

**PROTECTING PLACES FOR NATURE, PEOPLE, AND PEACE:
A CRITICAL SOCIO-LEGAL REVIEW OF TRANSBOUNDARY CONSERVATION AREAS**

by

ELAINE C. HSIAO

B.A., University of California, Los Angeles, 2004

J.D., Pace Law School, 2009

LL.M. Pace Law School, 2010

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

in

THE FACULTY OF GRADUATE AND POSTDOCTORAL STUDIES
(Resources, Environment and Sustainability)

THE UNIVERSITY OF BRITISH COLUMBIA
(Vancouver)

October 2018

© Elaine C. Hsiao, 2018

The following individuals certify that they have read, and recommend to the Faculty of Graduate and Postdoctoral Studies for acceptance, the dissertation entitled:

Protecting Places for Nature, People and Peace: A Critical Socio-Legal Review of Transboundary Conservation Areas

submitted by Elaine C. Hsiao in partial fulfillment of the requirements for

the degree of Doctor of Philosophy

in Resources, Environment & Sustainability

Examining Committee:

Philippe Le Billon, UBC Geography
Supervisor

Terre Satterfield, UBC Institute of Resources, Environment & Sustainability
Supervisory Committee Member

Benjamin Richardson, University of Tasmania
Supervisory Committee Member

Janette Bulkan
University Examiner

Sarah Gergel
University Examiner

Sara Seck
External Examiner

Abstract

Transboundary Conservation Areas (TBCAs), such as ‘Parks for Peace’ which have an explicit peace objective, have been heralded for their potential to simultaneously contribute towards biodiversity conservation and peace. In a world affected by frequent armed conflicts and widespread environmental degradation, the ecological peacebuilding potential of TBCAs should inspire hope. However, TBCA literature is unclear as to whether TBCAs with or without an explicit peace objective contribute positively to peace. Political ecologists describe them as externally-imposed, heavy-handed or even coercive, neoliberal constructs, and even long-time proponents caution that they can contribute to conflicts if not undertaken appropriately. This dissertation proposes that TBCAs and Parks for Peace have not generated the peace dividends envisioned because they are not appropriately designed for peace, conflict-sensitivity, or conflict resilience.

The dissertation’s analytical framework combines a political ecology approach with socio-legal analysis and peace studies perspectives. Empirically, the dissertation examines 56 transboundary agreements representing 32 TBCAs, responses to a survey of 88 TBCA practitioners, and field research conducted in two case studies from the Great Rift Valley in East Africa – (1) the Greater Virunga Landscape (GVL), and (2) the Kidepo Landscape. Findings indicate that TBCAs can contribute to peace if they are properly designed and negotiated at the appropriate level for desired functionality (i.e., operational integration on the ground may be better achieved through localized agreements, whereas regional political integration requires higher-level agreement), that

sustained support to activities on the ground is essential in conflict or post-conflict settings, and that bottom-up agreements can provide greater conflict resilience. TBCA agreements must provide clear mandates supporting peace and conflict resolution through cross-border institutional frameworks and on-going activities. Most importantly, they must be conflict-sensitive for TBCAs seeking to transform violence and conflict, and conflict-sensitivity must refer to all three categories of international, social and ecological peace.

Lay Summary

Environment and peace scholars assert that areas of nature conservation connected across international borders can promote peace, but we have never really known whether this is true. This dissertation explores whether transboundary conservation areas (TBCAs) are actually protecting places (areas for nature conservation), peoples (especially those living in and around them) and peace (harmony between States, peoples and the rest of nature). It specifically seeks to know how law plays a role in this process. This is the first study to systematically review TBCA agreements and to survey TBCA practitioners about their perspectives and experiences regarding cross-border cooperation, as well as the effectiveness of TBCA agreements regarding conflict prevention and resolution. Research findings conclude that TBCAs can contribute more to peace if transboundary agreements create governance institutions that are well-suited to deal with conflicts, support on-going activities at the local-level, and provide clear mandates addressing international peace (between States), social peace (between peoples) and ecological peace (between humans and the rest of nature).

Preface

The work presented in this dissertation is written as a collection of six papers (Chapters 1-6, with an additional concluding chapter) intended for publication in refereed or peer-reviewed academic journals. This has resulted in some repetition of background, problem statements and case studies, including fieldwork and methodology.

A version of Chapter 5 has been accepted for publication in a peer-reviewed online journal (IUCN AEL E-Journal). The other chapters will also be prepared as independent articles and submitted to different peer-reviewed journals. I was the sole author of each chapter. With advice from my supervisory committee, I was responsible for all areas of research conception, theoretical framing, data collection, analysis and drafting of all manuscripts.

Survey design in Chapter 4 included input from committee members, Philippe Le Billon, Terre Satterfield and Benjamin Richardson, and from members of the IUCN World Commission on Protected Areas (WCPA) Transboundary Conservation Specialist Group (TBC SG): Maja Vasilijevic, Kevan Zunckel, and Michelle Lim.

The survey and legal review in Chapter 4 and all field research towards the two case studies in Chapters 3, 5 and 6 were approved by UBC's Behavioural Research Ethics Board under Project Title, "Protecting Place, People and Peace: A Critical Socio-Legal Review of Transboundary Parks for

Peace" (Certificate Number H15-01152).

Field research in Kenya, Rwanda and Uganda was approved by the respective institutions: (1) Kenya Wildlife Service (KWS/BRM/5001) and National Commission for Science, Technology & Innovation (NACOSTI/P/16/66380/11349); (2) Rwanda Development Board (research contracts dated 12 March 2018, 30 March 2017 and 9 February 2017), University of Rwanda (DVC-AAR.690/2016, DVC-AAR.290/2017) and Ministry of Education (MINEDUC/S&T/411/2017, No. 0151/12.00/2017, No. 0152/12.00/2017); and (3) Uganda Wildlife Authority (COD/96/02) and Uganda National Council for Science and Technology (SS35ES).

Table of Contents

Abstract.....	iii
Lay Summary	v
Preface.....	vi
Table of Contents	viii
List of Tables	xiv
List of Figures.....	xv
Lists of Abbreviations	xvi
Acknowledgements.....	xxii
Dedication.....	xxiv
1 CHAPTER 1: INTRODUCTION	1
1.1 Introducing Parks for Peace.....	1
1.2 The challenge of integrating peace.....	2
1.2.1 Peace in a world of conflicts.....	2
1.2.2 Designing TBCAs for peace.....	4
1.3 Understanding Transboundary Conservation Areas (TBCAs): what little we know.....	5
1.3.1 Defining TBCAs.....	5
1.3.2 Quantifying TBCAs	8
1.4 The development of TBCAs and Parks for Peace	10
1.4.1 The IUCN story of TBCAs.....	10
1.4.2 Beyond colonial TBCAs	12
1.5 The problem statement: seeking peace, creating conflict.....	15
1.5.1 TBCAs creating conflict.....	15
1.5.2 Peace as a pre-requisite	17
1.5.3 Peace as an external process	19
1.6 Transforming law to transform conflict: critical legal studies in TBCAs	20
1.6.1 Why law?	20
1.6.2 Drawing from critical legal studies.....	22
1.6.3 Why TBCAs?	24

1.6.4	Uniting the disciplines for peace and conflict transformation.....	26
1.7	Just conservation for just peace.....	27
1.8	Overview of dissertation.....	28
2	CHAPTER 2: WHAT DOES PEACE MEAN FOR TBCAS?: UNDERSTANDING INTERNATIONAL PEACE, SOCIAL PEACE, AND ECOLOGICAL PEACE.....	32
2.1	Introducing peace for parks	32
2.2	A movement in need of transition	34
2.3	Integrated peaces: fundamentals.....	37
2.3.1	International peace	42
2.3.1.1	Early conflict studies: symptoms and remedies for war between States	42
2.3.1.2	Challenges of international peace for TBCAs	44
2.3.2	Social peace	48
2.3.2.1	Early peace studies: Johan Galtung and conflict levels	48
2.3.2.2	Challenges of social peace for TBCAs.....	50
2.3.2.3	Improving social peace for TBCAs	52
2.3.3	Ecological peace	55
2.3.3.1	The environmental branch of peace, conflict, and security studies	55
2.3.3.2	Challenges of ecological peace for TBCAs	58
2.4	Connecting peaces	61
2.5	International law and the three categories of peace	65
2.5.1	Just peace	66
2.5.2	International law and international peace	67
2.5.3	International law and social peace	69
2.5.4	International law and ecological peace.....	71
2.5.5	Regional laws and institutions.....	73
2.6	Pushing the boundaries of peace in parks	75
3	CHAPTER 3: A FRAMEWORK FOR MAPPING SOCIO-LEGAL LANDSCAPES: CRITICAL LEGAL STUDIES FOR PEACE IN TBCAS	77
3.1	Introducing a framework of analysis	77
3.2	Proposing a framework.....	78
3.2.1	Methods from political ecology: framing and situating a TBCA	81
3.2.2	Conflict mapping: Using the framework of integrated peaces.....	84

3.2.3	Legal mapping: <i>lex scripta</i> , <i>lex lata</i> and <i>lex ferenda</i>	88
3.2.3.1	Lex scripta: capturing peace and conflict management in written agreements ..	89
3.2.3.2	Lex lata: implementation, enforcement and evolving practices of living law	91
3.2.3.3	Lex ferenda: legal criticism for peace	94
3.3	Case study: transforming conflict in the Greater Virunga Landscape.....	96
3.3.1	Collaboration in the Greater Virunga Landscape	97
3.3.2	Conflict mapping in the Greater Virunga Landscape	98
3.3.3	Legal mapping in the Greater Virunga Landscape	105
3.3.4	Legal criticism in the Greater Virunga Landscape	110
3.4	Analysis: guidelines for criticism	113
3.4.1	Recommendations for criticism	114
3.5	Conclusion.....	118
4	CHAPTER 4: DESIGNING TBCAS FOR PEACE: A REVIEW OF TRANSBOUNDARY AGREEMENTS AND SURVEY OF PRACTITIONERS	121
4.1	Introducing transboundary legal agreements.....	121
4.1.1	Questions and assumptions	122
4.2	How are TBCAs transforming conflicts and building peace around the world?.....	124
4.2.1	Methodology: legal review of TBCA agreements	126
4.2.2	Methodology: practitioners' survey on 'TBCAs, Law and Peace'	129
4.3	Findings: understanding TBCA legal agreements.....	135
4.3.1	Locating peace, conflict, and conflict resolution in transboundary agreements	138
4.3.1.1	Peace in TBCA agreements	139
4.3.1.2	Conflict in TBCA agreements	139
4.3.1.3	Conflict resolution in TBCA agreements	141
4.3.1.4	Sub-categories of peace, conflict, and conflict resolution	143
4.3.1.5	Peace, conflict, and conflict resolution by region	145
4.3.2	International peace, social peace, and ecological peace in transboundary agreements	148
4.3.2.1	International, social, and ecological peace by region	151
4.3.2.2	Peace and conflict by section of TBCA agreement.....	153
4.3.2.3	Preferencing approaches to international, social, and ecological peace	154
4.3.3	A survey of TBCA practitioners on TBCAs, law, and peace.....	158

4.3.3.1	TBCA practitioners on bases of cooperation.....	161
4.3.3.2	TBCA practitioners on effectiveness of TBCA agreements	164
4.3.3.3	TBCA practitioners on peace and conflict resolution.....	169
4.3.3.4	TBCA practitioners on the TBCA agreements	174
4.4	Analysis of TBCA legal review and survey	177
4.5	Conclusion: from limited beginnings to further peace research.....	185
5	CHAPTER 5: NOMOSCAPING PEACE IN TIMES OF CONFLICT: A CASE STUDY OF THE GREATER VIRUNGA TRANSCOUNDARY COLLABORATION (GVTC) AND CONFLICT RESOLUTION	188
5.1	Introducing the Greater Virunga Landscape.....	188
5.2	Violence in the Greater Virunga Landscape	189
5.3	Transboundary conservation in the Greater Virunga Landscape.....	194
5.4	Law and peace in the Albertine Rift.....	196
5.4.1	GVTC and international peace.....	198
5.4.2	GVTC and social peace	199
5.4.3	GVTC and ecological peace	203
5.5	Contemporary conflict resolution in the Albertine Rift	205
5.5.1	Transformative transboundary institutions.....	205
5.5.2	Transboundary activities: engaging for peace.....	207
5.5.3	Traditional or alternative mechanisms for peace	209
5.6	Conclusions.....	211
6	CHAPTER 6: CONNECTING TRANSCOUNDARY LANDSCAPES: CONSERVATION AND PEACE IN THE GVL AND KIDEPO LANDSCAPE	216
6.1	Introducing TBCAs and violent conflict.....	216
6.2	TBCAs and the ever-elusive peace.....	218
6.2.1	Parks for Peace (and conflict?)	219
6.2.2	Stories of transboundary collaboration in the Great Rift Valley	222
6.2.2.1	Ecological connectivity	223
6.2.2.2	Socio-political connectivity	224
6.2.2.3	Notes on methodology for field research	226
6.3	The Greater Virunga Landscape	228
6.3.1	General description of the Greater Virunga Landscape bioregion.....	228
6.3.2	Issues of peace and conflict in the Greater Virunga Landscape	229

6.3.3	History of transboundary collaboration in the Greater Virunga Landscape	231
6.3.4	How peace is incorporated in the Greater Virunga Landscape legal framework.....	233
6.4	Landscapes for Peace with South Sudan: Kidepo Landscape	237
6.4.1	General description of the Kidepo Landscape bioregion	237
6.4.2	Issues of conflict and peace in the Kidepo Landscape.....	240
6.4.3	History of transboundary collaboration in the Kidepo Landscape.....	243
6.4.4	How peace is incorporated in the Kidepo Landscape legal framework.....	246
6.5	Designing transboundary collaboration for conflict-resilience.....	252
6.5.1	Bottom-up vs. top-down approaches to TBCA design.....	253
6.5.2	Naming peace explicitly	257
6.5.3	A community-based approach	261
6.6	Conclusion.....	262
7.	CHAPTER 7: CONCLUSIONS FOR AN EMPIRICAL EVOLUTION OF TBCA LAW	265
7.1	In Summary	265
7.2	Research findings and contributions.....	268
7.2.1	Research hypotheses.....	269
7.2.2	Chapter findings.....	271
7.2.2.1	Take-aways from Chapter 1	271
7.2.2.2	Take-aways from Chapter 2	273
7.2.2.3	Take-aways from Chapter 3	274
7.2.2.4	Take-aways from Chapter 4	276
7.2.2.5	Take-aways from Chapter 5	279
7.2.2.6	Take-aways from Chapter 6	281
7.2.3	Connecting conclusions	282
7.3	Specific recommendations for TBCA legal design	287
7.4	Limitations of research and follow-up.....	293
7.5	Signposts for future directions.....	299
7.5.1	Developing a knowledge platform for TBCA legal agreements.....	300
7.5.2	Indigenous and community-based TBCAs.....	303
7.5.3	Applying the framework to TBCAs and the Sustainable Development Goals	305
BIBLIOGRAPHY.....	307	
APPENDICES	346	

Appendix I: List of TBCAs and last armed conflict	346
Appendix II: Enlarged maps from Table 3-6 Conflict mapping in the GVL.....	352
Map of GVL and international conflict	352
Map of GVL and social conflict.....	353
Map of GVL and ecological conflict.....	354
Appendix III: List of transboundary agreements by TBCA and region	355
Appendix IV: List of TBCAs identified by survey respondents	364
Appendix V: TBCAs identified in 2007 Global List, legal review and survey.....	368
Appendix VI: Interview schedules.....	377
Appendix VII: Consent form for interviews	383
Contact letter for interviews (English).....	383
Consent form for interviews (English version)	385
Appendix VIII: Consent form and legal survey on TBCAs, law and peace (English version)....	389

List of Tables

Table 1-1: IUCN transboundary conservation terminology	6
Table 2-1 Conflict terminology.....	40
Table 3-1 Questions in conflict mapping.....	85
Table 3-2 Conflict mapping in a TBCA	86
Table 3-3 Mapping written law in a TBCA	90
Table 3-4 Mapping living law in a TBCA.....	93
Table 3-5 Formal legal agreements in the GVL.....	98
Table 3-6 Conflict mapping in the GVL.....	99
Table 3-7 Framework applied to the GVL	106
Table 4-1 Number of TBCA agreements by region.....	128
Table 4-2 Characteristics of TBCA survey respondents.....	131
Table 4-3 TBCAs and agreements by region	137
Table 4-4 Term search for peace, conflict and conflict resolution (other terminology).....	138
Table 4-5 Peace, conflict and conflict resolution in TBCA agreements	141
Table 4-6 Peace, Conflict, and Conflict Resolution by Region (# of Agreements/% of TBCAs)....	146
Table 4-7 International peace, social peace, and ecological peace references.....	149
Table 4-8 International peace, social peace and ecological peace in TBCA agreements.....	152
Table 4-9 Peace and conflict mentions by section of TBCA agreement.....	153
Table 4-10 International, social and ecological peace (# of mentions/TBCAs).....	156
Table 4-11 Number of TBCAs identified in 2007 List, legal review, and survey	160
Table 4-12 Do the legal instruments in the TBCA(s) that you were/are engaged in provide.....	165
Table 4-13 Number of TBCA agreements that included identified elements of success.....	167
Table 6-1 International, social and ecological conflicts in the GVL.....	231
Table 6-2 Protected areas in Landscapes for Peace	238
Table 6-3 International, social and ecological conflicts in the Kidepo Landscape.....	243
Table 6-4 Mapping law and peace in the GVL and Kidepo Valley	258
Table 7-1 Peace indicators - existing or potential datasets	302

List of Figures

Figure 2-1 Overview of the field of peace and conflict studies.....	39
Figure 2-2 Modeling conflict: the “hourglass model” and “cycle of conflict”.....	40
Figure 3-1 Pillars of positive peace.....	113
Figure 4-1 Map of survey responses by country (in blue)	132
Figure 4-2 Map of TBCAs around the world.....	135
Figure 4-3 Survey responses regarding changes in the basis of cooperation over time.....	162
Figure 4-4 Survey responses to statement on environmental peacebuilding	170
Figure 4-5 Percentage of TBCAs that experienced violent conflict (survey responses)	172
Figure 4-6 Nature of broader violent conflict experienced by TBCAs (survey responses)	173
Figure 4-7 Aspects of the legal instruments that are/were most effective in preventing or resolving conflicts, and in supporting peace.....	175
Figure 4-8 Whether legal instruments can make a positive difference for TBCA peace efforts... ..	177
Figure 5-1 Map of Greater Virunga Landscape (GVL)	191
Figure 5-2 GVTC governance structure	197
Figure 6-1 Map of GVL and Landscapes for Peace.....	219

Lists of Abbreviations

ACLED	Armed Conflict Location & Event Data Project
ACSR	Annual Conservation Status Report (of GVTC)
ADF-NALU	Allied Democratic Forces – National Army for the Liberation of Uganda
ARCOS	Albertine Rift Conservation Society
ASEAN	Association of South East Asian Nations
AU	African Union
AWF	African Wildlife Foundation
CAN	Andean Community of Nations
CBD	Convention on Biological Diversity
CBO	Community-Based Organizations
CCAD	Central American Commission on Environment and Development
CCR	Contemporary Conflict Resolution
CEO	Chief Executive Officer
CEPGL	Communauté Economique des Pays des Grands Lacs
CI	Conservation International
CLG	Critical Legal Geography
CLS	Critical Legal Studies
CSO	Civil Society Organization
DFGFI	Dian Fossey Gorilla Foundation International

DMZ	Demilitarized Zone
DRC	Democratic Republic of the Congo
EAC	East African Community
ECCAS	Economic Community of Central African States
ECOWAS	Economic Community of West African States
EIA	Environmental Impact Assessment
EJVM	Extended Joint Verification Mechanism (of ICGLR)
EU	European Union
EUROPARC	Federation of Nature and National Parks of Europe
FARDC	Forces Armées de la République Démocratique du Congo
FDLR	Forces Démocratiques de Libération du Rwanda
FFI	Flora and Fauna International
FPIC	Free, Prior and Informed Consent
GEO	Global Environmental Outlook
GREG	Georeferencing of Ethnic Groups
GVL	Greater Virunga Landscape
GVTC	Greater Virunga Transboundary Collaboration
GVTC-ES	Greater Virunga Transboundary Collaboration – Executive Secretariat
ICC	International Criminal Court
ICCA	Indigenous Peoples and Local Communities Conserved Areas and Territories
ICCN	Institut Congolais pour la Conservation de la Nature
ICDP	Integrated Conservation and Development Project

ICGLR	International Conference on the Great Lakes Region
ICJ	International Court of Justice
ICRC	International Committee of the Red Cross
IDP(s)	Internally Displaced People
IES	Institute for Environment and Peace
IGAD	Intergovernmental Authority on Development
IGCP	International Gorilla Conservation Programme
IHL	International Humanitarian Law
INTERPOL	International Criminal Police Organization
IP	Indigenous People
IPCC	Intergovernmental Panel on Climate Change
ITFC	Institute for Tropical Forest Conservation
IUCN	International Union for the Conservation of Nature
KCCA	Karenga Community Conservation Area
KWS	Kenya Wildlife Service
LC	Local Community
LRA	Lord's Resistance Army
M23	March 23 Movement (a.k.a Congolese Revolutionary Army)
MEA	Multilateral Environmental Agreements
MID	Militarized Interstate Dispute
MGP	Mountain Gorilla Project
MoA/MoU	Memorandum of Agreement/Understanding

MONUSCO	UN Organization Stabilization Mission in the DRC (formerly MONUC)
NCIP	Northern Corridor Integration Projects
NGO	Non-Governmental Organization
NICHE	Netherlands Initiative for Capacity Development in Higher Education
NP	National Park
NRM	National Resistance Movement (of Uganda)
OAS	Organization of American States
ODECA	Organization of Central American States
ORTPN	Office Rwandais de Tourisme et des Parcs Nationaux
OSAN	Union of South American Nations
PA	Protected Area
PAA	Protected Area Authority
PBDI	Peace and Biodiversity Initiative
PLC	Parti de Libération Congolais
PPF	Peace Parks Foundation
PRIO	Peace Research Institute Oslo
RDB	Rwanda Development Board
RDF	Rwandan Defence Forces
RTC	Regional Technical Committee (of GVTC)
SADC	Southern African Development Community
SDG	Sustainable Development Goal
SICAP	Central American System of Protected Areas

SNS	Sacred Natural Site
SPLA	Sudan People's Liberation Army
SSC	Species Survival Commission (of IUCN)
TBC SG	Transboundary Conservation Specialist Group (of IUCN WCPA)
TBCA	Transboundary Conservation Area
TBCL/S	Transboundary Conservation Landscape and/or Seascapes
TBICCA	Transboundary Areas and Territories Conserved by Indigenous Peoples and Local Communities
TBMCA	Transboundary Migration Conservation Area
TBPA	Transboundary Protected Area
TFCA	Transfrontier Conservation Area
TSP	Transboundary Strategic Plan (of GVL)
UCDP-GED	Uppsala Conflict Data Program – Georeferenced Event Dataset
UN	United Nations
UNCED	United Nations Conference on Environment and Development
UNDP	United Nations Development Programme
UNECE	United Nations Economic Commission for Europe
UNEP	United Nations Environment Programme (now UN Environment)
UNEP-WCMC	UNEP – World Conservation Monitoring Centre
UNESCO	United Nations Educational, Scientific, and Cultural Organization
UNGA	United Nations General Assembly
UNHCHR	United Nations High Commission on Human Rights

UNHRC	United Nations Human Rights Council
UNODC	United Nations Office of Drugs and Crime
UR	University of Rwanda
US CIA	United States Central Intelligence Agency
USAID	United States Agency for International Development
UPDF	Uganda People's Defence Force
URA	Uganda Revenue Authority
UWA	Uganda Wildlife Authority
WCC	World Conservation Congress
WCPA	World Commission on Protected Areas (of IUCN)
WCS	Wildlife Conservation Society
WDPA	World Database of Protected Areas
WHS	World Heritage Site
WWF	World Wildlife Fund

Acknowledgements

First and foremost, I give thanks to my ancestors for their inspiration, wisdom, guidance and sustenance throughout the production of this dissertation. I would like to appreciate especially my parents, Shen Nien-Tsu and Hsiao Ching Chih, for their support, financially and in morale, shelter and good food, particularly towards the latter period of reclusive writing.

I express my humblest gratitude to my committee members, Philippe Le Billon, Benjamin Richardson and Terre Satterfield. I have appreciated their feedback, unique perspectives, and the way they have always given me freedom to pursue my extracurricular endeavors. I would also like to mention Natasha Affolder for her grace and guidance in the first year, and Nick Robinson for his long-standing and patient mentorship – it is an honor to be one of his many admiring students.

This PhD could not have been undertaken without the financial support of UBC through a Four Year Fellowship, Law Graduate Fellowship, James Robert Thompson Fellowship, Ibn Battuta Award for Field Research, Go Global Self-Directed Research Grant and the IRES Writing Grant.

Most of all, my field research in East Africa could not have been possible without an extensive network of allies and environmental protectors to whom I apologize for not all naming here individually. I must give my gratitude to Emmanuel Kasimbazi – the Kasimbazis are my home away from home. I give my appreciation to UWA, RDB, KWS and ICCN for facilitating my field research,

not only through research permits, but in providing countless hours of interviews, occasional accommodations, transport, food, advice, translation, and long-time friendships throughout these beloved landscapes. I am similarly indebted to colleagues from the IUCN, GVTC, IGCP, ITFC, WCS, UR, Gorilla Doctors, ARCOS, DFGFI, UPDF, FARDC, RDF, URA and numerous village leaders for the knowledge and time they shared. Many thanks to friends who welcomed me in their homes as I bounced from one research site to another, or hotels and campgrounds that became frequent residences – Rosanne Cicanes, Charles Karangwa, Christina Ellis, Jordi and Evelien Van Oort, Red Rocks Campground and Albertine Tourist Resort. Andrew Reid and Eliode Yalire, for your patient dedication to transcription and all other miracles, I bow to you. Lutale Obeid, *webale ny* for my car and Lydia Nandudu, for taking care of it all these months I've been away, not to mention the generous 'student rates' I was getting at Nkuringo Bwindi Gorilla Lodge and Papyrus Guest House.

Tlazokamati to my sisters, wombyn, lobas de la luna, and all of my dear ones who have loved me and encouraged me, inspired me or challenged me throughout this journey. For everyone whose names are not written here, they are written in my heart. *Inlakesh*.

Dedication

To my grandmothers, who passed before I could complete this PhD, and for all who stand on the thin green line in honor of all Grandmothers and our Mother, this Earth – may they guide us always as we return to peace, love and beauty.

1 CHAPTER 1: INTRODUCTION

1.1 Introducing Parks for Peace

In 2001, upon the release of elephants from South Africa into Mozambique to celebrate the establishment of the Greater Limpopo Transfrontier Park, President Nelson Mandela boldly stated:

'I know of no political movement, no philosophy, no ideology, which does not agree with the peace parks concept as we see it going into fruition today. It is a concept that can be embraced by all. In a world beset by conflicts and division, peace is one of the cornerstones of the future. Peace parks are a building block in this process, not only in our region, but potentially in the entire world' (Ramutsindela, 2007, p. 6).

In concept, Parks for Peace, which have been defined by the International Union for the Conservation of Nature (IUCN) as transboundary conservation areas (TBCAs) dedicated "to the promotion, celebration and/or commemoration of peace and cooperation," are as embraceable as President Mandela declared, but in practice, they have been sources of tension and sites of conflict (Neumann, 2004; Vasilijević et al., 2015, p. xi; 2003, p. 5). This contradiction invites one to query whether TBCAs are actually working for peace and if not, why?

1.2 The challenge of integrating peace

1.2.1 Peace in a world of conflicts

The 2017 Global Peace Index indicates that the world is less peaceful than it was 10 years ago (Institute for Economics and Peace, 2017, p. 30). At least in the short term, no positive change is predicted (Dupuy et al., 2017, p. 4). Of 146 major armed conflicts (>1,000 casualties in total) between 1950-2000 assessed by Hanson et al., 81% took place entirely or partly within a biodiversity hotspot (Hanson et al., 2009, pp. 1–3). While armed conflicts are largely intra-state conflicts, they are increasingly internationalized (involving external actors) and the presence of porous borders and relations with neighboring countries can affect the complexity and longevity of violence (Dupuy et al., 2017; Institute for Economics and Peace, 2017, pp. 4, 35–36, 39, 81; Stockholm International Peace Research Institute, 2016, p. 5). Clearly, in many places the boundaries of protected areas (PAs) drawn to keep negative human activities out of wildlife habitat are not able to fend off the violences of armed conflict, let alone the less visible cultural and structural violences related to separation or exploitation (E.g., Fimbel & Fimbel, 1997).

In this context, transboundary conservation areas (TBCAs), especially ‘Parks for Peace,’ have been promoted for their peacebuilding potential in addition to commonly claimed benefits of PAs, such

as protection of endangered species and ecosystem services, health and well-being, or economic development through ecotourism (S. Ali, 2007; Sandwith, Shine, Hamilton, & Sheppard, 2001; Westing, 1993). If cross-border cooperation through TBCAs can indeed ameliorate the negative impacts of violence and augment positive dividends towards peace, then TBCAs have great relevance in efforts towards a more peaceful world. Riding on the expected/presumed benefits of TBCAs, the way forward for organizations like the IUCN, Conservation International (CI), and the Peace Parks Foundation (PPF) was obvious – TBCAs could bring States and their people together to conserve nature and peace and as the world's environmental leaders, they would lead the charge in establishing TBCAs all around the world. According to the IUCN, Transboundary Protected Areas (TBPA), a subset of TBCAs, grew from 70 border parks in 1988 to 227 in 2007 (Vasiljević et al., 2015, p. 5).

New TBCAs continue to be created despite countervailing voices of criticism for the social injustices triggered or aggravated by their establishment, and meager evidence that they have contributed minimally to peace and conflict resolution (Barquet, Lujala, & Rød, 2014; Ide, 2018; Waisová, 2015; Büscher, 2013; See e.g., Darnell, 2008; Massé & Lunstrum, 2015; Duffy, 2001, 2005). Hence, the question is increasingly being asked as to whether or not transboundary conservation can contribute to peace through cross-border PA management and the answer remains ambiguous. Ali notes that “the power of such efforts in transforming the debate on environmental conservation to larger political reconciliation has eluded scholars despite a few examples of the direct use of environmental conservation in resolving regional disputes such as the Cordillera del Condor border dispute between Ecuador and Peru” (S. H. Ali, 2011, p. 32).

1.2.2 Designing TBCAs for peace

Furthermore, the question of whether TBCAs have been appropriately designed for peace and conflict resolution is even less queried. In this dissertation, *design refers to the legal and governance framework which stipulates why a TBCA is being created, how it shall be constituted and governed, as well as who is responsible for what activities within the territory in order to achieve its goals or principles, and any other aspect of its constitution.* A TBCA's design can be formalized in transboundary legal agreements, setting up multilateral institutional structures, providing mandates and clarity around a TBCAs objectives and mechanisms of implementation. It also contemplates the level or scale of cooperation (e.g., local-level vs. high-level), which determines who is collaborating (i.e., local-level cooperation may be between rangers, while high-level cooperation may be between ministries). There has not been any research on the legal design of TBCAs and how they address peace and conflict resolution, though Schoon and Waisova have looked at resilience in terms of enduring cooperation.

Schoon argues that bottom-up vs. top-down institutions create path dependencies that can affect the robustness and effectiveness of transboundary collaboration (Schoon, 2013). Case studies of the Kgalagadi Transfrontier Park and Great Limpopo Transfrontier Park illustrate that the top-down institutional design of the Great Limpopo resulted in more effective high-level or political collaboration, while the bottom-up approach in the Kgalagadi supported more effective operational collaboration, which ultimately contributed to greater institutional robustness or

longer-lasting/resilient transboundary conservation (Schoon, 2013, p. 426). Waisova's research offers a few case-based insights into institutional design in relation to conflict (i.e., during conflict, post-conflict). Importantly, she notes that transboundary collaboration can be initiated during conflict *if* the conflict is non-violent, but it is susceptible to collapse if conflict intensifies or to remain weak if the conflicts are political (Waisová, 2015). Where collaboration is weak or hindered by on-going conflict, the presence of non-political actors may be less sensitive to conflict intensity and can help to sustain transboundary communications and meetings (Waisová, 2015, p. 118). These two studies imply that a more bottom-up operational and non-political approach to TBCA design may be more appropriate in terms of peace and conflict resilience. Needless to say, much more could be understood about TBCAs and how they can serve the pursuit of peace.

1.3 Understanding Transboundary Conservation Areas (TBCAs): what little we know

1.3.1 Defining TBCAs

It should be noted that there is no commonly agreed definition for TBCAs and in practice, proponents of transboundary conservation have used their own definitions. The IUCN World Commission on Protected Areas Transboundary Specialist Group (WCPA TBC SG) has championed “TBPs for Peace and Cooperation” or “Parks for Peace” since the late 1980s, facilitating a series

of international meetings on the concept, ultimately producing a set of Best Practice Guidelines on ‘Transboundary Protected Areas for Peace and Co-Operation’ in 2001 (Sandwith et al., 2001, pp. 1–4). The 2001 Guidelines attempted to provide a clear definition of both TBPs and Parks for Peace. These definitions were revised in the 2015 Best Practice Guidelines on ‘Transboundary Conservation: A Systematic and Integrated Approach’ (Vasilijević et al., 2015, pp. 6–14). The 2015 Guidelines were updated to align with a new 2008 definition of PA and a broader understanding of TBCAs through three typologies: TBPs, Transboundary Conservation Landscape and/or Seascapes (TBCL/S), and Transboundary Migration Conservation Areas (TBMCA). Any one of these TBCAs can be designated as a Park for Peace.

Table 1-1: IUCN transboundary conservation terminology

Protected Area (PA)	A clearly defined geographical space, recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values.
Transboundary Protected Area (TBPA)	A clearly defined geographical space that includes protected areas that are ecologically connected across one or more international boundaries and involves some form of cooperation.
Transboundary Conservation Landscape and/or Seascape (TBCL/S)	An ecologically connected area that includes both protected areas and multiple resource use areas across one or more international boundaries and involves some form of cooperation.
Transboundary Migration Conservation Areas (TBMCA)	Wildlife habitats in two or more countries that are necessary to sustain populations of migratory species and involve some form of cooperation.
Park for Peace	Special designation that may be applied to any of the three types of Transboundary Conservation Areas, and is dedicated to the promotion, celebration and/or commemoration of peace and cooperation.
Other Related Terminology	Transfrontier Conservation Area (TFCA), Transboundary Parks, Transfrontier Parks, Cross-Border Parks, Transfrontier Conservation and Development Area (TFCDA), Peace Parks

Source: (Vasilijević et al., 2015, pp. 6–14)

True to the title of the 2015 Guidelines (Vasiljević et al., 2015), these definitions and typologies in Table 1-1 provide a more systematic approach to understanding TBCAs. However, alternative definitions and conceptualizations continue to exist.

Early on, Gerardo Budowski defined Peace Parks as “protected areas where there is a significant conflictive past” (Sandwith & Besançon, 2010, p. 3), without requiring them to be transboundary as that would limit the possibilities of their application (e.g., islands or places of historical conflict not adjacent to borders) (Budowski, 2004, p. 30). The Convention on Biological Diversity (CBD) Peace and Biodiversity Initiative (PBDI) refers to Peace Parks as “areas where the agreed management objectives explicitly recognize both a protected area and a no conflict zone” (CBD Secretariat, nd, p. 2). These areas are to be identified and established by “cooperating jurisdictions,” which does not necessitate inter-State partnership.

Transfrontier conservation areas (TFCAs) promoted or established by the PPF in Southern Africa, however, follow a definition enshrined in the South African Development Community (SADC) Protocol on Wildlife Conservation and Law Enforcement: “the area or the component of a large ecological region that straddles the boundaries of two or more countries, encompassing one or more protected areas, as well as multiple resource use areas” (SADC, 1999, p. 3 (Art. 1)). The value of adopting a transboundary definition of Parks for Peace in this dissertation is that it facilitates a focus on cross-border agreements between States and incorporates international peace.

1.3.2 Quantifying TBCAs

There is no definitive count of how many Parks for Peace or even TBCAs there are in the world – Gerardo Budowski had commented in 2003 that there were 169 peace parks in 113 countries (Budowski, 2004, p. 30). This is partly due to divergent definitions of Parks for Peace and partly due to a failure to invest time and resources into compiling an authoritative count. The IUCN has never published a tally of territories it defines as Parks for Peace. In 2007, they collaborated with the United Nations Environment Program World Conservation Monitoring Centre (UNEP-WCMC) to provide a list of 227 TBPAs, just one sub-type of all TBCAs. The 2007 Global List of Transboundary Protected Areas (hereinafter 2007 Global List) is unfortunately, wrought with errors and could not be considered a definitive count of TBPAs or in that regard, an authority on how many TBCAs there are.

The 2007 Global List is problematic for a number of reasons. First of all, the definitions of TBCAs and TBPAs have changed since then (Vasilijević et al., 2015, pp. 3, 6, 8–14). The 2007 Global List seems to equate the two, lumping many TBCL/TBCSs, as well as TBMCA (e.g., Greater Virunga Landscape, a TBCL) under the banner of TBPA. A closer look into many of the listed TBPAs reveals that a number of PAs listed as part of the TBPA no longer exist in the World Database on Protected Areas (WDPA) and are not in fact recognized as part of the cross-border collaboration (e.g., Flathead Valley is not a part of Waterton-Glacier International Peace Park although it directly abuts the TBCA and is listed in the 2007 Global List as one of the PAs included). In some cases, contacting

PA authorities (PAAs) in the TBPA confirmed that they were not aware of such a TBPA or cooperation between respective PAAs. This essentially means that: (1) there is no effective or even intended transboundary cooperation, (2) the TBPA is not a known entity, and/or (3) the PAs are merely adjacent or near each other and an international border (e.g., Ellesmere/Greenland Transboundary Complex). It also explains why there is an overestimated 3,043 PAs forming only 227 TBPAs according to the 2007 Global List – an average of 13.4 PAs per TBCA (Lysenko, Besançon, & Savy, 2007). There are also a number of known TBCAs missing from the 2007 Global List (e.g., Kibira-Nyungwe, Binational Lac Télé-Lac Tumba, |Ai-|Ais/Richtersveld Transfrontier Park, Dinaric Arc, etc.), despite having transboundary agreements that pre-date 2007.

Updating the 2007 Global List is not a simple task. It would involve using the WDPA to identify all of the transboundary PA dyads as Barquet et al. did in their research and then narrowing the 11,000+ dyads down to include only the areas that constitute part of a transboundary cooperative framework (See Barquet et al., 2014). This necessitates an assessment of levels of cooperation as Dbicz presumably did in 2003 and a confirmation of actual territorial boundaries for each TBCA (Lysenko et al., 2007; Zbicz, 2003). Such a study falls outside of the ambit of this dissertation but continues to be a much-needed contribution to TBCA research, especially towards improving systematic evaluations of TBCAs in practice.

The lack of uniformity in defining and conceptualizing TBCAs is also paralleled in the seemingly ad-hoc practice in establishing and implementing them around the world. The inability to quantify TBCAs and Parks for Peace reflects a general trend in the absence of more quantitative TBCA

research or studies that demonstrate patterns in TBCA practice. This dissertation fills a small gap in TBCA and Parks for Peace research by providing a socio-legal review of TBCAs and survey of TBCA practitioners that helps to identify a number of known TBCAs and emergent patterns of practice.

1.4 The development of TBCAs and Parks for Peace

1.4.1 The IUCN story of TBCAs

Generally, the story of PAs traces to early Renaissance European hunting grounds (Eagles, McCool, Haynes, & Phillips, 2002, p. 5). It recognizes Yellowstone as the first National Park (NP), established by the United States in 1872 (Eagles et al., 2002, p. 5; Lockwood, Worboys, & Kothari, 2006, p. 46; Yui, 2014, p. 2). The WCPA also traces the history of TBCAs to Europe and North America (Vasilijević et al., 2015, p. xi). An 18th century Treaty of Alliance between the King of France and Prince-Bishop of Basel considered management of environmental crimes important for good relations and peace between the two bordering States and proposed legal harmonization of forest, hunting and fishing offenses (Vasilijević et al., 2015, p. 4). The 1925 Annex to the Krakow Protocol signed by the governments of Poland and the former Czechoslovakia, included designation of a bilateral nature park in the Pieniny Mountains as part of a border dispute

resolution (Mittermeier et al., 2005, p. 28; Vasiljević et al., 2015, p. 4). In 1932, Canada and the United States inaugurated their own TBCA, Waterton-Glacier International Peace Park, allegedly the world's first Park for Peace (Sandwith et al., 2001, p. 1). This designation focused on celebrating existing peace and did not purport to pursue conflict resolution and peacebuilding.

The development of PAs, TBCAs, and Parks for Peace is globally promoted by WCPA members and those who support the IUCN as an authority in conservation knowledge (Brockington, Duffy, & Igoe, 2008, pp. 19–24; Mittermeier et al., 2005, p. 28). They have been active in exporting NPs or “America’s Best Idea” and other PAs, including TBCAs and Parks for Peace, all around the world (Brockington et al., 2008; Duncan, 2009; Murphy, 2017, p. 68; Sandwith et al., 2001, p. 1; Yui, 2014). In fact, when South Africa emerged from a long period of violence, apartheid, and war with its neighbors, it set on its agenda peace and conservation through TFCAs. This narrative of PAs, TBCAs and Parks for Peace is exciting, admirable and full of benefits for places, peoples and peace, but PAs, TBCAs and Parks for Peace have more than one interpretation and an omission of these critical narratives would preference the problematic “fortress conservation” PA/TBCA over alternative approaches.

The history of the Greater Virunga Landscape (GVL) is one example of how a TBCA’s story can be told in different lights. In the IUCN 2015 Best Practice Guidelines on transboundary conservation, the 1925 designation of Albert NP to protect mountain gorillas in Ruanda-Urundi and the Congo is noted as an aside and not as the world’s first TBCA (Vasiljević et al., 2015, p. 4). This African PA may not have qualified as the first official TBCA because its creation is credited to the territory’s

single colonial occupier (the Belgian), dismissing the presence of diverse kingdoms and tribes within the colonial PA. Only later on as a collaboration between nation-states did it become a well-recognized TBCA. While its on-going progress as a political and inter-institutional collaboration is admirable, it has yet to dismantle the fortress. Many of the GVL's current-day conflicts trace back to historical injustices, including the common repertoire of disenfranchisement, criminalization, and fences that constitute the model of "fortress conservation" further entrenched by its independent post-colonial governments (Kule Bitswande, 2017; Zephyrin, 2001, p. 51). It is this other perspective on PAs and TBCAs that challenges aspirations for peace.

1.4.2 Beyond colonial TBCAs

Non-North Atlantic (Europe and North America) PAs predate those highlighted by the IUCN by at least 2,000 years. As far back as the 4th and 3rd century BC, elephants were protected in India (although domesticated) and in 3rd century BC China, imperial hunting reserves were created in mountain areas (Xu & Melick, 2007, p. 319). Babylon, Assyria and Persia also established hunting reserves (Brockington et al., 2008, p. 20). Numerous indigenous or traditional societies have been designating natural areas (Indigenous Peoples and Local Communities Conserved Areas and Territories or ICCAs) to protect hydrological resources, sacred sites, and ceremonial grounds, and regulating the use of wildlife in order to sustain natural resources for food, material, ceremony, or medicine (Borrini-Feyerabend et al., 2012; Brockington et al., 2008, p. 20). It is unknown how long

these unwritten practices have been around. Some informal PAs have become part of State-designated PAs or are recognized as an alternative to State-legislated and State-run PAs in an effort to broaden PA coverage to reach conservation targets (e.g., Convention on Biological Diversity Aichi Target 11 stating that by 2020, at least 17% of terrestrial and inland water, and 10% of coastal and marine areas, should be conserved through PA systems) (CBD Secretariat, 2012; Jonas, Barbuto, Jonas, & Kothari, 2014; Muhumuza, 2012).

It could be that the first unofficial TBCAs were created once international borders began to be drawn, splitting ICCAs into neighboring States (e.g., Rwenzori Mountains of the Democratic Republic of the Congo – DRC and Uganda). Traditional societies or tribes may have had agreements about the territories they inhabited. In East Africa, there was a practice witnessed by colonial missionaries during the peace settlement of the Uguha wars in the late 18th and early 19th centuries. The long warring parties “threw down their spears, took up their hoes to mark out boundaries & came to terms of peace” (Reid, 2007, p. 181). Boundary making signified mutual recognition of territorial sovereignty and was integral to conflict resolution; the hoes symbolized the cultivation of peace around the newly set borders. These may not have been formal TBCAs, but they provide an example of traditional cultures creating transboundary zones of peace. Sacred Natural Sites may have been the world’s first Parks for Peace; again, dating back to a time unknown. For example, in the Karamoja region where the Kidepo Valley case study is located, sacred groves are recognized by different tribes as sanctuaries from violence where weapons have to be left behind (or destroyed in ceremony) and peace agreements with enemies are respected (Anonymous, 2017k).

The story of PAs, TBCAs and Parks for Peace becomes much longer and more diverse when considering cases that do not at first glance fit the IUCN definitions or are not known by North Atlantic societies and were not established by comparable protocol. Tracing an inclusive history of the development of PAs, TBCAs or Parks for Peace would likely involve a transboundary collaborative effort of unprecedented scale, reaching millennia back in time, but it could provide a repository of long-existing alternative approaches to the violences of fortress model TBCAs. Unfortunately, such a history has never been collected or documented. Therefore, the TBCAs identified in this study and virtually all TBCA literature, focus on a model of transboundary conservation that generally derives from colonial models of nature protection.

Including alternative TBCAs may alter the dominant definitions of TBCAs and any existing attempts at quantifying them. This dissertation does not undertake to rectify the narrative of TBCA development historically, nor is it able to incorporate alternative models of TBCAs in the legal review and case studies. It does observe that these historical injustices are not addressed in TBCA agreements (see Chapter 4), that unrecognized alternative traditional peace and conflict resolution processes exist even in fortress model TBCAs (see Chapters 5 and 6), and that this may be part of the solution in designing TBCAs as vehicles for peace and conflict resolution. Therefore, the framework of analysis applied in this dissertation and the various research findings are intended to shine some light in the direction of conflict transformation for and through TBCAs.

1.5 The problem statement: seeking peace, creating conflict

1.5.1 TBCAs creating conflict

The government-driven vs. community-based development of TBCAs debate is symptomatic of a deeper injustice related to the preferential promotion of one version (fortress conservation) over the many other alternatives that exist (Brockington et al., 2008, pp. 19–24; Shoreman-Ouimet & Kopnina, 2015; 2012, pp. 29–36). Despite all the bravado around “America’s Best Idea” and the “concept that can be embraced by all,” PAs, TBCAs, and Parks for Peace are increasingly criticized for social injustices and on-going violences (Brockington et al., 2008, pp. 19–24; 2012, pp. 29–36). These are the subaltern stories that have emerged from the fringes of conservation through political ecology. Mainly these stories reveal: (1) colonial or imperial origins and influences, (2) conservation as a capitalist political enterprise, (3) impacts on marginalized peoples, especially Indigenous Peoples and rural or low-income communities, and (4) coercive practices or human rights abuses (W. M. Adams & Mulligan, 2003; 2008, p. x; Duffy, 2001; Grandia, 2007; Heynen, McCarthy, Prudham, & Robbins, 2007; Neumann, 2004, p. 813; Peluso, 1993).

For example, in the case study of the GVL, the Twa people tell a story of dispossession, forced displacement, exploitation and ostracization (Dowie, 2009; Zephyrin, 2001). The forests that now form parts of the PAs within the GVL (Bwindi Impenetrable NP, Mgahinga Gorilla NP, Virunga NP

and even Rwenzori Mountains NP) are their ancestral domain, but they were forced to relocate and to find other ways to access livelihood and biocultural resources when the post-colonial PAAs re-adjusted the PA boundaries and began implementing park management.

"By way of background, as of 21 April 1925, Batwa Pygmies in DR Congo were forced to leave their ancestral forest in what is now Virunga National Park when the forest was unilaterally converted into a protected area. Similar forced evictions occurred in Rwanda in the 1920s when the Volcanoes National Park was established on Twa land, and the Twa's traditional activities – including hunting, fishing and animal trapping – were completely banned in these areas in 1974. In Uganda, Twa land was unilaterally converted into forest reserves in the 1930s and later upgraded to the Bwindi Impenetrable National Park and the Mgahinga Gorilla National Park in 1991. In all three countries, the Batwa/Pygmies were never consulted nor did they receive adequate or any compensation for the taking of their lands." (Centre d'Accompagnement des Autochtones Pygmées et Minoritaires Vulnérables & United Organisation for Batwa Development in Uganda, 2008, p. 2)

Later, when the transboundary collaboration and governance systems came into being, the Batwa or Twa people found they were still disenfranchised from the processes and petitioned through a 'Joint Declaration of Indigenous Organisations and Indigenous Support Organisations of the Central Albertine Rift Transboundary Biosphere Initiative' for recognition of their rights and for full consultation in the development of the TBCA (Centre d'Accompagnement des Autochtones Pygmées et Minoritaires Vulnérables & United Organisation for Batwa Development in Uganda, 2008). It was not transboundary conservation that they were against, it was exclusion from its processes that they found disempowering (Kidd, 2011). As the TBCA legal review in Chapter 4 reveals, historical social injustices are really not addressed in cross-border collaborative agreements and as the case studies in Chapters 5 and 6 illustrate, this failure can limit

peacebuilding and conflict resolution through transboundary conservation.

1.5.2 Peace as a pre-requisite

Criticisms of PAs, TBCAs and Parks for Peace challenge theories of environmental peacebuilding, which propose that cooperation over shared natural resources will strengthen relations between parties and across boundaries (Conca & Dabelko, 2002). TBCAs and Parks for Peace have been recommended to resolve even the most divisive border disputes (e.g., de-militarized zone or DMZ between North and South Korea or the Golan Heights between Israel and Palestine). In theory and in many instances, transboundary environmental cooperation is a non-violent process that can support conflict prevention (e.g., reducing environmental insecurity), peacekeeping (e.g., deployment of 'green helmets' or rangers protecting civilians and wildlife), peacemaking (e.g., integrating Parks for Peace or regenerative natural resource use and benefit-sharing in peace agreements) and peacebuilding (e.g., sustaining collaborative natural resource governance) (Matthew, Brown, & Jensen, 2009; 2011, p. 10). However, transboundary environmental cooperation is not the only pathway to ecological peacebuilding. Some environmental dimensions of conflicts can be addressed unilaterally (e.g., wildlife trade bans, sanctions) and with the political economies of resource conflicts so globalized today, peace and conflict interventions may need to come from faraway governments, not just from neighboring States (Le Billon, 2012). Therefore, it is worthwhile to consider whether TBCAs are meaningful vehicles to environmental peacebuilding.

There is little non-anecdotal evidence that transboundary environmental cooperation begets peace. In perhaps the only study to systematically evaluate TBCAs and peace by Barquet et al., PA dyads straddling international borders are analyzed in relation to instances of Militarized Interstate Disputes (MIDs) (Barquet et al., 2014). The study finds that TBCAs tend to be established between States that have experienced MIDs where there were no casualties, which coheres with Waisová's assessment based on three case studies that environmental cooperation only begins when there are no violent clashes between parties (Barquet et al., 2014; Waisová, 2015). Generally, Barquet et al., are unable to conclude that TBCAs have significant impact on peace in terms of reducing future MIDs (Barquet et al., 2014, p. 8). Regionally, in Africa, the Middle East and Asia, the presence of TBCAs over the long term correlates with fewer MIDs, while in Latin America, TBCAs seem to coincide with increased MIDs (Barquet, 2015, p. 9). Hanks, the first Chief Executive Officer or CEO of the PPF would agree that transboundary conservation and peace take time and that TBCAs are not a quick-fix solution (Barquet, 2015, p. 9; Hanks, 2017). Overall, it is not apparent that environmental cooperation leads to peace.

Barquet et al.'s results from Latin America concur with anecdotal experiences from various TBCAs around the world where it appears environmental cooperation initiatives, like TBCAs and Parks for Peace, may even contribute to conflicts, injustice and violence (Barquet et al., 2014; Brosius & Russell, 2003; Büscher, 2010; Grandia, 2007; Kidd, 2011; Sandwith & Besançon, 2010). In Southern Africa, transboundary conservation has been an active component of regional integration and a remarkable achievement of high-level cooperation following many years of poor or even

antagonistic relations during apartheid, but various scholars shadow the accomplishments by highlighting social injustices and conflicts that arise in and around TBCAs (See e.g., Büscher, 2013; Büscher & Ramutsindela, 2015; Spierenburg & Wels, 2006). This counter-narrative is a common thread throughout the literature on conservation and PAs broadly (2004).

1.5.3 Peace as an external process

If the theory of environmental cooperation is as straightforward as it purports, there should be little to no difference between a TBCA and a Park for Peace. The process of cross-border collaboration in all TBCAs should inevitably contribute to peacebuilding and therefore, all TBCAs could be considered Parks for Peace even if not so named. If a difference in peace outcomes exists (in other words, a TBCA does not contribute to peace while Parks for Peace do positively contribute to peace), it could be said that transboundary natural resources governance does not inherently or automatically contribute to peace. Peace is therefore an external process in addition to transboundary conservation and it needs to be made explicit in order to be achieved. This seems to be the commentary of TBCA proponents themselves (S. Ali, 2007; Sandwith & Besançon, 2010).

Systematic studies of TBCAs are rare and do not speak comprehensively to measured effectiveness in terms of intended objectives or the various potential benefits claimed by TBCA proponents (E.g., Barquet, Lujala, & Rød, 2014; E.g., McCallum, Vasilijević, & Cuthill, 2015; Zbicz & Green, 1997).

There has been no global study of whether TBCAs are improving biodiversity conservation, enhancing the availability or sharing of human and material resources, or truly improving relations between States and cross-border counterparts. Monitoring and evaluation of TBCAs generally occurs at site-level (and perhaps only within individual PAs), utilizes different methodologies, and may not be publicly available (See Bocchino, 2017, p. 2). Most likely, they are also not assessing TBCAs for international peace (between States), social peace (between people/s), and ecological peace (between humans and the rest of nature). These concepts are further defined in Chapter 2.

1.6 Transforming law to transform conflict: critical legal studies in TBCAs

1.6.1 Why law?

Ramsbotham et al. identify international law, institutions, and cosmopolitan democracy as critical to the pursuit of contemporary conflict resolution and deep social transformation – all of which have to do with law (Ramsbotham et al., 2011). In fact, law is everywhere and touches upon every aspect of our lives and physical surroundings. Blomley et al. observe that “law as an instrument of change, domination or resistance, and as a means through which justice might be given practical realization, has, in innumerable ways, shaped – however provisionally – the basic terms and experience of social life.” (Blomley, Nicholas, Delaney, & Ford, Richard T., 2001, p. xv). Law is

inseparable from its socio-political context, being both shaped by it and shaper of it (Tushnet, 1991, pp. 1517–1518; R. M. Unger, 1983). This is what makes law one of the most powerful institutions in human society. Law “not only acts willfully within and controls other actions in settings or domains but also constructs and orchestrates those settings and specifies the distribution and direction of energy flows within them. In short, this is the power to shape environments for human action and interaction” (2005, p. 28 (citing Eric Wolf in “Pathways of Power: Building an Anthropology of the Modern World”)). This is the power by which laws create markets and regulate them, or the way it creates TBCAs and determines their rules and systems.

Law gives meaning to space and is part of the process of placemaking. Space itself is not value-neutral, it is also actively produced, resulting in the concept of place (Lefebvre, 1991). Sometimes this process of place-making for PAs occurs through a rationalizing socio-political process of meaning making; e.g., this place is the last remaining habitat of critically endangered species and therefore it should be recognized as a protected area (Massey, 1994, p. 4). This meaning is then formalized through law’s own legitimizing socio-political process (lawmaking), which allows the socio-political interpretation to be accepted, implemented and enforced within the designated space (See Spierenburg & Wels, 2006). This can also be described as the process of *nomosphering* (the iterative creation and performance of legal meaning and rulemaking through spacemaking) or the production of *nomospheres* (normative universes) (Blomley, Nicholas et al., 2001; D. Delaney, 2010). In nomosphering, “the (socio-)spatial and the (socio-)legal are constituted through each other” (D. Delaney, 2010, p. 23). This is further explored in Chapters 3 and 5.

Law is so powerful that it is often used to advance the interests of political elites as an instrument of structural violence and potentially even cultural violence – as is certainly the case with the neoliberal economic culture which is at the root of so much of the world's ecological violence (See Dezelay & Bryant G. Garth, 2002; De Sousa Santos & Rodríguez-Garavito, 2005). In these cases, conflict formation may arise, driven by a need for (socio-)legal change.

"All attempts to institute horizons, to establish boundaries, to secure the identity of places, can...be seen to be attempts to stabilize the meaning of particular envelopes of space-time...such attempts at the stabilization of meaning are constantly the site of social contest, battles over the power to label space-time, to impose the meaning to be attributed to a space, for however long or short a span of time." (Massey, 1994, p. 5)

Therefore, one of the ways to address this is through a process of re-making the socio-spatial and the socio-legal.

1.6.2 Drawing from critical legal studies

Transforming the law for greater justice, or in this case greater peace, requires a critical review of existing laws. Law and Society scholars emphasize the need to understand the context within which lawmaking happens to uncover oppressive or violent forces of law, and to transform institutions and systems to emancipate law and society for justice (Tushnet, 1991). Blomley's

proposed methodology is to reveal “splices” or “dominant forms of spatio-legal relations” (N. Blomley, 2003, pp. 17–34). In other words, identify sites at which different modes of legal and social power operate, distinguishing between dominant and counter-hegemonic legal paradigm, and identify the institutional and legal transformations that need to happen in order to promote the deep social transformation that Contemporary Conflict Resolution (CCR) is describing (Butler, 2009, p. 315).

Unger’s approach is to compare or contrast “*living law*” (*lex lata*) or “*law as it is*” to “*law as it is written*” (*lex scripta*), as well as compare and contrast “*law as it is*” to “*law as it should be*” (*lex ferenda*) (R. Unger, 1996). This is what he describes as *mapping* and *criticism*, whereby *mapping* is a detailed description of “the legally defined institutional microstructure of society in relation to its legally articulated ideals,” while *criticism* is an exploration of “the interplay between detailed institutional arrangements of society as represented in law, and the professed ideals or programs these arrangements frustrate and make real.” The contribution of legal scholars, therefore, is in the critical analysis of existing laws and their implementation, and where they fall short of what they should be. This is demonstrated through the framework described in Chapter 3.

In terms of critical legal review for peace, the role of scholars is to identify the pathways through which existing laws are contributing to violence and/or conflicts and how they can be reformed for peace. For Sarat and Kearns, law is inherently violent: “law is a creature of both literal violence, and of imaginings and threats of force, disorder, and pain” and yet it “denies the violence of its origins...by proclaiming the force it deploys to be ‘legitimate’” (Sarat & Kearns, 1995, pp. 1, 4). In

a worse scenario, Hay argues that the violence of law as an arm of violence by the State, can inspire greater violence between people (Hay, 1995, p. 151). Therefore, opportunities for non-violent legal transformation need to be identified and utilized. These may come through non-violent social and/or political action resulting in legislative reform through mechanisms of formal or dominant lawmaking systems (e.g., parliament) or through the exercise of legal pluralism (i.e., alternative or dominated legal systems) (See e.g., De Sousa Santos, 1977; DeZalay & Bryant G. Garth, 2002). This dissertation provides a critical legal review of TBCAs for indicators of peace and conflict resolution so that future TBCA “lawmakers” can incorporate the lessons learned and recommendations as they continue to evolve TBCA law towards positive peace.

1.6.3 Why TBCAs?

The project of transforming law in order to transform conflict is very applicable to TBCAs and could bring them into greater congruence with international, social, and ecological peace. Conventional TBCAs are clearly delineated socio-legal-spatial zones often represented by the dominant system of legal authority (State-based park management system with “fences-and-fines”-based law enforcement), but alternative systems of legal practice can persist (e.g., seasonal invasion by nomadic peoples into park lands for livelihood-essential access to water and grazing) and either be deemed officially sanctioned or officially punished for trespass. Laws and regulations draw lines that exclude or even expel local populations, differentiating who is authorized to do certain

activities within the territory and who is not (e.g., high-paying tourists can trophy hunt while local poachers are shot on sight for hunting bushmeat) (Spierenburg & Wels, 2006). Mapping and criticism of pluralistic modes of law-making in a TBCA could help to harmonize tensions between idyllic theories and objectives of the TBCA and their more problematic tensions on-the-ground.

Transboundary cooperation inevitably involves agreements and norms. Even informally, collaborating parties must determine who to involve, for what purposes and how to work together. A formal legal framework typically defines at the very least the territory, objectives and terms of collaboration (e.g., institutions/partners, activities, etc.). If “law is to space as mind is to body,” then the legal framework is the “mind” of the TBCA, the organizing system by which its objectives are identified and manifested (D. Delaney, 2010, p. 13). Examining a TBCA’s legal framework allows us to determine whether it is being appropriately designed for peace and whether different designs might be more conducive to positive peace.

The process of compiling a TBCA legal framework is essential to transforming violence. It can give voice to both official or codified *and* unofficial or uncodified customary practices, norms and principles that reveal landscapes of legal pluralism. Legal pluralism speaks to the cohabitation of multiple legal orders or systems in a place (De Sousa Santos, 2002, p. 89). These simultaneously existing legal systems can be “cross-cutting, intersecting, aligning with one another, or existing in relations of paradox or antagonism...because the social relations of space are experienced differently, and variously interpreted, by those holding different positions as part of it” (Massey, 1994, p. 3). E.g., PAAs and local communities experience PA designations uniquely. Increasing

understanding of local systems, knowledge and customary law is relevant to the mission of decentralizing and decolonizing law (De Sousa Santos, 1977; De Sousa Santos & Rodríguez-Garavito, 2005; Kleinhans & Macdonald, 1997).

1.6.4 Uniting the disciplines for peace and conflict transformation

In pursuit of transforming law, Critical Legal Studies (CLS) would benefit from deep integration with CCR, including its environmental security and peace subset, and with political ecology. There are numerous existing connections between the disciplines, including overlapping objectives (notably, social transformation and justice), theories and interdisciplinary methodologies. Political ecology studies have been the most critical of TBCAs, demonstrating law as an instrument of violence in PAs (Duffy, 2005; Massé & Lunstrum, 2015; E.g., Spierenburg & Wels, 2006, pp. 303–304). If ecological peacebuilding is to transcend these criticisms of structural violence, it must evolve itself beyond generic theories of partnership for peace and consider the scale and diversity of conflicts and violence in socio-ecological landscapes to propose more nuanced interventions for positive peace.

Whenever ecological conditions can trigger conflict or insecurity, it simultaneously provides an entry-point for strategies of prevention, peacekeeping, peacemaking, and peacebuilding. When these interventions are about “addressing structural issues and the long-term relationships

between conflictants," referring more to the agenda of social change that both political ecology and CLS are also about, that is where we find CCR (Ramsbotham et al., 2011). The critical lens of political ecology needs the pragmatic approach of CLS to move beyond critique and into the realm of solutions. When critical socio-legal studies are performed in a TBCA, it builds on the work of political ecology by identifying the legal mechanisms for conflict and violence in the landscape, as well as the ones for conflict transformation and peacebuilding (CCR). This can thereby contribute to the advancement of environmental peacebuilding, not only in theory but more importantly, in practice. Transforming law in order to transform conflicts in TBCAs requires not only the integration of international, social, and ecological peace, but also a uniting of the disciplines.

1.7 Just conservation for just peace

Conservation is not a neutral process, and neither is law. TBCAs are a by-product of socio-ecological processes and connectivity. History tells the stories of the rise and fall of cultures and nations, which altered relations between peoples and their environments. Only when places became divided, did the concept of transboundary become relevant. Perhaps similarly, it could be contemplated that PAs became relevant when people and the rest of nature became divided. Thus, TBCAs begin with separation, then efforts to repair and reunite follow. Without cross-border cooperation they are just adjacent PAs. Initial cooperation may come from external actors bringing new ideas, it may come from within but looking at outside examples, or it may derive from pre-

existing unity, for example where a community, or people have been divided by borders and they must find ways to overcome separation. It may be funded by outsiders and influenced by their objectives. These all affect the ways in which a TBCA is formalized.

TBCA laws are ultimately a by-product of socio-political and political economic factors, which in turn, affect the way in which peace is cultivated in a landscape through lawmaking. Some parties do not end up at the table (e.g., illicit actors who are significant forces within a landscape and may become peace disrupters), while some external forces may have significant control (e.g., donors funding transboundary programs according to their own values, beliefs, and strategic objectives). State-driven collaborations may leave out non-governmental peace partners and mechanisms (e.g., indigenous/traditional systems), while emphasizing the role of traditional national security (e.g., military), which can lead to the implementation of more coercive means to peace. This practice has long been legitimized as “just war,” but what could be more transformative for TBCAs is “just conservation” and “just peace” (Allan & Keller, 2006). This raises further questions as to how TBCAs have been incorporating just peace into their design and processes.

1.8 Overview of dissertation

To summarize, this dissertation asks the broad question of whether TBCAs and Parks for Peace are ‘working’ in terms of all three categories of peace. It argues that TBCAs are not providing the peace

dividends anticipated because they are not adequately addressing international, social and ecological peace. In other words, TBCAs are not sufficiently cultivating peace or facilitating conflict resolution between States, between people(s), and between humans and the rest of nature, and thereby are not proving effective towards positive peace. There is some evidence that TBCAs, including Parks for Peace, rely on pre-existing international peace for formalization (Barquet et al., 2014; Hanks, 2017; Waisová, 2015; E.g., Alcalde, Ponce, & Curonisy, 2005, p. 63) and that they are primarily designed for ecological peace (i.e., ecological connectivity and environmental security) (See Lubbe, 2008; Vasilijević et al., 2015, p. 22; See Uwingeli, 2017), while potentially sacrificing social peace (Büscher & Ramutsindela, 2015; Chapin, 2004; Duffy, 2001; Massé & Lunstrum, 2015; West, Igoe, & Brockington, 2006). Political ecologists have helped to raise the critiques, but this has yet to trigger a peace renaissance for TBCAs. Such transformation requires that TBCAs be evaluated for peace and CCR, not just for cooperation. Peace must shift from a symbolic aspiration to an active process within transboundary land and seascapes.

The following chapters of this dissertation examine these hypotheses and assertions in different ways. Chapter 2 sets the foundation for this dissertation's understanding of positive peace, based on international peace, social peace, and ecological peace. With these concepts of peace, it becomes clearer that TBCAs are not achieving peace in all three categories and thereby, are at best, structures of negative peace. This chapter further develops the problem statement around TBCAs and how transboundary conservation is challenged in all three categories of peace.

Chapter 3 provides a *framework of analysis* combining the disciplines of CLS, political ecology and CCR. This framework can be used to assess the legal framework of a TBCA for all three categories of peace and various stages of conflict transformation. It utilizes “chains of explanation” from political ecology, conflict mapping from CCR, and Unger’s mapping and criticism from CLS. CCR also provides the basis for criticism by setting out *lex ferenda* or “*law as it should be*” according to positive peace. The GVL provides an example of the framework in application.

Chapter 4 looks to the practice of transboundary conservation through a *systematic review* of 56 TBCA agreements (i.e., *law as it is written*, or *lex scripta*) based on indicators of international peace, social peace, and ecological peace, and through the *analysis of survey responses* from 88 TBCA practitioners (i.e., *living law*, or *lex lata* customary practices on-the-ground), providing reflections on whether TBCAs contribute to conflict transformation and peace, how, and in what ways the TBCA agreements do or can facilitate these processes. Taking into consideration the key elements of success for cross-border cooperation as identified by TBCA practitioners in the survey on TBCA agreements, the 56 TBCA agreements in the legal review are assessed for key elements such as clarity of objectives, specificity of transboundary activities, establishment of transboundary institutions, funding, etc.

Chapter 5 continues with the case study of the GVL, elaborating on the history of its transboundary collaboration and legal framework, while also looking at conflict management through its institutional mechanisms. This helps to demonstrate the importance of strengthening transboundary governance to directly support conflict resolution on-the-ground. It also highlights

a few alternative or traditional mechanisms for peace and conflict resolution that could be incorporated to strengthen ecological peacebuilding in the GVL.

Chapter 6 adds to the case study of the GVL by comparing it to the Kidepo Landscape on a different set of international borders of Uganda – between South Sudan and Uganda, near the Kenyan border. Contrasting the different institutional approaches, levels of cooperation, and conflicts that they face, this research helps to highlight the value of on-going engagement at the local level, and the need to address peace and conflict resolution explicitly in all aspects of transboundary conservation. This chapter emphasizes conflict-resilience and conflict-sensitivity for transboundary conservation and TBCAs in areas of violent conflict.

Finally, Chapter 7 reflects overall on the conclusions of each chapter and connects the findings toward a series of recommendations that can be useful in improving the design and implementation of TBCAs for peace. This includes an explanation of the limitations of this research, recommendations, and some foresight on future research directions.

2 CHAPTER 2: WHAT DOES PEACE MEAN FOR TBCAS?: UNDERSTANDING INTERNATIONAL PEACE, SOCIAL PEACE, AND ECOLOGICAL PEACE

2.1 Introducing peace for parks

Hundreds of years ago, possibly as far back as the 11th to 16th century A.D., the Great Peacemaker and Hiawatha united the Five Nations of Mohawks, Oneidas, Onondagas, Cayugas and Senecas under the Iroquois Confederacy, describing a Vision for the Great Peace Confederacy as a union of people of many nations ruled by one government of their nations “in justice, in peace, in beauty, in respect, and compassion” (De Costa, 1873; Issitt, 2006; Saraydarian, 1984, p. 57). Their vision was that this Great Peace would bring in other nations under its protection. Haiwatha declared that:

“After this unity, each nation will protect the other nations. Each nation will be a refuge for others in emergency. Each nation will make other nations’ survival possible. In unity we will survive. In unity we will prosper.” (Saraydarian, 1984, p. 56)

Today the United Nations (UN) is headquartered on the land of the Iroquois Confederacy where the Great Law of Peace is kept. The UN continues to promote a Culture of Peace that includes justice, peace, beauty, respect and compassion. The UN Declaration on a Culture of Peace defines a Culture of Peace as “a set of values, attitudes, traditions and modes of behavior and ways of life based on,” *inter alia* (UNGA, 1999, p. Art. 1):

- Respect for life and non-violence,
- Full respect for all human rights and fundamental freedoms,
- Peaceful settlement of conflicts,
- Sustainable development for present and future generations,
- Principles of cooperation, pluralism, cultural diversity, dialogue and understanding at all levels of society and among nations

In the wake of the 1987 UN World Commission on Environment and Development, the Earth Charter was drafted to call for a “sustainable global society founded on respect for nature, universal human rights, economic justice, and a culture of peace” (Earth Charter Commission, 2000, p. pml.). In order to cultivate a Culture of Peace, the Israel/Palestine Center for Research and Information recognizes that it is:

“an on-going process, it is necessary to continue to challenge each other, both looking at the other side’s society and looking inward at our own society...to deal with some of the more difficult questions involved in what it takes to create a culture of peace at a time when peace does not yet exist, when the streets are filled with violence, when the challenge of the conflict still exists, when we are still, perhaps not officially but in reality, enemies” (Baskin & al Qaq, 1999, p. 3).

As the Israeli/Palestine Center for Research and Information rightfully notes, peace requires change within an individual, within a community, and across communities. As stated in the Constitution of the United Nations Educational, Scientific, and Cultural Organization (UNESCO), “since wars begin in the minds of men, it is in the minds of men that the defences of peace must be

constructed" (Constitution of the United Nations Educational, Scientific, and Cultural Organization, 1945, p. pmbl.). UNESCO seeks this change through communication, cooperation, and cultural exchange (Constitution of the United Nations Educational, Scientific, and Cultural Organization, 1945, p. Art. 1(2)). The UN can be thought of as an organ of international peace, while the Israeli/Palestine Center for Research and Information speaks more to social peace and the Earth Charter to ecological peace. However, as argued below, all three categories of peace are integrated and interdependent.

2.2 A movement in need of transition

Despite the many downsides of bordered PAs (see Chapter 1), TBCAs have proliferated around the world. With Dr. Anton Rupert, President Mandela, and other political elites spearheading the PPF, 18 TBCAs, which are known as TFCAs in southern Africa, have been in development post-apartheid throughout SADC (Hanks & Myburgh, 2015). In Europe, the Federation of Nature and National Parks of Europe (EUROPARC) hosts a transboundary PA network, TransParcNet, that represents 10 TBCAs; the Green Belt Initiative is transforming the former 'Iron Curtain' into an ecological network; and the Balkans are reconnecting through TBCAs (EUROPARC Federation, 2017; European Green Belt Association, 2017). Latin America also features connectivity initiatives, such as the Mesoamerican Biological Corridor which houses a number of prominent TBCAs, including Parque Internacional La Amistad which straddles two States that have dissolved their national

armies, and the world's first TBCA created through a peace agreement between Ecuador and Peru (S. H. Ali, 2018; Barquet, 2015). According to the WCMC, in 2007 there were 3,043 PAs constituting 227 TBCAs worldwide (Lysenko et al., 2007).¹ This number does not include the numerous transboundary ICCAs (TBICCAs) that likely significantly outnumber State-to-State TBCA collaborations. The TBCA movement seems to thrive on while the clamor for Parks for Peace has quieted.

Parks for Peace were especially promoted in the 1990s as a win-win collaboration for nature and people (Sandwith et al., 2001; Vasilijević et al., 2015, p. xi; Westing, 1993). When PPF first began its mission to develop TFCAs throughout SADC, it used the terms TFCAs and Peace Parks interchangeably (Hanks, 2017). Continuously challenged by PA-community conflicts or lack of social peace in TFCAs, PPF has distanced itself from this practice and has clarified that SADC's TBCAs are TFCAs and not any of the other confusingly interchanged nomers (e.g., Peace Parks or Transboundary Natural Resource Management Areas) (Hanks & Myburgh, 2015, pp. 160, 163). It seems peace may be elusive for TBCAs, even in Parks for Peace. As this chapter argues, this is especially true if we consider peace through the lens of positive peace (Galtung, 1969), and apply it to international peace, social peace, and ecological peace.

As set out in Chapter 1, TBCA scholarship seems to agree that transboundary conservation does not contribute to peace as the early literature on environmental peacebuilding might have hoped

¹ As noted in Chapter 1, there are a number of identifiable errors with these numbers. They are cited here for the purposes of demonstrating a growing trend in the establishment of TBCAs.

(Barquet et al., 2014; Sandwith & Besançon, 2010, p. 232; Wolmer, 2003, p. 6). The Greater Virunga Transboundary Collaboration (GVTC) between the DRC, Rwanda, and Uganda has repeatedly codified its aspirations for regional peace and conflict resolution in transboundary Memorandums of Understanding (MoUs) and Declarations, but cognizant of on-going violence in the region, it does not consider the GVL to be a Park for Peace (Ruzigandekwe, 2017). John Hanks, first CEO of PPF, concurred that “peace comes first” and that it would be impossible to get TFCAs up-and-running between States that are still experiencing real conflict (Hanks, 2017). This challenges the environmental peacemaking theory of Conca & Dabelko amongst others, which argues that transboundary natural resources management can serve as a ‘neutral’ issue that can bring conflicting parties to the table for wider dialogue (Waisová, 2015, p. 106). Environmental cooperation may not be so neutral if it is so easily derailed by ‘higher politics’ (Waisová, 2015, p. 110).

Although the evidence for TBCAs and peace is bleak, one cannot help but question: is it that Parks for Peace or TBCAs cannot be effective mechanisms for international, social, and ecological peace? Or is it that they have not yet been properly designed to do so?

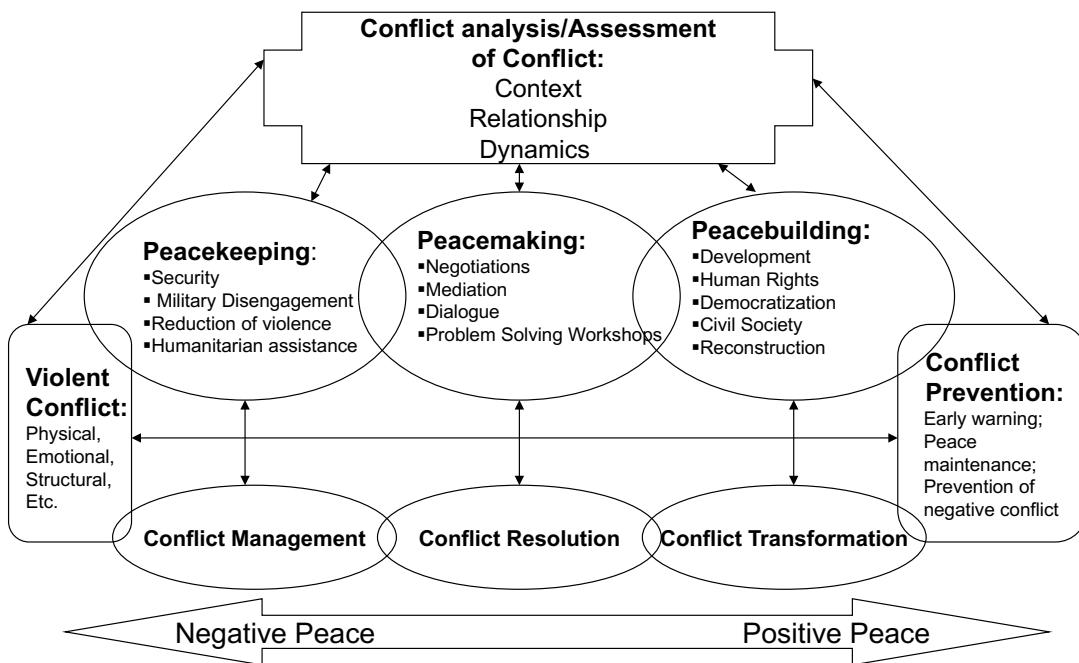
2.3 Integrated peaces: fundamentals

In this dissertation, peace is understood through the categories of international peace, social peace, and ecological peace, and the concepts of positive peace vs. negative peace. Positive peace and negative peace derive from Johan Galtung's theories of peace and conflict. Galtung describes peace not as the absence of conflict, but as the absence of violence and therefore, non-violent transformation of conflict (Galtung, 1996, p. 9). Violence can be direct (personal, physical) violence or indirect (structural) violence (Galtung, 1969, p. 171, 1990, p. 291). Indirect violence is called structural violence because it originates from social structures between people, between groups of people (societies), and between groups of societies; e.g., immigrant children die from poverty attributable to labor restrictions (Galtung, 1996, p. 2; Ramsbotham et al., 2011, p. 11). Underlying direct and indirect violence is cultural violence, which is used to justify all other violence. Hence, the importance of strengthening cultures of peace. Negative peace is the absence of direct violence, while positive peace is the absence or overcoming of direct violence, as well as structural and cultural violence (Ramsbotham et al., 2011, p. 11). Legitimacy and justice are integral to positive peace; hence, the importance of law in a culture of positive peace (Galtung, 1996, pp. 31–34; Ramsbotham et al., 2011). This dissertation utilizes Galtung's fundamental concepts of peace in all three categories of peace.

As peace is most often understood through its counterparts, conflict and violence, and conflict resolution is fundamental to peace, it is still useful to define conflict. Conflict, according to Johan

Galtung, is the full articulation of: (1) *contradiction* – disagreement in values or interests; (2) *attitudes/assumptions* – cognitions and emotions towards each other, including themselves; and (3) *behavior* – actions, which can be destructive or constructive, even simultaneously (Galtung, 1996, pp. 71–72). Peace is not necessarily the absence of conflict; it is a response to conflict formation and ranges from conflict settlement (negative peace) to conflict transformation (positive peace) (see Figure 2-1 below) (Ramsbotham et al., 2011, p. 10). CCR sees “conflict formations arising out of social change, leading to a process of violent or non-violent conflict transformation, and resulting in further social change in which hitherto suppressed or marginalized individuals or groups come to articulate their interests and challenge existing norms and power structures” (Ramsbotham et al., 2011, p. 25). Conflict resolution seeks to “transform (actually or potentially) violent conflict into peaceful (non-violent) processes of social and political change” (Ramsbotham et al., 2011, p. 32). This search for social change and transformation of norms or power structures could also be seen as pursuit of justice. At each stage of conflict, there is transformative potential for greater justice and hence, greater peace.

Figure 2-1 Overview of the field of peace and conflict studies



Developed by Dr. Amr Abdalla and the students of the course on Navigating Cultures for Peacebuilding. Eastern Mennonite University, Summer 2005.

Conflict escalation and de-escalation is sometimes portrayed as an hourglass model or a wave-like cycle of conflict (Figure 2-2) (Lund, 2011; Ramsbotham et al., 2011, p. 14). This does not mean that the stages of conflict are linear and move up and down the hourglass or conflict cycle in sequence; in fact, in CCR it is recommended that during de-escalation all of the conflict resolution tasks are initiated simultaneously and nested (Ramsbotham et al., 2011, p. 14).

Figure 2-2 Modeling conflict: the “hourglass model” and “cycle of conflict”

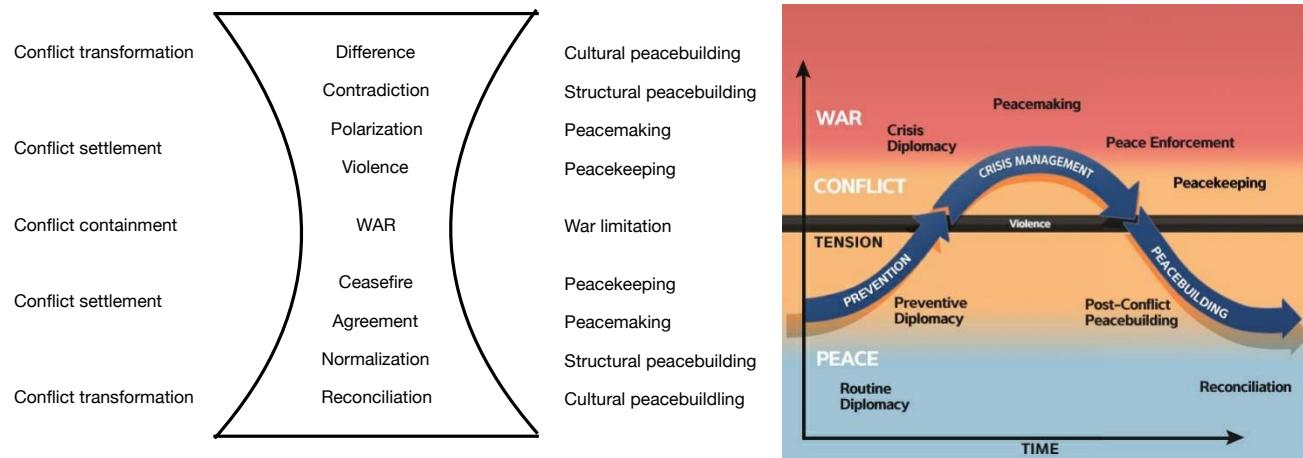


Table 2-1 below provides definitions for each of the peace and conflict terms appearing in the hourglass above as outlined in ‘Contemporary Conflict Resolution: The Prevention, Management and Transformation of Deadly Conflicts’ (Ramsbotham et al., 2011, pp. 30–32).

Table 2-1 Conflict terminology

TERM	DEFINITION
Conflict	Pursuit of incompatible goals by different groups
Armed conflict	Conflict where parties on both sides resort to the use of force
Violent conflict	Similar to armed conflict, but includes one-sided violence (direct, physical violence)
Conflict settlement	Reaching of an agreement between the parties to settle a political conflict, so forestalling or ending an armed conflict
Conflict containment	Peacekeeping and war limitation (geographical constraint, mitigation and alleviation of intensity, and termination at the earliest opportunity)
Conflict management	Settlement and containment of violent conflict; Positive conflict handling
Conflict resolution	Deep-rooted sources of conflict are addressed and transformed; Behavior is no longer violent, attitudes are no longer hostile and the structure of the conflict has changed

Conflict transformation	Deepest levels of cultural and structural peacebuilding; Deep transformation in the institutions and discourses that reproduce violence, as well as in the conflict parties themselves and their relationships
Contemporary conflict resolution	Where conflict transformation becomes manifest across global cultures, linking the personal, societal, global and ecological spheres
Negotiation	Process whereby parties seek to settle or resolve their conflicts
Mediation	Involves the intervention of a 3 rd party; voluntary process in which parties retain control over the outcome
Conciliation facilitation or	Intermediary efforts to encourage parties to move towards negotiations
Problem-solving	Parties invited to reconceptualize the conflict with a view to finding creative win-win outcomes
Reconciliation	Longer-term process of overcoming hostility and mistrust between divided peoples
Peacemaking	Moving towards settlement of armed conflict, where parties are induced to reach agreement voluntarily; Aims to change the attitudes of the main protagonists
Peacekeeping	Interposition of international armed forces to separate the armed forces of belligerents; can include monitoring and policing and supporting humanitarian interventions; Lowers the level of destructive behavior
Peace-enforcement	Imposition of a settlement by a powerful 3 rd party
Peacebuilding	Addresses structural issues and long-term relationships between conflicts; underpins peacemaking and peacekeeping by seeking to overcome the contradictions which lie at the root of the conflict

Source: (Ramsbotham et al., 2011, pp. 31–32)

This study seeks to understand how TBCA legal agreements have addressed conflict management, resolution, and transformation in terms of international peace, social peace, and ecological peace. The sections (2.2.1 – 2.2.3) below explain what is understood by each of these three categories of peace and how they interrelate.

2.3.1 International peace

2.3.1.1 Early conflict studies: symptoms and remedies for war between States

International peace refers to conflict, peace, and security between States. International conflict describes a level of conflict (inter-state vs. intra-state or individual/group/State), but it also reflects the nature of conflict (e.g., two governments directly in conflict vs. one government in conflict with a sub-national group, even if the sub-national group is being supported by another government). The European peace education and research agenda of the early 1900s saw international peace as a subset of international relations and international security primarily occupied with external threats to a State (Barash & Webel, 2014, pp. 23–24; Commission on Human Security, 2003, p. 3). Its method to understanding peace was through the study of *international dynamics* (Ramsbotham et al., 2011, p. 37).

Formal peace studies programs established in 1930-31 in France and Germany amidst widespread international violence underpinned by extreme cultural violence and elusive peace emphasized the need to understand the causes of war as part of a strategy to cure the disease of war by understanding its symptoms (social, political or economic factors) and in order to propose its remedies (mechanisms or conditions for peace) (Ramsbotham et al., 2011, pp. 37–38). Thus, the

focus has been on conflict which can be quantified (e.g., armed conflicts are defined as those producing 25+ deaths a year), categorized (e.g., international, civil, protracted, major, etc.), mapped (e.g., Peace Research Institute Oslo – PRIO – dataset of conflict sites), and analyzed for emerging patterns or hotspots (See Dittrich Hallberg, 2012; Uppsala Conflict Data Program, 2017). Current measures of violent conflict include interstate war and MIDs, indicating continued value in understanding the state of international peace. Even internationalized internal conflicts are measured as on the rise with 2016 being the deadliest in the last decade (Institute for Economics and Peace, 2017, p. 49).

A focus on interstate war, MIDs, or even internationalized internal armed conflicts reflects only negative international peace – direct violence between States. It prioritizes “threat power” over “integrative power” or “exchange power” (Ramsbotham et al., 2011, pp. 269–270). A transition towards positive international peace would have to look at cultural and structural relations, legitimacy, and justice between States as well. In this process, Galtung references four discourses of power – cultural, economic, military and political (Galtung, 1996). In positive international peace, non-violent exercises of these four powers must prevail. Some indicators could be: abundance of cultural exchange (e.g., study/work abroad, tourism) and mutual understanding; trade relations and economic harmonization; participation in regional institutions (e.g., Association of South East Asian Nations – ASEAN, African Union – AU, European Union – EU, UN), currencies and legal harmonization; demilitarization and joint alternative security cooperation; level of diplomatic relations and movement of people between States (for employment, habitation, or tourism); etc. Positive international peace is not just about disarmament and the end of warfare,

it is about international cooperation and global well-being.

2.3.1.2 Challenges of international peace for TBCAs

Allegedly, TBCAs provide a collaborative opportunity for adjacent States to promote greater positive international peace. Protagonists of TBCAs and Parks for Peace suggest that they help create a “habit of cooperation” in areas of mutual interest that can spread to other areas of potential contest (Barquet et al., 2014, p. 3; Conca & Dabelko, 2002). This can serve to resolve border disputes or conflicts in borderlands, including reconciling divided States (e.g., North and South Korea) (Barquet et al., 2014, pp. 2–3). Ide’s review of empirical studies linking environmental cooperation and peace concludes that “environmental cooperation can facilitate the absence of violent conflict and symbolic rapprochement. Such a link is most likely to be driven by common institutions and the build-up of trust and understanding but highly dependent on a number of contextual factors” (Ide, 2018, p. 3).

Ideally TBCAs can foment positive peace indicators, such as cross-border economies and livelihood systems, social and cultural exchange, long-term bioregional planning and integrated security that promote interdependence, and arguably, more peaceful relations (Barquet et al., 2014, pp. 2–3; Conca & Dabelko, 2002; Oneal, Oneal, Maoz, & Russett, 1996). Whether or not this is true is important as conflict occurs more often between neighboring States and the liberal peace theory

of economic interdependence is highly contested (Biebari, 1996; Brochmann, Rød, & Gleditsch, 2012).

Unfortunately, as noted in Chapter 1, evidence that TBCAs contribute to peace is scarce. Although the Barquet et al. study provided weak evidence that the establishment of TBCAs prevents future conflicts, the overall effect of TBCAs on MIDs was not statistically significant (Ide, 2018, p. 7). In Africa, Asia, and the Middle East, there was some long-term (i.e., 10 years or more) correlation to fewer MIDs (Barquet et al., 2014, p. 8). The significance of this coincidence may be attributable to the pre-existing level of cross-border integration that is required to establish a TBCA and to ongoing good relations that enable the continuity of transboundary conservation activities, rather than the assumption that the transboundary collaboration is driving peace between the States. In other words, again, TBCAs require peace and cooperative relations.

The significance of the Barquet et al. findings may also be heavily skewed. The study is problematic in that they identify 11,141 TBCAs that are not all TBCAs in the strict sense according to the IUCN definition. There is no evidence that they exhibit the critical element of cross-border collaboration; meaning that nearly 11,000 of them are likely merely border-adjacent PAs. The number of TBCAs included in Barquet et al.'s study is probably heavily overstated (10,914 more than the 227 identified by the UNEP-WCMC) and thereby, the weak correlation they did find towards greater long-term peace in Africa, Asia and the Middle East is likely also overstated. Many of the TBCAs identified in the study do not represent instances in which formerly antagonistic States have cooperated to coordinate transboundary governance of adjacent PAs. They could just be

illustrative of States expanding domestic PAs which happen to be near international borders (less-occupied remote territories) and may even be a strategic maneuver. The establishment of PAs in borderlands provides opportunity to strengthen government presence and infrastructure, including security, and establishes a buffer to strengthen national defense and withdraw vulnerable populations from areas that could come under attack (Duffy, 2001; Wolmer, 2003, p. 7; Ybarra, 2012).

Lack of progress in a number of long-standing TBCA proposals (e.g., K2-Siachen, North-South Korea DMZ, Israel-Palestine) indicate that TBCAs are rarely useful to resolve international conflicts and generally require international peace as a pre-requisite (Waisová, 2015; See Ide, 2018). Appendix I provides a list of the TBCAs covered in this research with both the dates of their first transboundary legal agreement and last known inter-state war, according to the Correlates of War dataset and UPCD's conflict data. Where both dates are available, it is clear that all of the TBCA legal agreements followed many years after the last inter-state war where the countries involved were on opposing sides (Sarkees & Wayman, 2010).

As Wolmer noted at the 2003 World Parks Congress in Durban, "It seems wistful thinking that TBCAs are likely to be anything other than a very low priority for governments in actual conflict situations" (Wolmer, 2003, p. 6). Even Barquet et al. note that "states that have been involved in fatal MIDs are not more likely to establish TBPAs. This may be because environmental cooperation tends to be initiated when conflicts are not intense" (Barquet et al., 2014, p. 8). Annex I's simple comparison of dates does not include the spectrum of conflicts that arise between States.

Therefore, it does not definitively conclude that TBCAs are only established in times of peace between States, but it does imply that as other scholars have noted, they do not occur when there is significant violent conflict between the parties.

In some instances, the process of establishing a TBCA may even raise tensions over territorial issues and destabilize negative peace between States (e.g., Pamir Peace Park) (Wolmer, 2003, p. 5). Some TBCA practitioners have noted that the TBCA meetings, which are typically intended to harmonize environmental governance in the land/sea-scape, can be co-opted by higher political conflicts, thereby stalling environmental cooperation (Büscher, 2013). In the Maloti-Drakensberg TFCA between Lesotho and South Africa, participants felt the same influences of geopolitical hegemonies – in this case, the dominance of South Africa – in their interactions (Büscher, 2013, pp. 116–117). There is also the significant issue that territorial issues may not lie between States alone, but might exist between peoples or between people and State. When transboundary governance of TBCAs does not provide adequate platform for people to express grievances, it can augment conflict between them.

Thus, the nuances of establishing a TBCA or Park for Peace should be carefully considered before being proposed for a conflict-prone border area. If TBCAs or Parks for Peace are to facilitate positive international peace, it is critical that their design is not only conflict-sensitive (“do no harm”), but it must also incorporate conflict transformation and peacebuilding or CCR at all levels (“add value”). This is further explored in Chapter 6 based on comparative case studies of the GVL and Kidepo Landscape.

2.3.2 Social peace

2.3.2.1 Early peace studies: Johan Galtung and conflict levels

If international peace is about external relations between States, then social peace refers to internal affairs or conflict, peace and security between people(s). Social conflict is essentially cultural or identity-based violence manifested through direct or structural violence. It can escalate in scale to become an issue of international peace or internationalize (i.e., when external governments participate in supporting one side or another of an intrastate social conflict), but the nature of social conflict is not inter-State per se. Since the 1950s a growing body of research on peace and conflict has emerged to counter the focus on international conflict, bringing light to internal or civil armed conflicts, which exceed international armed conflicts in instances and fatalities (Barash & Weibel, 2014, pp. 25–26; Harbom & Wallensteen, 2009). These often ethno-religious, ideological and communal conflicts were perceived as more complex, blurring distinctions between “state and society, soldier and civilian, internal and external transactions across frontiers, war and organized crime” (Ramsbotham, 2005, p. 111; van Creveld, 1991).

In the 1970s, Edward Azar defined protracted social conflicts as “the prolonged and often violent struggle by communal groups for such basic needs as security, recognition and acceptance, fair access to political institutions and economic participation” (Azar, 1990, p. 93). Similarly, CCR sees

“conflict formation arising out of social change, leading to a process of violent or non-violent conflict transformation, and resulting in further social change in which hitherto suppressed or marginalized individuals or groups come to articulate their interests and challenge existing norms and power structures” (Ramsbotham et al., 2011, p. 25). Elements of social conflict include: (1) communal content or identity group (ethnic, cultural, gender, sexuality, religious, economic, etc.); (2) grievance or deprivation of human needs; (3) poor governance, particularly in relation to differential treatment or failure to satisfy individual or identity-group needs; and (4) international linkages or the political-economic relations that often contribute to prolonging the conflict (Ramsbotham, 2005, pp. 114–116). At a minimum of negative social peace there is freedom from direct violence between individuals and identity-based groups.

Social conflict transformation towards positive social peace requires deep cultural and structural peacebuilding, where justice and equity are imperative (Galtung, 1996, p. 7; Ramsbotham et al., 2011, pp. 31–32). Just peace compels consideration of human rights and social justice in conflict resolution, which it argues are essential to stable or lasting peace, and which CCR argues is essential to positive peace (Allan & Keller, 2006; Ramsbotham et al., 2011, p. 12). Just peace is an indicator of positive peace, which in turn is an indicator of a society’s resilience and capacity for conflict prevention (Institute for Economics and Peace, 2016a, p. 4). In other words, social peace is integral to positive peace. Furthermore, social resilience and conflict prevention are connected to human security.

The Commission on Human Security defines human security as protection of “the vital core of all human lives in ways that enhance human freedoms and human fulfillment” (Commission on Human Security, 2003, p. 4). This is what Galtung perceived to be the essence of peace, where violence is the deprivation or limiting of one’s capacity to fulfill their potential (Galtung, 1969, p. 168). Azar’s scholarship on protracted social conflicts indicates that a State’s capacity to provide human security for individuals or identity-groups is fundamental to social peace. Therefore, positive social peace requires the protection of freedom, security, rights, and justice – all of which are concerns of the legal realm. Hence, CCR considers international law to be critical in the pursuit of positive peace.

2.3.2.2 Challenges of social peace for TBCAs

The social benefits of PAs, including their contribution to human security, have long been promoted and evinced by conservationists but they can be overshadowed by heavy criticism of conservation-induced social injustices perpetrated through structural and cultural violence (S. Ali, 2007, pp. 6–7, 15–16; Chapin, 2004; Stolton et al., 2015; West et al., 2006; Westing, 1993). TBCAs with colonial legacies typically have a number of historical injustices to remedy, but their legal agreements do not seem to address this matter, even those which have a peace objective (see legal review in Chapter 4 and case studies). As discussed in Chapter 5, none of the eight transboundary agreements which govern the Greater Virunga Landscape (DRC, Rwanda and Uganda) mention its

colonial past or the need for historical reconciliation, although they frequently mention support for local communities, peace, and conflict resolution. Current conservation efforts provide some limited benefit-sharing to local communities, but simultaneously perceive them as one of the greatest threats to park resources (GVTC, 2017b).

A great challenge for TBCAs (and fortress-model PAs broadly) in terms of social peace is the rationalizing narrative that they produce when a landscape is designated for limited ecologically-oriented uses (W. M. Adams & Mulligan, 2003). This tends to exclude cultural, spiritual, and livelihood uses or practices within the landscape, prejudicing cultures whose identity-basis is shaped by and made more resilient through land and resource rights (DeGeorges, 2009, p. 639). It also tends to prioritize externally-oriented values of the PAs (e.g., tourism, sport hunting, and research) over local values, which may even become criminalized (e.g., bushmeat hunting) (Chatty, 2002). Sometimes entire communities are dislocated from traditional lands in order to maintain a tourist-valued “wild” landscape aesthetic (J. S. Adams & McShane, 1992; Mbaria & Ogada, 2017). It has not helped that the conservation community is berated for its dominantly North Atlantic ideologies, with local people sometimes perceiving PAs to be “for the whites” and being forcibly removed and/or intentionally excluded from conservation projects (Chapin, 2004; Mbaria & Ogada, 2017; Singh & van Houtum, 2002).

In TBCAs where wildlife wars are contributing to increased securitization of ‘poaching’ and anti-poaching efforts, and even militarization of ranger forces, there is legitimate concern around human rights abuses and the use of coercive force in the name of conservation (Duffy, 2017;

Neumann, 2004; Survival International, 2017a). Similarly, in violent environments where TBCAs are afflicted by armed conflicts, militarization of PAs and counter-insurgency tactics can cause further ostracizing of communities, creating a positive feedback loop of greater conflict and violence (Verweijen & Marijnen, 2016). Even long-time TBCA proponent Trevor Sandwith has cautioned that TBCAs can be “an instrument of conflict, especially when the implementation of conservation strategies impinges on the rights of local people or limits their options to pursue livelihood strategies in times of stress” (Sandwith & Besançon, 2010, p. 232). In other words, when conservation infringes on human security, justice and identity-based grievance, social peace is at risk.

2.3.2.3 Improving social peace for TBCAs

If TBCAs and Parks for Peace are to contribute to positive social peace, it is imperative that they address the condemning legacy of (fortress model) PA-based conservation that is rife with historical and colonial injustices, displacement and human rights abuses, exclusion or the silencing of stakeholder voices, and other identity-based grievances (W. M. Adams & Mulligan, 2003; Brockington, 2002; Chapin, 2004; Dowie, 2009). They need to prioritize human security, human rights, freedoms and justice. Perhaps in this way, they may even offer some positive impact towards the resolution of other social conflicts.

As the PA community suffered from an onslaught of evidence and accusations that they were trading people for parks or disregarding human life for the benefit of wildlife, there emerged a mantra that parks could also be for people (and not just in terms of aesthetic or recreational value) (Naughton-Treves, Buck Holland, & Brandon, 2005, pp. 227-228). This meant greater participation/consultation, reconciliation for historical violations (e.g., compensation for human displacement), implementing rights-based approaches, more equitable benefits-sharing (e.g., revenue-sharing schemes), and supporting sustainable development (McNeely & Scriabine, 1983; Naughton-Treves et al., 2005; Schreckenberg, Franks, Martin, & Lang, 2016). Rights-based approaches to more just nature conservation can take many forms. Fundamentally, it is the inclusion of both substantive and procedural human rights, standards, and indicators in the “design, planning, implementation, monitoring, and evaluation of projects and programmes” (Jodoin, 2014).

More specifically, in the context of TBCAs, rights-based approaches can include, *inter alia*: (1) recognizing human rights in the principles and implementation of transboundary agreements, (2) establishing co-governance of PAs with indigenous and traditional communities, (3) strengthening collaborative natural resource management in partnership with local communities, (4) developing (cross-border) access and benefits sharing (ABS) with transparency and accountability mechanisms, (5) providing reconciliation processes for historic or on-going injustices (e.g., Whakatane Mechanism in Mount Elgon), (6) conducting Social Assessments of Protected Areas (SAPAs), (7) facilitating participatory PA boundary demarcation processes, (8) developing integrated conservation and development projects (ICDPs) to support alternative livelihoods, etc.

(W. M. Adams & Mulligan, 2003; Borrini-Feyerabend, Pimbert, Farvar, Kothari, & Renard, 2007; Franks & Small, 2016; IUCN, 2012; Tuhiwai Smith, 2012). Each of these mechanisms presents their own set of pros and cons, particularly regarding design and implementation flaws; for example, as noted by Lele et al., “assumptions about homogeneous communities, and inattention to tenurial change and security” (Lele, Wilshusen, Brockington, Seidler, & Bawa, 2010). At the very least, human rights standards (e.g., free, prior, and informed consent) should be incorporated in all TBCA agreements, procedural human rights integrated in all transboundary activities, and fulfilment of substantive human rights as related to international, social and ecological peace in and around a TBCA should be upheld and supported (Boyd, 2011; Gellers & Jeffords, 2018; Holland, 2015; Hsiao, 2012).

Sustainable development, one of the claimed benefits of PAs, is meant to balance economic and ecological considerations with social pillars that include human security, rights, freedoms, justice, and peace (World Commission on Environment and Development, 1987; Stolton et al., 2015). Nearly all of the Sustainable Development Goals (SDGs) have an environmental or social linkage with Goal 16 focusing specifically on Peace, Justice, and Institutions.

SUSTAINABLE DEVELOPMENT GOAL 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels (United Nations, 2015)

The concept of sustainable development may in itself be outdated, as conversations have turned to regenerative development, which seems to be more relevant in an epoch defined by

anthropogenically-induced environmental change (Crutzen, 2005; Mang & Haggard, 2016; Robinson & Cole, 2015; University of British Columbia, n.d.). Nevertheless, the SDGs do provide an integrated approach to improving development. Whether the objective is sustainable development, regenerative development, or some alternative, institutions, systems, and stakeholders will determine implementation and outcomes. It is believed that institutions play a key role in whether environmental cooperation contributes to peace (Ide, 2018). In terms of social peace, this dissertation looks at how institutions or in this case TBCA institutions incorporate justice, rights, freedoms, and human security. This is examined most extensively in the legal review of TBCA agreements in Chapter 4 and case studies in Chapters 5 and 6.

2.3.3 Ecological peace

2.3.3.1 The environmental branch of peace, conflict, and security studies

Ecological Peace refers to ecological security and the absence of violence by humans against the rest of nature. In a context of negative ecological peace, this means freedom from direct violence (e.g., extinction of species, anthropogenically-induced environmental change) and in a context of positive ecological peace, it speaks to freedom from cultural and structural violence as well (e.g., neoliberal laws that permit ecological devastation for economic gain or ideologies of human

superiority that can be manifested through religious teachings, cultural affiliations, or social practices that harm non-human nature), reflecting a state of harmony between humans and the rest of nature premised on an ethic or relationship of mutual care and respect (Francis, 2015; Lejano, 2007; Leopold, 1989). Nature in this case refers to all of those entities which we understand to compose our natural environment or biosphere, including living organisms, ecological and hydrological systems, geology, natural resources, etc.

The entire debate about whether humans are a part of nature or not persists because a state of positive peace between humans and the rest of nature evades us (Vining, Merrick, & Price, 2008). There should be no question as to whether or not we are a part of nature – the real conflict lies in whether humans take preference or not (anthropocentrism vs. ecocentrism). As De Lucia notes, the terms “anthropocentrism” and “ecocentrism” are just reversals of center-based paradigms, which necessarily produce a periphery (2017, p. 191). One of the greatest challenges of TBCAs is that they are constructions on the periphery of nation-states and they construct peripheries between nature and the communities surrounding (Andersson, de Garine-Wichatitsky, Cumming, Dzingirai, & Giller, 2013). They demonstrate the critical need to integrate social peace and ecological peace. In this regard, it is worth noting that sometimes violence against nature is committed intentionally or unintentionally because of a lack of respect and responsibility to protect nature (e.g., unsustainable natural resource extraction), but sometimes it is the result of social conflicts playing out through the environment (e.g., the use of Agent Orange during the Vietnam War) (Bertelle, 2000; Cronon, 1996; Davis, Green, & Reed, 2009; Leebaw, 2014). The

capacity to use the natural environment as an extension of violence against our own kind is telling of our disregard for the rest of nature and it is this rift that ecological peace seeks to heal.

Environment, peace, and conflict studies has emerged most prominently amongst a circle of environmental security scholars. Barnett identifies environmental security studies as “one means by which to further our understanding of the ways in which peace and environment are related” (Barnett, 2001, p. 5). Its early scholarship, however was much like early peace studies – heavily focused on violent inter-state conflict and negative peace – and described as realist, dogmatically affixed to nation-state notions of [negative] peace (Barnett, 2001, pp. 27–29). On one hand, the security sector was a threat to the environment and on the other, environmental degradation was a threat to national and human security (Brown, 1997; Mische, 1989; Ullman, 1983; Westing, 1986).

This early work bred “racialized, sexualized, and apocalyptic” neo-Malthusian fears that an expanding human population would overwhelm and degrade natural resources, causing poor and marginalized communities who lack ingenuity or capacity to adapt non-violently to resort to violent social conflict (Homer-Dixon, 1999; Kaplan, 1994; Peluso & Watts, 2001, p. 40). Mapping pathways between nature and violence now involves less environmental determinism and more complex understandings relating characteristics of natural resources, governance, history, culture, politics, economics, and social dynamics across historical periods and geographic scales (Le Billon, 2012).

Environmental security studies have achieved measures in elaborating the ecological dimensions of international peace/conflict and social peace/conflict, but in this pursuit, it has missed the underlying war against nature. In the spectrum of negative ecological peace to positive ecological peace, there is a range of violence that humans are committing purely against nature. With better understandings of the ecological dimensions of the disease of war, we (humans) should be well on our way to writing prescriptions for ecological peace. The traditional security response would be “threat power,” mobilizing the use of force and defense strategies (e.g., intelligence and surveillance) for environmental protection to safeguard human and ecological security (Duffy, 2014; Lombard, 2015; Ybarra, 2015). Alternatively, non-coercive means can be used to mitigate or eliminate violences (direct, structural or cultural) against the environment and efforts towards reparation and even regeneration could be included (Weisman, 2012). Given that much of the direct violence against nature is a by-product of cultural and structural violence, non-coercive mechanisms could better address the root causes that are intertwined in socio-economic and political systems, cultural values and belief systems.

2.3.3.2 Challenges of ecological peace for TBCAs

Ultimately, our species needs to develop a culture of ecological peace in order to co-exist in positive peace with the rest of nature. In theory, TBCAs are one of the ways by which humans are attempting to create zones of peace with nature. They provide habitat uninhabited by man-made

international borders and freedom for species to thrive, so long as they remain within the confines of the TBCA's boundaries. In these places, human activities are limited so as not to produce harm to wildlife or natural systems. Category Ia (Strict Nature Reserve) PAs or TBCAs that allow only for aesthetic enjoyment, limited recreation or research can be seen as an attempt at instituting negative ecological peace (Dudley, 2008, p. 13). The physical violence against nature is reduced, but structural and cultural violences may persist outside of the park borders, impacting nature within (e.g., anthropogenically-induced climate change) (Büscher et al., 2016). Studies on PA downgrading, downsizing, and degazettement (PADDD) warn that even strict PA protection cannot be guaranteed in perpetuity and these safe havens for negative ecological peace are susceptible to social, economic, and political pressures (Mascia et al., 2013, n.d.; Symes, Rao, Mascia, & Carrasco, 2016). Hence, the urgent need for positive ecological peace and not just negative ecological peace.

The Nature Needs Half vs. Whole Earth debate is illustrative of this derision. Some scientists argue 50% of the Earth must be protected in order to adequately protect biodiversity and maintain standards of well-being (Locke, 2013; Wilson, 2016). Others say that agenda would require a tripling of existing PAs coverage, which would have significant impacts to people and most especially the poor, while failing to address the drivers of biodiversity loss and environmental degradation (Büscher et al., 2016). “Even if one could separate humanity from nature on half of the Earth the activities of the human half (especially fossil fuel use) will need to be addressed fully to ensure the survival of biodiversity” (Büscher et al., 2016, p. 2). The Nature Needs Half attempt to support ecological peace actually undermines its own objectives by further institutionalizing the divide between humans and nature and creating a global human-nature apartheid.

The idea of separating nature and humans as proposed by the Half-Earthers pays token heed to the social impacts of PAs, which can affect social peace and even international peace, or diminish political support for PAs (Cafaro et al., 2017). Even with Half-Earth, it is difficult to entirely eliminate direct ecological violence inside of protected territories; poaching and sanctioned large-scale human activities, such as industrial extraction or mining may persist within the PAs. In multi-use TBCAs where humans are not extracted from the landscape and nature-culture practices are allowed to continue, there is greater opportunity to cultivate positive ecological peace (See Infield, Entwistle, Anthem, Mugisha, & Phillips, 2017). Oldekop et al.'s study of 165 PAs found positive conservation and socioeconomic outcomes were positively correlated and most prevalent where local people were empowered and involved in co-management, economic inequalities were reduced, and cultural/livelihood benefits were maintained (Oldekop, Holmes, Harris, & Evans, 2015). If TBCAs are to help us transcend borders and violence towards a Whole Earth, social and ecological peace must be simultaneously addressed.

We might describe this peaceful coexistence or cohabitation of ecosystems, ecoregions and the whole ecosphere as sustainable development at a negative peace minimum or regenerative development when exhibiting positive peace (Mang & Haggard, 2016; United Nations, 2015, p. 2; World Commission on Environment and Development, 1987). Regenerative development is a reaction to the insufficiencies of sustainable development. It began as an approach to design and initially, was most frequently practiced through “net positive” architecture – e.g., the Center for Interactive Research on Sustainability at the University of British Columbia, which seeks to

engineer net-positive impacts in three areas: water, energy, and human wellbeing (Mang & Haggard, 2016; University of British Columbia, n.d.). Observing that sustainable development “has simply prolonged inevitable environmental decline by aiming to make things ‘less bad’ as opposed to finding ways to rehabilitate and improve unsustainable circumstances,” and attempting to better incorporate social considerations, regenerative development seeks to restore unity between humans and the rest of nature, including through human contributions to the restoration, healing, and positive transformation of nature (Robinson & Cole, 2015, p. 133). Thus, regenerative development better aligns with positive ecological peace, while sustainable development, which seeks, at best, to do no harm, is more comparable to negative ecological peace. Arguably, CCR broadly could be considered an approach to regenerative peace, while national security approaches to conflict management might be more relevant to negative peace.

2.4 Connecting peaces

Drawing from these understandings of international, social, and ecological peace and the related debates, I argue that ecological peace, social peace, and international peace are all interrelated, integrated, and interdependent. As environmental security scholars and international declarations have noted, a minimum threshold of environmental quality or well-being is essential to human security and international security. Human security requires positive international peace, social peace, and ecological peace:

“An all-encompassing condition in which individual citizens live in freedom, peace and safety and participate fully in the process of governance. They enjoy the protection of fundamental rights, have access to resources and the basic necessities of life, including health and education, and inhabit an environment that is not injurious to their health and well-being” (Commission on Human Security, 2003, p. 3).

This description of human security by the Commission on Human Security captures various aspects of international peace, social peace, and ecological peace – e.g., peace and safety as elements of international peace; protection of fundamental rights and freedom as elements of social peace; and access to resources, health, and well-being as elements of ecological peace.

Further linking ecological peace and social peace, it is argued that ecological conditions can become sources of social conflict (Gleditsch, 1998; 1991, 1999; Smith & Vivekananda, 2007). In other words, our ‘war’ against nature can incubate violent social conflict or can become a tool of social and international conflict. Natural resource abundance and the presence of high-value natural resources has been shown to exacerbate grievances, fuel greed, or affect resource-dependencies to trigger localized conflicts (Baechler & Spillman, 1996; Collier & Hoeffler, 2001; de Soysa, 2002; Kahl, 2006; Lal & Myint, 1996; Le Billon, 2012; Sachs & Warner, 1995). Case studies predominantly of developing economies link ecological conflict dynamics to social conflict (e.g., relative perceptions of scarcity by an identity-based group denied access to or benefits from an abundant resource) (Berdal & Malone, 2000; Kahl, 2006). In turn, where there are international conflicts or social injustices and violence, the environment may suffer; e.g., burning oil wells during Iraq-

Kuwait war or fire-bombing forests during South Ossetia's secessionist movement (Otarashvili, 2008; Seacor, 1994). Ecological conflicts are often human conflicts (social or international) playing out in a natural landscape with impacts to the environment or utilizing the environment and natural resources for human purposes.

Underlying this behavior is cultural and structural violence between humans and nature that allows the environment to become collateral to our own species' disputes, or to manipulate and exploit the environment for our own violent objectives. Unsustainable human development illustrates our 'speciesist' greed (anthropocentrism). When ecological peace is sought by coercive means (an extreme form of ecocentrism), victims of social injustices may not support the ecological peace that is sought and ultimately, this creates a conflict between them and the environment being protected at their cost; e.g., where people have been removed from their land to create wildlife reserves and they engage in vengeance killings or wildlife poisoning as a result of negative human-wildlife interactions (Chapin, 2004; Dickman, 2010, pp. 461–462; Okot Omoya, Mudumba, Buckland, Mulondo, & Plumptre, 2013, p. 400).

Even Parks for Peace and TBCAs created to resolve conflicts (e.g., Cordillera del Condor which ended a century long violent border dispute between Ecuador and Peru) often prioritize what they consider to be a common 'neutral' interest in shared ecological management (S. Ali, 2007; Sandwith & Besançon, 2010; Sandwith et al., 2001). Carius commented that, "[i]t is ironic that sometimes environmental peacemaking efforts are only successful if they are not explicitly called 'peacemaking' projects" (Carius, 2006, p. 67). In this case, he is referring to a joint project between

Armenia and Azerbaijan to create a database on the Caucasus mountains, which may not have been possible if they had explicitly indicated an interest in contributing towards conflict resolution. This environmental entry-point for low diplomacy may open higher-level political channels of communication between conflicting parties, but if not careful it can also serve as a rationalizing narrative that overshadows the grievances of local communities (S. Ali, 2007; Conca & Dabelko, 2002; Dabelko, 2006; Ramutsindela, 2007, p. 103). This is one of the primary arguments of Buscher's thesis in 'Transforming the Frontier: Peace Parks and the Politics of Neoliberal Conservation in Southern Africa' (Büscher, 2013).

Ecological, social, and international conflicts can be deeply interlinked, therefore interventions to transform these conflicts should also be interlinked. When it comes to positive peace, one cannot be achieved without the others. Many seemingly local conflicts have contributing international factors (e.g., global systems, such as trade and economics, inter-state relations, and religious or ideological regimes) that make it difficult to address root causes through a purely local regime, including through transboundary collaboration (See e.g., Koos & Pierskalla, 2016). Nevertheless, an alliance between neighboring States may offer additional international leverage that would not have existed were one of those countries to act unilaterally. For example, where protected areas are involved, their international designations or global ecological importance can trigger action by international institutions, like the IUCN or UNESCO (e.g., mountain gorilla protection in the GVL) that may play a mediating role. If those interventions are not careful to balance all three categories of peace, their efforts may lose legitimacy or efficacy (e.g., green militarization of Virunga NP in the

GVL as supported by the European Commission and UNESCO's World Heritage Programme) (Marijnen, 2017; Sjöstedt, 2017).

References to peace, especially positive peace, in this dissertation should be considered a reference to the interconnected, interrelated, and interdependent categories of international peace, social peace, and ecological peace.

2.5 International law and the three categories of peace

Drawing from the Charter of the United Nations (UN), the Earth Charter, and numerous multilateral agreements which speak to peace, as well as traditional worldviews of different cultures and beliefs, one finds basis for understanding peace as an expression of relationships between our inner selves (inner peace), those around us (inter-personal peace), between societies or identity-based groups (social peace), between countries or States (international peace), and between humans and the rest of nature (ecological peace). One of the strongest links between law and positive peace is justice.

2.5.1 Just peace

Quoting Mona Fixdal, “war should end in a ‘better state of peace,’ a peace that is more just and stabler than that which held before it began” (Fixdal, 2012, p. 1). Stable peace or an enduring peace requires that the original and emergent point(s) of contradiction reach mutually acceptable resolution where the root causes of actual or perceived injustice are transformed. Peace, once achieved, needs to be maintained and “adapted to changing societal circumstances, in order to survive” (Allan & Keller, 2006, p. viii). In other words, new points of contradiction which may relate to grievances over actual or perceived injustices need to continuously be addressed. Just peace is an indicator of a society’s resilience and capacity for conflict prevention and thereby essential to durable or stable peace and positive peace (Institute for Economics and Peace, 2016b, p. 4; Ramsbotham et al., 2011, p. 12).

There are many elements to justice when it comes to international peace, social peace, and ecological peace already described in international law, which can be drawn upon rather than recreated for TBCA agreements. This includes the concepts of *jus ad bellum* (law on the use of war or just war theory), *ius contra bellum* (law on the prevention of war), *jus in bello* (law in war), and *jus post bellum* (law after war). When applying these largely customary laws to the CCR hourglass illustrated previously, it is notable that they are focused on war between States and not comprehensive in providing a legal framework for conflict transformation in all three areas of peace (international, social, and ecological). Furthermore, just peace does not require “justifiable

violence,” which is the final resort (*ultimo ratio*) rationale found in these customary laws on the use of force and the concept of just war. What just peace requires is recognition of rights (substantive and procedural) and justice for all parties in conflict resolution (Allan & Keller, 2006). Ultimately, “there is no greater justice than peace” (Allan & Keller, 2006, p. xiv). Foundations for justice in international peace, social peace, and ecological peace can be found in international law, regional laws, case law or jurisprudence, and soft law, as well as the laws of individual nations (United Nations, 1945, pp. 91–92). It can include written law or unwritten law, including customary law. This section focuses on codified international laws.

2.5.2 International law and international peace

The primary written laws of international peace derive from multilateral agreements like the Charter of the United Nations (UN Charter), the Vienna Convention, Statutes of the International Court of Justice (ICJ), and the International Criminal Court (ICC). The Vienna Convention sets forth the basic principles of agreement or treaty between States, while the UN Charter provides a global commitment to and multilateral system for maintaining peace and security for all Member States (United Nations, 1945, 1969). Article 1 of the UN Charter defines “international peace and security,” “friendly relations among nations,” “international cooperation,” and responding to international challenges (economic, social, cultural, or humanitarian) as its primary purposes, while UN Principles outlined in Article 2 include peaceful settlement of international disputes and refraining

from the threat or use of force (United Nations, 1945, pp. 5–7). Out of that arises the UN system of Member States and their General Assembly (UNGA), the Secretariat and its various organs (e.g., United Nations Environment Programme – UN Environment) and a series of Councils (e.g., Security Council). Numerous international courts, such as the ICJ and ICC, provide judicial process for procedural as well as substantive justice in the resolution of conflicts between States or against States. These courts uphold customary international law or case law enshrining treaty commitments and general principles of international law that support TBCAs and peace, such as international peace and security, international cooperation in common concerns of humankind, and protection against transboundary harm to environments or natural resources.

International organizations, including organs of the UN system also contribute actively to protection of all three categories of peace. The Constitution of the UNESCO begins: “That since wars begin in the minds of men, it is in the minds of men that the defenses of peace must be constructed” and therefore its purpose is “to contribute to peace and security by promoting collaboration among the nations...in order to further universal respect for justice, for the rule of law and for the human rights and fundamental freedoms” (UNESCO, 2014, p. 5). In the UNESCO ‘Convention Concerning the Protection of the World Cultural and Natural Heritage,’ it calls on all Member States to establish an “effective system of collective protection” against threats or harms to cultural and natural heritage (UNESCO, 1975, sec. pml). Some TBCAs are officially recognized as UNESCO World Heritage Sites or individual PAs within them (e.g., Bwindi Impenetrable, Rwenzori Mountains, and Virunga NPs in the GVL), but ideally all should enjoy the collective protection of international peace.

2.5.3 International law and social peace

UNESCO's approach to international peace recognizes the interrelated values of social peace, cooperation, and mutual respect. Social peace exhibits a diverse array of international legal instruments. For example, the Universal Declaration on Human Rights protects "the right to life, liberty and security of person," recognizing that rule of law and human rights is "essential, if man is not to be compelled to have recourse, as a last resort, to rebellion against tyranny and oppression" (UNGA, 1948, sec. pmb. & art. 3).

Increasingly, the right to a healthy and sustainable environment is being recognized as fundamental to human rights. The UN Human Rights Council (UNHRC) Special Rapporteur on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment's report in January 2017 officially recognized that the full enjoyment of human rights depends on biodiversity and ecosystem services (UNHRC, 2017). The report notes that "degradation and loss of biodiversity often result from and reinforce existing patterns of discrimination," which environmental security and political ecology scholarship link to grievance-driven social conflicts if other intervening factors do not mediate (UNHRC, 2017, p. 9). The Special Rapporteur claims that "States *may* also have more specific duties to protect places or components of biodiversity that are especially necessary for the enjoyment of rights," and in some cases, States *have* a duty to cooperate (UNHRC, 2017, p. 12).

The UNHRC report also refers to the UN Special Rapporteur on the Rights of Indigenous Peoples' report which highlights the negative impacts of forced displacement from PAs (UNHRC, 2016, para. 51). Such acts contravene the UN Declaration on the Rights of Indigenous Peoples, which also calls for "demilitarization of the lands and territories of indigenous peoples" and protection of their territories, lands, resources, traditional medicines and health practices and even their spiritual relationship to all of the above (UNGA, 2007, sec. pmlb, arts. 24, 25 & 30). When it comes to environmental projects, Free, Prior, and Informed Consent (FPIC) by impacted indigenous communities should precede any action (United Nations, 1999). This is fundamental to rights-based conservation.

Multilateral environmental agreements (MEAs) do try to incorporate social safeguards like FPIC, but they do not always include for the impact of purely social conflicts on the environment. For example, the case in Bwindi Impenetrable NP in the GVL where in a dispute amongst neighbors, one party burned down part of the protected forest in order to implicate the other, or in ethnic conflicts played out through access, use, or occupation of environments and natural resources, land grabbing, or other resource conflicts (Anonymous, 2017b).

2.5.4 International law and ecological peace

When it comes to ecological peace or the environmental effects of human conflicts (social or international), a few MEAs speak to protection of the environment against warfare. For example, the Rio Declaration, the World Charter for Nature, or the Convention on Biological Diversity. These MEAs highlight warfare, human conflicts sparked by resource scarcity, and the interrelated protection of biological diversity (UNCED, 1992, sec. prin. 24 & 25; UNGA, 1983, sec. pmb, prin. 5 & art. 20; United Nations, 1992, p. pmb). International humanitarian law also provides specific prohibitions: e.g., the Geneva Convention Protocols I and III, International Committee of the Red Cross (ICRC) Guidelines for Military Manuals and Instructions on the Protection of the Environment in Times of Armed Conflict and the Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques (ENMOD) all condemn the use of certain weapons or strategies that impose long-term, severe impacts on the environment (International Committee of the Red Cross (ICRC), 1977a, sec. art. 35(3) & 55, 1977b, 1996; UNGA, 1976, sec. art. 1, 1998, p. art. 8(2)(b) & art. 7(1)(k)).

Some multilateral agreements attempt to limit environmental harm from non-warfare activities, which in recent years has focused heavily on extractive industries (minerals, oil/gas, fisheries, timber, etc.) (E.g., United Nations, 1982). The Aarhus Convention requires projects of potential environmental harm to conduct environmental impact assessments (or similar modality according to domestic legislation), including where impacts transgress international borders (UNECE, 1997).

Protection against transboundary harms also extends to protection for transboundary wildlife (e.g., migratory species) and natural places (PAs and World Heritage Sites – WHS) (United Nations, 1971, p. art. 5, 1979, 1992, sec. art. 3, 5 8, 13). This incorporates a duty to collaborate across borders, even in TBCAs (E.g., IUCN, 1933, p. art. 6). The Convention to Regulate International Trade in Endangered Species of Flora and Fauna (CITES) sets up a regime to control international wildlife trade or the transport of endangered species across borders (United Nations, 1973). General principles of environmental law extend to principles of precaution, prevention, and intergenerational, as well as intragenerational equity.

There is also a small body of soft law created primarily by the IUCN to guide TBCA establishment and management, as well as to address issues related to conflict and conservation. This includes ‘IUCN Guidelines for Protected Areas Legislation,’ a ‘Draft Code for TBPA in Times of Peace and Armed Conflict’ and numerous World Conservation Congress (WCC) Resolutions and Recommendations (e.g., IUCN Rec 5.16 on Peace, Conflict and Protected Areas or WCC 2016 Res 035 on Transboundary cooperation and protected areas). Some IUCN resolutions do not speak to TBCAs explicitly, but they may be very relevant; e.g., WCC 2016 Resolution 68 on ‘Prevention, management and resolution of social conflict as a key requirement for conservation and management of ecosystems’ (World Conservation Congress, 2016).

2.5.5 Regional laws and institutions

Different regions of the world have also institutionalized and legislated their own regional frameworks to protect international, social, and ecological peace. In Africa, the primary regional institutions concerned with peace include, *inter alia*, the AU, East African Community (EAC), International Conference on the Great Lakes Region (ICGLR), the Economic Community of Central African States (ECCAS), the Economic Community of West African States (ECOWAS), and SADC. The AU and each of the regional communities have promoted regional peace and cooperation between Member States. Furthermore, SADC has been prominent in establishing regional standards and policy towards establishment and management of TBCAs.

In Europe, the EU Treaty and Treaty of Lisbon specifically set out to integrate European efforts to address global problems, including conflict and environmental issues like climate change (European Union, 2017). Article 37 of the Charter of Fundamental Rights of the EU protects the environment, while sub-regional agreements help to govern transboundary cooperation towards conservation, PAs, or protection against harms to the environment (European Union, 1979, 1999, p. art. 6, 2012, p. art. 37; IUCN, 1982; The Governments of Denmark, Finland, Norway and Sweden, 1974). This includes TBCAs that have existed for hundreds of years or community conservation areas that became transboundary when borders were first recognized (Couto, 2016).

In Latin America there are also regional institutions like the Organization of Central American States (ODECA), the Central American Commission on Environment and Development (CCAD), the

Union of South American Nations (OSAN), or even the Organization of American States (OAS), which includes North America. Some of the regional organizations like the Andean Community of Nations (CAN), the National and Central American Systems of Protected Areas (SICAP), deal specifically with PAs or TBCAs. On every continent of the world there is at least one multilateral policy or lawmaking institution promoting TBCAs and/or peace.

International laws on international peace, social peace, and ecological peace are diverse and can be found in numerous multilateral agreements. However, there has never been one definitive treaty or convention on the interrelated issues of nature, peace, and security. Depending on the specific conflict issue or location, one may reference a different set of international or regional laws. Therefore, in addressing issues of international, social, or ecological conflict and peace for a specific TBCA, we must also access a unique legal framework. For TBCAs in Africa, one would reference the African Convention on the Conservation of Nature and Natural Resources (Algiers Convention). Jurists of a particular region may look to laws of other regions for inspiration and courts may refer to external jurisprudence for guidance, but they are not bound by them. This creates the interesting scenario in that there is no single international legal framework for TBCAs or for TBCAs and peace and perhaps for this reason, individual TBCA legal frameworks have varied. It also indicates the value of the legal review of TBCA agreements in Chapter 4 and the general findings of this dissertation towards understanding important elements shaping TBCA laws and peace.

2.6 Pushing the boundaries of peace in parks

The next generation of TBCAs will need to push the boundaries of peace, enveloping these cross-border land and sea-scapes in international, social, and ecological conflict transformation for positive peace. It is insufficient to design TBCAs for ecological peace alone, even if the primary objective is to reduce negative impacts of human activities on the rest of nature. Ecological peace in bounded territories requires or at the very least, benefits substantially from international peace and social peace all around. As the case studies in Chapter 6 illustrate, it is not easy to defend the ecological integrity of a TBCA surrounded by violent conflicts between peoples and States.

Furthermore, issues or elements critical to one category of peace frequently bleed into other categories of peace; e.g., human rights may seem most relevant to social peace, but as noted previously also includes environmental rights that fall under ecological peace. The concept of sustainable development also blends all three categories of peace across its 16 goals, with various goals fitting under one or more categories of peace. Thereby, this chapter argues that international peace, social peace, and ecological peace are intertwined, interrelated, and interdependent. Solutions towards one must integrate solutions towards all. Furthermore, a robust international legal framework exists to support these objectives.

This chapter provides an overview of each category of peace and frames it within Galtung's broader theories of peace, conflict, and violence. International peace refers to conflict, peace, and security

between States. Social peace refers to conflict, peace, and security between people(s) based on identity and/or cultural identities. Ecological peace refers to conflict, peace, and security between humans and the rest of nature, including an ethic of mutual respect and care for nature. A sufficient foundation in codified international and regional laws exist to promote and uphold all three categories of peace. Some of these laws even speak directly to aspects of international, social, or ecological peace in transboundary conservation and PAs. Many of the international laws that do not mention conservation and PAs specifically, nevertheless offer a wealth of international legal principles to support TBCAs. These form a broader legal framework for peace in TBCAs that can be drawn on and referenced in formulating TBCA-specific legal agreements.

3 CHAPTER 3: A FRAMEWORK FOR MAPPING SOCIO-LEGAL LANDSCAPES: CRITICAL LEGAL STUDIES FOR PEACE IN TBCAs

3.1 Introducing a framework of analysis

As argued at the outset of this dissertation, the dissonance between transboundary ideals and practice may lie in their design. As transboundary ecological corridors, cross-border relationships are generally established to promote harmonized environmental or wildlife management, not peace. This is evidenced in the paucity of mentions of peace in TBCA legal agreements and conflict resolution mechanisms adequate to respond to the spectrum of conflicts that might exist in any given TBCA (see Chapter 4). Therefore, this chapter proposes a framework to analyze existing or proposed TBCA legal agreements for mechanisms of peace and conflict resolution, so that TBCA law can be transformed in order to appropriately integrate interventions for CCR in all three categories of peace.

This framework for socio-legal review of TBCAs and peace looks at the *written law (lex scripta)*, *living law* or *law as it is (lex lata)* and *law as it should be* or *ideal law (lex ferenda)* in terms of addressing international, social, and ecological conflicts present through a land- and/or seascape. It is based on methods derived from political ecology, CLS and CCR. By mapping conflicts in the territory and identifying how they are addressed in the *written law* and *living law*, gaps can be identified between these two forms of codified and uncodified law (respectively) and *law as it*

should be. If *law as it should be* is captured in formal transboundary agreements and implemented on-the-ground, the contribution of TBCAs to peace and conflict resolution may become more tangible. In other words, if *lex scripta*, *lex lata*, and *lex ferenda* are all the same, then the outcomes towards peace and conflict resolution could become more apparent.

This chapter seeks specifically to understand how TBCAs (through their legal agreements) nomoscape peace and conflict resolution. This framework in section 3 provides a series of methodologies that are part of the investigative process towards that goal. The case study of the GVL in section 4 serves as a demonstration of this framework in application. Section 5 offers some analysis and extracts a set of guidelines for “criticism,” based on Unger’s methodology of mapping and criticism. Section 6 concludes with further opportunities in utilizing and developing this framework.

3.2 Proposing a framework

CCR views conflict as part of a process (violent or non-violent) of social change, through which marginalized individuals/groups have an opportunity to articulate their grievances or interests and challenge existing norms or power structures (Ramsbotham et al., 2011, p. 25). As an alternative to violent conflict, non-violent modes of socio-political transformation can come through international institutions, international law, and cosmopolitan democracy, all of which

have to do with law (Ramsbotham et al., 2011, p. 267). Legal research, however, has not conventionally been transformation-oriented. Mostly, it seeks to understand existing legal frameworks and institutions with limited agenda to deeply transform law and policy or its institutions and systems. Hindered by institutional fetishism, legal researchers may only tinker within existing socio-political arrangements (R. Unger, 1996, p. 37).

Roberto Unger claims that when institutional fetishism refuses to reject less than ideal elements of law or engage in institutional rendering, it inhibits deep institutional experimentalism that can lead to socio-democratic reformation (R. Unger, 1996). When scholars are theoretically uncritical and fail to engage against injustice and inequality or for social justice and social transformation, they fail to “tackle the problems of which mercenaries and child soldiers are symptoms” (Ramsbotham et al., 2011, pp. 7, 401–402). In other words, they do not address the root causes of conflict or injustice. For this reason, Law and Society, including CLS, emerged throughout the 1960-1990s with an explicit agenda for emancipation and justice of the most marginalized, disenfranchised, and oppressed elements of society (Tushnet, 1991). They engaged issues of decolonization, indigenous sovereignty, globalization, gender, and more, collectively expanding ethical conceptions in theories of jurisprudence, which had been narrowly preoccupied with matters relevant almost exclusively to the individual and the State (See e.g., De Sousa Santos, 1977; De Sousa Santos & Rodríguez-Garavito, 2005; Dezalay & Bryant G. Garth, 2002; Engle Merry, 2009; Sarat, Constable, Engel, Hans, & Lawrence, 1998; Scheingold, 2004).

This dissertation argues that CCR-oriented critical legal research in TBCAs is needed to protect nature and peace, two of the greatest human challenges on Earth. The framework presented here attempts to initiate that process through critical legal investigations that reveal dissonances between transboundary arrangements as presented in the formal agreements, as performed within socio-legal spaces, and as required for positive peace and CCR. It is argued that TBCA legal agreements that integrate CCR can lead towards greater contributions to peace, or in other words nomoscape peace. The framework proposed here is designed to evaluate TBCA agreements for peace and conflict resolution in three categorical areas: international peace and conflict, social peace and conflict, and ecological peace and conflict. Although all three are interrelated and interdependent, as discussed in Chapter 2, they are also unique perspectives from which to assess the contribution of a TBCA towards peace through cross-border cooperation.

The proposed framework is based on integrated approaches emerging from three disciplines: (1) political ecology, (2) CLS, and (3) CCR or peace and conflict studies. It begins with a political ecology of the TBCA, which identifies a growing legal framework that facilitates certain socio-political and socio-ecological changes. Then conflict mapping using the framework of international peace, social peace, and ecological peace is undertaken to identify conflicts, conflict actors, and conflict dynamics in the landscape. A critical legal analysis follows with traditional legal review of *lex scripta* (i.e., *written law*), a mapping of *living law* or *lex lata*, which identifies geographies of legal performativity through the TBCA, and “criticism” to identify gaps between the two and *lex ferenda* or *law as it should be* (based on principles of positive peace – international, social, and ecological). These gaps represent transformational opportunities for peace and CCR. A more

detailed description of that framework and case study demonstrating aspects of its application follow.

3.2.1 Methods from political ecology: framing and situating a TBCA

Political ecology provides a framework for contextualizing an existing TBCA. Critical components in understanding the political ecological context of a TBCA include: (1) historical analysis; (2) multiscalar and trans-scalar analysis (geographic and temporal); (3) ethnographic fieldwork and analysis of a range of actors (i.e., marginalized communities, governmental/non-governmental/multilateral institutions) (Rocheleau, 2008, p. 718). Historical analysis is fundamental to understanding “the extent and nature of environmental change and to explain how current geographical social and political relations and conditions came to be” (Neumann, 2005, p. 42). In this analysis, to avoid giving power to historic determinism or linear historic narratives (e.g., IUCN history of TBCAs), it is important to seek alternative histories and give voice to subaltern narratives as they exist and challenge hegemonic regimes (Chakrabarty, 2000). Otherwise the historical analysis becomes yet another amplifying echo in the repetition of incomplete histories that tell the same story largely from a perspective of dominance, thereby purporting further credibility to that version of the story (Chakrabarty, 2000, pp. 6–9; Tuhiwai Smith, 2012, pp. 29–35).

Alternative histories can be revealed through field-based empiricism that engages directly with a number of representatives from a range of social groups, each telling his/her-story (De Sousa Santos, 1977; Tuhiwai Smith, 2012, pp. 142–161). This process may methodologically incorporate a collaborative search for solutions to socio-ecological problems and build closer ties between research, practice, and activism (Johnston, 1994, See also 1997). Sometimes participatory, collaborative or reflexive research methods can be used to give power to marginal groups as socio-political agents in their landscapes, as well as in information-production and knowledge transfer (Tapela, Büscher, Maluleke, Twine, & Steenkamp, 2009; Tuhiwai Smith, 2012). This draws them out as actors in a field and not just “community” research subjects. Participatory research in conflict or post-conflict environments has its challenges, however, which should be kept in mind when undertaking such work (See Özerdem & Bowd, 2016, pp. 123–129).

Elaborating a historical analysis of any TBCA should trace back to before the TBCA or any PA status existed and map the socio-ecological changes before, throughout, and after. Political ecology uses the methodology of multiscalar “chains of explanation” (Rocheleau, 2008, p. 718). As an example, Blaikie and Brookfield describe a study of:

“land managers and their direct relations with the land (crop rotations, fuelwood use, stocking densities, capital investment and so on). Then the next link concerns their relations with each other, other land users, and groups in the wider society who affect them in any way, which in turn determines land management. The state and the world economy constitute the last links in the chain” (Blaikie & Brookfield, 1987, p. 27).

This illustrates a chain of inquiry that begins with the direct political, social, economic and ecological experiences of various individuals or a specific group, then moves into wider scales of analysis of that individual/group within the context of other groups and society, culminating in the national/global economy dynamics and context. In a socio-legal analysis, the legal apparatuses in these chains of explanation that facilitate socio-ecological change, allocation of costs and benefits, and how they may impact uniquely upon different identity-based groups (including non-human life or living systems), socio-economic or political economic systems, as well as the original objectives are identified as part of the analysis.

When applying this in a single TBCA, one might begin with just one village or area within the TBCA and link the chains of explanation across the entire transboundary landscape, and then situate it within a broader global context. The roles of different social groups in shaping the TBCA (e.g., scientists identify ecological value of place; colonial officials designate land as PA; newly independent post-colonial government expels indigenous peoples and increases conservation status) need to be identified and mapped through their (power) relations to each other (e.g., displaced people engage in land conflicts with neighboring ethnic groups and PAAs for essential resources) as well as within larger political-economic processes or systems (e.g., inflows of international donor funds, systems of colonial resource extraction, shifts in commodities cultivation that follow changes in land use designations). It may be possible to situate the individual TBCA in a regional transboundary conservation movement promoted by particular Non-Governmental Organizations (NGOs) and funded by a regular set of donors. All of these can then

be connected to transboundary legal developments, such as the production of an early MoU as an output of a series of cross-border meetings funded by an international donor.

3.2.2 Conflict mapping: Using the framework of integrated peaces

Once some of the TBCA's context has been described, a more thorough conflict mapping can relate the histories, political ecology, and legal instruments to existing issues of international peace/conflict, social peace/conflict, and ecological peace/conflict. Primary methods in conflict analysis and conflict mapping include: field-based empiricism, stakeholder interviews, and literature reviews of peace/conflict reports (Sandole, 1998; Wehr, 2006). While the political ecology of a TBCA helps to explain the wherefrom, who, and how of a transboundary landscape, conflict mapping provides a snapshot of a specific conflict or interlinked conflicts. It is a structured analysis of "the origins, nature, dynamics and possibilities for resolution of the conflict" (Ramsbotham et al., 2011, p. 89; Wehr, 1979, p. 18). According to Ramsbotham et al., conflict mapping should include:

Table 3-1 Questions in conflict mapping

Background
<ul style="list-style-type: none"> • Map of the area • Brief description of the States/countries involved • Outline history of the conflict
The Conflict Parties and Issues
<ul style="list-style-type: none"> • Who are the core conflict parties? What are their internal sub-groups, on what constituencies do they depend? • What are the conflict issues? Is it possible to distinguish between positions, interests (material interests, values, relationships) and needs? • What are the relationships between the conflict parties? Are there qualitative and quantitative asymmetries? • What are the different perceptions of the causes and nature of the conflict among the conflict parties? • What is the current behavior of the parties (is the conflict in an 'escalatory' or 'de-escalatory' phase?)? • Who are the leaders of the parties? At the elite/individual level, what are their objectives, policies, interests and relative strengths and weaknesses?
The Context: Global, Regional and State-level Factors
<ul style="list-style-type: none"> • At the state level: is the nature of the state contested? How open and accessible is the state apparatus? Are there institutions or fora which could serve as legitimate channels for managing the conflict? How even is economic development and are there economic policies which can have a positive impact? • At the regional level: How do relations with neighboring States and societies affect the conflict? Do the parties have external regional supporters? Which regional actors might be trusted by the parties? • At the global level: Are there outside geopolitical interests in the conflict? What are the external factors that fuel the conflict and what could change them?

Source: (Ramsbotham et al., 2011, p. 90)

When this process is repeated over time for a specific conflict, it is called "conflict tracking" or "conflict monitoring" (Ramsbotham et al., 2011, p. 93). It may be used following a peace process or conflict management intervention and be referred to as "process tracking" or "peace process

tracking" (See e.g., USAID, 2003). Elaborating on Ramsbotham et al.'s conflict mapping and tracking, Table 3-2 provides a framework for conflict mapping based on international conflicts, social conflicts, and ecological conflicts in a TBCA. It also brings into consideration relevant legal dimensions of the conflict analysis.

Table 3-2 Conflict mapping in a TBCA

	International Conflict	Social Conflict	Ecological Conflict
Background			
Map of the area	Localized sites of international conflict, entire TBCA or TBCA in the context of broader regional conflict	Localized sites of social conflict, entire TBCA or TBCA in the context of broader regional conflict	Localized sites of ecological conflict, entire TBCA or TBCA in the context of broader regional conflict
Brief description of the state(s)	All States party to the TBCA	All States party to the TBCA	All States party to the TBCA
Outline history of the conflict	May include: Border Disputes, MIDs, Inter-State militias, International relations (breakdown or failure of diplomacy), Inter-State adjudication	May include: Ethnic conflict, Land/Resource-based conflict, Rebel/Secessionist movement, Human rights abuses	May include: PA-occupancy by armed militias, Illegal/Unsustainable extraction, Environment/Wild life crimes, Human-wildlife conflict, Unsustainable human development/growth, Anthropogenically-induced climate change, Environmental disasters

Conflict Parties and Issues			
Who are the core conflict parties? What are their internal sub-groups, on what constituencies do they depend?	Are any of these groups legally-constituted (e.g., officially recognized Indigenous Peoples)? Are any of these groups targeted by particular laws/regulations/policies (e.g., park revenue-sharing law that provides special allocation to a uniquely identified group – households directly adjacent to PA)? Constituencies may include natural resources or non-human entities.		
What are the conflict issues? Is it possible to distinguish between positions, interests (material interests, values, relationships), and needs?	Are there historical/pre-colonial factors at play? Distinguish between international conflicts, internationalized internal conflicts and cross-border social/ecological conflicts.	Are there historical injustices that persist? Are there culture/cosmology differences that underlie?	Are there issues of intra-/inter-species equity and justice? Are human activities infringing on the rights and freedoms of other aspects of nature?
What are the relationships between the conflict parties? Are there qualitative and quantitative asymmetries? Are any of these asymmetries legally-enabled?	As relevant to relations between States.	As relevant to relations between social groups or identity-based groups.	As relevant to relations between humans and the rest of nature.
What are the different perceptions of the causes and nature of the conflict among the conflict parties?	The causes and nature of the conflict may indicate interlinkages between international conflict, social conflict, and ecological conflict. Integrated root causes should be identified here. When addressing ecological conflicts, beware anthropomorphization of non-human aspects of nature. E.g., elephants encounter increasing human infrastructure blocking migration routes to watering holes and food sources.		
What is the current behavior of the parties (is the conflict in an 'escalatory' or 'de-escalatory' phase?)?	What stage is the conflict in? Conflict escalation is characterized by difference, contradiction, polarization, violence, and culminates in war or violent conflict. Conflict de-escalation takes place through ceasefire, agreement, normalization, and reconciliation.		
Who are the leaders of the parties? At the elite/individual level, what are their objectives, policies, interests, and relative strengths and weaknesses?	Policy analysis should include critical legal analysis of laws/policies/regulations that are used by different groups/individuals. A comparative between man-made law and natural law may be particularly relevant to ecological conflict analysis.		

Context: Global, Regional and State-Level Factors	
State level	Is the nature of the state contested? How open and accessible is the state apparatus? Are there institutions or fora which could serve as legitimate channels for managing the conflict? How even is economic development and are there economic policies which can have a positive impact?
Regional level	How do relations with neighboring States and societies affect the conflict? Do the parties have external regional supporters? Which regional actors might be trusted by the parties?
Global level	Are there outside geopolitical interests in the conflict? What are the external factors that fuel the conflict and what could change them?

At the state, regional, and global levels, critical legal analysis should again be included. Finally, linkages between international conflicts, social conflicts, and ecological conflicts should be identified whenever appropriate so that integrated solutions can be adequately identified.

3.2.3 Legal mapping: *lex scripta*, *lex lata* and *lex ferenda*

Critical legal mapping is a three-part process, beginning with an analysis of *written law (lex scripta)* or blackletter law and how it codifies peace and conflict resolution. Then it moves from the books to the field to identify *living law (lex lata)* or *law as it is in practice*. This can include implementation of codified laws, which may or may not require some contextual adaptation, and it can include traditional or customary laws, which may not be written and exist through recognized cultural or circumstantial practice (See Slaughter & Ratner, 1999). The third part is a more conceptual analysis of *law as it should be* or a law's ideal (*lex ferenda*). This process does not have to be entirely

conceptual, however, as it may be based on a participatory process of consultation and enquiry to understand what stakeholders want and believe the law should be. These consultations may be carried out regularly over time in order to produce an adaptive *lex ferenda* that is living and ever-evolving towards greater positive peace. Each of these steps in critical legal analysis are further elaborated below.

3.2.3.1 Lex scripta: capturing peace and conflict management in written agreements

Most fundamentally a survey of blackletter law includes a review of all transboundary agreements directly relevant to the TBCA, whether they are treaties, declarations, or Memorandums of Agreement/Understanding (MoA/MoU). The written legal framework includes international laws, such as MEAs and International Humanitarian Law (IHL). It also includes regional laws, such as law and policy of relevant regional institutions (e.g., SADC, European Community), and national legislation, particularly PA legislation and park bylaws/regulations. In analyzing the written legal framework, the researcher is seeking to identify how international peace, social peace, and ecological peace are addressed through agreed principles, legal mechanisms, or stipulated processes, including dispute resolution mechanisms or governance systems and cross-border institutions. Specific laws can be correlated back to the conflicts that were identified in the conflict mapping to indicate whether all issues are addressed, how, and perhaps even evaluated for efficacy.

The laws can also be distinguished according to the type of intervention and the stage of conflict (e.g., conflict prevention, de-escalation). This can be captured in a table, such as Table 3-3 below.

Table 3-3 Mapping written law in a TBCA

Conflict Type	Description	Written Law(s)
International	Border Disputes	
	Militarized Interstate Disputes (MIDs)	
	Inter-State militias	
	International Relations: breakdown or failure of diplomacy	
	Inter-State Adjudication	
Social	Ethnic Conflict	
	Land/Resource-based Conflicts	
	Human-PA Conflicts	
	Rebel/Secessionist Movement	
	Human Rights Abuses	
Ecological	PA occupancy by armed militias	
	Illegal/Unsustainable Extraction (oil/gas, fishing)	
	Environment and wildlife crimes	
	Human-Wildlife Conflict	
	Unsustainable human development/growth	
	Anthropogenically-Induced Climate Change	
	Environmental Disasters	

Note: The right-most column “Written Law(s)” is empty in this template so that it can be filled-in in accordance to each TBCA’s codified legal framework.

The types of conflicts listed above in Table 3-3 are general examples of what might be encountered in a TBCA. Each site will differ however, as revealed by the conflict mapping process described above and the “Description” column should be filled in according to the results of Table 3-2. Related questions of inquiry nuancing the legal framework for peace might follow, such as: How does peace play into the genesis of a transboundary protected area initiative? How is it captured

in its governance framework? What influences these processes? How does this explain gaps between what is intended and what is formally legislated? This connects to the second part of a legal analysis, which maps *living law* or *law as it is*.

3.2.3.2 Lex lata: implementation, enforcement and evolving practices of living law

Legal mapping of *written law* is followed by mapping *living law* or *law as it is* (*lex lata*), which can include unwritten law. This is law as it actually exists in practice. It could include implementation of *written law*, e.g., how are formal agreements operationalized? What do PA managers do in particular conflict situations? It also includes unwritten practices that may be long-standing customary laws and systems, or they may be on-the-ground innovations for a particular set of circumstances. This may occur because no formal law exists on the matter or because the formal law is not appropriate for the situation that arises. Mapping *living law* seeks to understand how it relates to *written law* and how this impacts upon the achievement of a TBCA's stated objectives – in this case, with a focus on peace and conflict resolution. This process may reveal legal limitations and their impacts on a TBCA and its actors' capacity to build peace or transform conflict. It may also reveal alternative solutions or adaptations in response.

Methodologically, this involves literature reviews, expert/stakeholder interviews, participant observation, and may draw on legal anthropology to identify traditional and customary practices

in peace and conflict management. Legal anthropology might inquire into: Whether traditional/community practices in peace and conflict management exist? How do these integrate with higher-level legal practices? Should these traditional practices be further incorporated and if so, how? An example of a table mapping both *written law* and *living law* follows below (Table 3-4). Again, these correlate back to international peace, social peace, and ecological peace, as well as examples of specific conflicts and issues identified previously in Table 3-2.

Table 3-4 Mapping living law in a TBCA

Conflict Type	Description	Written Law(s) Formal codified laws, regulations or policies	Living Law Informal, traditional or customary practices
International	Border Disputes		
	Militarized Interstate Disputes (MIDs)		
	Inter-State militias		
	International Relations: breakdown or failure of diplomacy		
	Inter-State Adjudication		
Social	Ethnic Conflict		
	Land/Resource-based Conflicts		
	Human-PA Conflicts		
	Rebel/Secessionist Movement		
	Human Rights Abuses		
Ecological	PA occupancy by armed militias		
	Illegal/Unsustainable Extraction (oil/gas, fishing)		
	Environment and wildlife crimes		
	Human-Wildlife Conflict		
	Unsustainable human development/growth		
	Anthropogenically-Induced Climate Change		
	Environmental Disasters		

Note: The two right-most columns "Written Law(s)" and "Living Law" are empty in this template so that it can be filled-in in accordance to each TBCA's codified legal framework.

3.2.3.3 Lex ferenda: legal criticism for peace

The final analysis should be a critique identifying *lex ferenda* or *law as it should be* (law's ideal) based on a political ecology of the TBCA, blackletter legal analysis, and a mapping of *law as it is* on-the-ground. Comparing *law as it is written* to *law as it should be* facilitates the identification of gaps between the objectives of TBCA proponents (actors/institutions behind TBCA laws) and also between the TBCA's objectives and those of positive peace (international, social, and ecological) and CCR. Comparing *living law* and *law as it should be* exposes gaps between practice or implementation and legal pluralism. This allows all of the unwritten or customary laws and practices to be compared or contrasted to what is written, but most importantly as compared or contrasted to what is intended and desired. These gaps outline opportunities for improving the *written law* or formal transboundary legal agreements so that a TBCA can better achieve its objectives towards positive peace and CCR.

In this process of criticizing *lex lata* (law as it is) or even *lex scripta* (written law) for *lex ferenda* (law as it should be), one should have a clear idea of what the TBCA's objectives are. These may extend beyond the formal objectives stated in TBCA agreements and include local or regional aspirations. A formal agreement may codify intentions to cooperate towards greater regional peace, which is a rather vague statement. Stakeholders on-the-ground may interpret this differently. The PAAs may wish for this to assist in removing armed militias and poachers from their PAs, while local villagers may wish for cross-border officials to stop arresting them when they

harvest water and firewood at the edges of the PA nearby. As TBCA agreements are frequently negotiated at the behest of PAAs, their terms may tend to favor the objectives of PA management rather than the full range of actors in the land/sea-scape. The survey of TBCA practitioners and review of TBCA agreements in Chapter 4 indicates that elements of a TBCA agreement that practitioners consider most important for the success of transboundary cooperation are incorporated in almost all agreements.

Therefore, it is useful to query whose objectives and which ones are captured in the transboundary agreements? What other desired outcomes do people talk about, but are not formally recognized? In what other ways is peace being captured in the legal framework? Legal criticism should consider whether such agreements (so narrowly constructed) can provide effectively for broad objectives such as peace and conflict transformation, especially when considering international peace, social peace, and ecological peace. Hence, the emphasis on all three categories of peace requires just consideration for all stakeholders – States, people(s), and nature.

The original conflict mapping also needs to come into consideration, as the TBCA agreements should be able to adequately address all of the existing conflict dynamics and actors involved if they are to contribute towards transforming those conflicts. The conflict mapping may identify needs or objectives which have not been identified by any of the stakeholder consultations or formal negotiations. Identifying the gaps between formal objectives, stakeholder objectives, and theoretical objectives, based on theories of environmental peacebuilding, CCR, or just conservation, can help to remove dissonances between written and unwritten objectives, and allow all

aspirations to be captured in the criticism for *lex ferenda* or *law as it should be*. This can provide a legal roadmap, much like a Theory of Change, for transforming law in order to transform conflict. Theory of Change “explains how activities are understood to produce a series of results that contribute to achieving the final intended impacts” and is often used in impact-oriented development projects (Rogers, 2014, p. 1). Critical legal mapping for peace and conflict resolution could be similarly used to enumerate activities or legal transformations that need to occur in order to transform conflicts on-the-ground.

3.3 Case study: transforming conflict in the Greater Virunga Landscape

The GVL provides a dynamic case study for applying the above framework. As a TBCA featuring seven national parks, a game reserve, and two wildlife reserves on the shared borders of the DRC, Rwanda, and Uganda, it captures one of the most biodiverse regions of the world with one of the most violent histories (Martin, Rutagarama, Cascão, Gray, & Chhotray, 2011; Omeje & Redeker Hepner, 2013; A. Plumptre et al., 2003; Prunier, 2011). The GVL is part of the Albertine Rift, which has one of the highest occurrences of endemic mammal species (at least 34 endemic and 12 near-endemic) of any ecoregion in the world (Kityo, Plumptre, Kerbis Peterhans, Pilgrim, & Moyer, 2003, p. 23; Olson et al., 2001, p. 936). The PAs that form the GVL are critical biodiversity corridors for species diversity and dispersal throughout the Albertine Rift (Ayebare et al., 2013).

These places are under threats from human population pressures (i.e., high levels of natural resource dependency) and activities like oil and natural resource extraction (legal and illegal), agricultural expansion and intensification, and settlement (GVTC, 2017b; National Environment Management Authority, 2010). The landscape is also known for a long history of violent conflict with clashes between tribes, against colonial governments and policies, genocide, internationalized wars, and on-going political, economic, and inter-ethnic conflicts (Alden, Thakur, & Arnold, 2011; Anonymous, 2017b; Hart & Mwinyihali, 2001; A. J. Plumptre, Masozera, & Vedder, 2001; Prunier, 2011; Taylor, Robertshaw, & Marchant, 2000; van de Giessen, 2008). Despite these challenges, transboundary environmental cooperation in the GVL has strengthened over time in many ways (Kameri-Mbote, 2007; Refisch & Jenson, 2016).

3.3.1 Collaboration in the Greater Virunga Landscape

Transboundary collaboration in the GVL began informally with mountain gorilla research in 1959, anti-poaching patrols and educational programs in 1979 by the Mountain Gorilla Project in Rwanda, and in 1991 as a transboundary initiative, the International Gorilla Conservation Programme (IGCP) (Gray & Rutagarama, 2011, p. i; Refisch & Jenson, 2016, p. 831). The three countries' PAAs signed the first trilateral MoU in 2004 recognizing the Central Albertine Rift Transfrontier Protected Area Network and cooperation towards conservation and peace in the region (Office Rwandais de Tourisme et des Parcs Nationaux, Uganda Wildlife Authority, & Institut

Congolais pour la Conservation de la Nature, 2004). By 2015, cross-border collaboration developed into a formal tri-national framework elaborated in a treaty (yet unratified), backed by a series of MoUs, declarations, and transboundary plans (Democratic Republic of Congo, Republic of Rwanda, & Republic of Uganda, 2015; GVTC, 2014).

Table 3-5 Formal legal agreements in the GVL

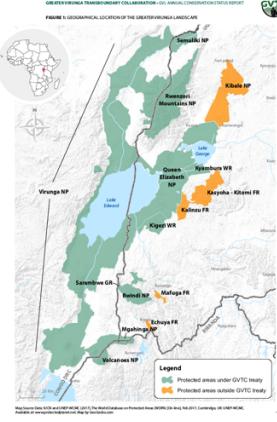
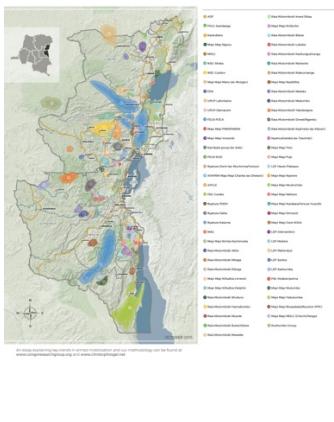
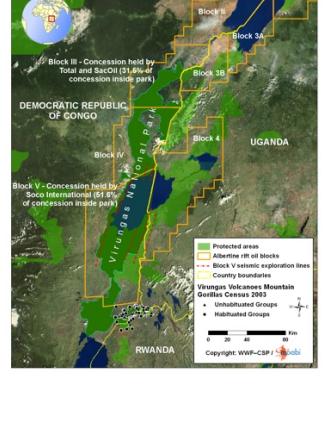
2004	Trilateral MoU on “The Collaborative Conservation of the Central Albertine Rift Transfrontier Protected Area Network” (2004 Trilateral MoU)
2005	Tripartite Ministerial Declaration of Goma on the Transboundary Natural Resources Management of the Transfrontier Protected Area Network of the Greater Virunga Landscape (2005 Goma Declaration)
2006	MoU on Revenue Sharing
2009	Interministerial Board Meeting on the institutionalization of the GVTC (2009 Interministerial Statement)
2013	Headquarters Agreement between the Government of the Republic of Rwanda and the Greater Virunga Transboundary Collaboration “GVTC” (2013 Headquarters Agreement)
2014	Memorandum of Understanding between International Conference on the Great Lakes Region (ICGLR) and the Economic Community of Great Lakes Countries (CEPGL) and Great Virunga Transboundary Collaboration (GVTC) (2014 MoU between ICGLR, CEPGL & GVTC)
2015	Signing of Greater Virunga Transboundary Collaboration Treaty on Wildlife Conservation and Tourism Development (2015 GVTC Treaty)

3.3.2 Conflict mapping in the Greater Virunga Landscape

Analyzing the agreements listed above in Table 3-5, this section and Chapter 5 look at how the *written law* and *living law* address various conflicts in the GVL. Based on field research conducted

in November 2010 – August 2011, January – May 2017, and February – March 2018, and literature on the region, the following conflict mapping in Table 3-6 attempts to summarize a number of persistent conflicts in the landscape. It is not a comprehensive conflict mapping of all conflicts in the GVL, nor does it provide a complete and in-depth analysis of conflict specificities (e.g., their historical origins, parties involved, etc.) (See Sandole, 1998; E.g., Abram et al., 2017; Bragagnolo, Pereira, Ng, & Calado, 2016). The objective of this conflict mapping is primarily to identify the various types of international, social, and ecological conflicts that are prevalent in the territory so that the legal analysis that follows can identify laws relevant to each type of conflict. It should be noted that a more detailed and complete conflict mapping would allow for a better understanding of *lex lata* and *lex ferenda*. This framework could be applied to any one aspect of a conflict in the landscape and does not have to be applied wholesale to the entire territory as is demonstrated below. In a more focused approach, a more nuanced analysis would be possible.

Table 3-6 Conflict mapping in the GVL

	International Conflict	Social Conflict	Ecological Conflict
Background			
Map of the area (enlarged maps are provided in Appendix II)			

Brief description of the state(s)	DRC, Rwanda and Uganda	DRC, Rwanda and Uganda	DRC, Rwanda and Uganda
Outline history of the conflict	<p>DRC and Rwanda were occupied by Belgian colonials, while Uganda was British-occupied. Communities on the borders were divided into Franco/Anglo-phone countries and civil/common law jurisdictions. Borders remained porous, however, for communities and militaries. Each of the 3 countries has meddled at some point in the political affairs or rebel movements of its neighbors, fostering resentment and distrust. Armed militias sometimes occupy one side and attack the other, leading one country to accuse its neighbor for harboring its enemies. Some parts of the borders are disputed, not well delineated or demarcated, and remain sources of contention – e.g., DRC accuses Rwandese military of invading its territory when Rwanda claims it is within its own jurisdiction. At times Rwanda has also conducted military</p>	<p>Borders drawn by European colonial occupiers and fixed by international decolonization programs. Some of these borders included PA designations which displaced Indigenous Peoples (IPs)/Local Communities (LCs) from their territories of life and knowledge. As some displaced peoples struggled to survive and became landless (e.g., Batwa, Bakonzo, Basongora), they came into conflict with neighboring peoples and with PAAs. Some are antagonistic to the central governments and have formed natural resource-exploiting armed militias (e.g., Mai Mai, Allied Democratic Forces – National Army for the Liberation of Uganda or ADF-NALU). Sometimes the armed groups make deals with local communities to exploit park resources, offering protection against PAAs in exchange for profits.</p>	<p>Environmental impacts of violent international and social conflicts in the landscape are significant, including localized species extinctions and biodiversity loss. Impact of war, civil conflict, refugees, and internally displaced people (IDPs), sometimes harboring in PAAs or buffer zones, has devastated forests and sections of PAs. Transhumance or pastoral migrations pass through PAs, raising fear of resource competition (e.g., water and food) and disease transmission with wildlife, or neighboring community lands. In the past, one country blamed the other for bringing thousands of people and livestock into their park. When Virunga and Queen Elizabeth NPs were colonially designated, human activity was limited inside the PAs to designated fishing sites. These became multigenerational settlements without services (health and education) but with</p>

	operations in DRC (i.e., invaded) in pursuit of genocidaires.		growing populations increasingly depleting aquatic resources with more aggressive fishing tactics (e.g., more boats, smaller nets, fishing in breeding grounds and all year-round).
Conflict Parties and Issues			
Who are the core conflict parties? What are their internal sub-groups, on what constituencies do they depend?	<p>Indigenous Peoples and Local Communities (IP/LCs): mainly the ethnic groups and communities bordering the PAs (e.g., Batwa, Bakonzo, Basongora, Bakiga, Batoro, etc.). Constituent groups, such as women, youth, elders, spiritual/traditional leaders, medicine people, hunters, artisans, etc., are uniquely affected by different issues.</p> <p>Pastoralists, Fisherfolk and Cultivators: these are primarily livelihoods-defined groups. Other resource-dependent livelihoods in the GVL include: mining, hunting, gathering, beekeeping, crafts/artisanry, tourism, etc. This group could be classified under IP/LCs and similarly, the roles of men, women, and youth often vary.</p> <p>Militias and Militaries: Many armed militia groups persist mainly in Virunga NP (e.g., Forces Democratiques de Liberation du Rwanda or FDLR/Interhamwe, March 23 Movement (M23), Mai Mai, ADF-NALU). They frequently clash with national armies (Forces Armées de la République Démocratique du Congo – FARDC in DRC, Rwandan Defence Forces – RDF in Rwanda, and Uganda People's Defence Force – UPDF in Uganda).</p> <p>PAAs and Government: PAAs in the GVL are – Institut Congolais pour la Conservation de la Nature (ICCN) in DRC, Rwanda Development Board (RDB) in Rwanda, and Uganda Wildlife Authority (UWA) in Uganda. They typically have different units, including Law Enforcement, Community Conservation, Research and Monitoring, and Tourism. The governments in each country include central government and local government, which can be broken down to scalar levels – cell/village, town, county, province, etc.</p> <p>Corporations: Various private sector enterprises are present in the GVL. These include extractive industries (mining, oil/gas, fishing), tourism, agriculture, construction, etc. They may be international, regional (African), or domestic. The past decade is marked by an increase in Chinese corporations.</p>		
What are the conflict issues? Is it possible to distinguish between positions, interests	- Border disputes along various parts of trinational boundaries (e.g., Sarambwe) - Militias and military incursions (including armed kidnappings and	- Ethnic Conflict between IP/LCs or livelihood groups - Land/Resource-based conflict - Rebel/Secessionist movement	- PA-occupancy by armed militias in Virunga NP (occasional spillover into Rwanda/Uganda) - Illegal/unsustainable extraction:

(material interests, values, relationships) and needs?	raids, cross-border support to militias/rebel groups). Some military incursions claim to be accidental due to lack of clarity on border demarcation	- Human rights abuses: e.g., gender-based violence, kidnappings, lack of FPIC, etc.	artisanal/corporate mining, fishing, oil/gas, ivory, wildlife -Environment/wildlife crimes - Human-wildlife conflict - Unsustainable development/growth, - Anthropogenically-induced climate change
What are the relationships between the conflict parties? Are there qualitative and quantitative asymmetries? Are any of these asymmetries legally-enabled?	Inter-governmental relations have historically fluctuated, but currently tensions are generally with DRC, while Rwanda and Uganda tend to be more aligned. As part of the EAC and the Northern Corridor Integration Projects (NCIP), Rwanda and Uganda now have single visa entry (visa in one country is valid in the other) and share trade routes to Kenya. Armed militias mainly in Virunga NP occasionally attack villages across the borders (up to 2-3 times a month). National armies (UPDF, FARDC) have been accused of exploiting natural resources in PAs for trafficking or otherwise and of selling arms to militia groups. PAA collaboration with militaries to address the presence of militias has improved, and is also	Relations between ethnic groups vary and may be tied to perception of favoritism or discrimination (e.g., Batwa are socially discriminated, but some tourism and conservation projects have targeted them for benefits. Pastoralists may come into conflict with cultivators or PAAs when grazing or watering animals, and passing through lands which might be traditional transhumance corridors. In high population areas (densities range 100-500 people/km ²), land conflict exists. Encounters between fishermen in DRC/Uganda can be violent. Sometimes militias offer local communities access to PA resources in exchange for money,	Generally, all PA-adjacent communities, resource-based livelihoods, and even many corporations/private sector entities rely to some degree on natural resources found only within the PAs and/or are affected by wildlife in the area. Communities on the front-line of PAs may come into conflict with wildlife and thus, PAAs. Militias often rely on natural resources inside PAs for subsistence and trafficking (fuelwood, timber, ivory, bushmeat, medicines, etc.), and can be responsible for unsustainable extraction. In some instances, their presence may be preventing extraction by other parties. The impact of the tourism industry has varied, generally profiting from

	<p>improving conservation awareness of militaries and thus, cooperation between national militaries in the 3 countries. Oil/gas extraction is in development on Ugandan side of Albertine Graben, while DRC has resisted, which has led to some criticism of Uganda.</p>	<p>taxes, or support (food, shelter, political power). Militias may control community territories by force, coercion, or agreement. Some militias form within a community or are hired by them. PAAs have implemented programs to reduce costs/impacts to communities and improve/share benefits, but some grievances persist. Extractive industries have been accused of exploiting government corruption, threatening PAAs or communities, and their activities may lack adequate consultation or FPIC, undermining rights and conservation. Benefits from private sector are not always equitably distributed, leading to resentment.</p>	<p>wildlife and nature without heed for ecological impacts (e.g., infrastructure development, waste management, disease control, etc.). Tea and pyrethrum plantations have been discovered to provide a cash-crop buffer between communities and wildlife, but does not consider its chemical use or other social and ecological impacts.</p>
What are the different perceptions of the causes and nature of the conflict among the conflict parties?	<p>Perceptions of the causes and nature of conflict may differ. For example, in human-wildlife conflict, communities may perceive that the wildlife are the cause of losses to their crops, property, or selves. Some claim that wildlife belongs to the PAAs and therefore, PAAs should be responsible for damages. PAAs argue that wildlife belongs to the place or to everyone and are national heritage. PAAs may be restricted in their ability to compensate damages depending on park legislation. Between fishing communities, a community will feel that others are overfishing (other often becomes defined as Congolese/Ugandan) while they are struggling to catch enough to survive. When the border was not well-demarcated, they would blame the other side for fishing on their side and this would result in violent attacks, theft of boats/nets, and kidnappings for ransom. PAAs note that fishing camps were meant to be for seasonal livelihood use and not the permanent settlements they have become. Thus, public services like schools and hospitals are not permitted inside. Lack of education limits opportunities for alternative</p>		

	livelihoods, so families remain in fishing camps and may resort to illicit activities (trafficking of natural resources, drugs, or arms) and/or armed militias (e.g., Mai Mai). These social conflicts and challenges are often blamed on the governments for corruption and poor governance.
What is the current behavior of the parties (is the conflict in an 'escalatory' or 'de-escalatory' phase?)?	Different conflicts exist at varying stages and are not stagnant (i.e., may escalate or de-escalate at any given time). They range from negative peace to violent conflict. Sometimes, transboundary collaboration has assisted in identifying conflicts in the region, particularly violent conflicts or those that affect PA conservation, and led to cooperation towards the de-escalation or resolution of those conflicts. For example, a border dispute around Sarambwe Game Reserve was identified as the root cause of cross-border kidnappings, ranger/military incursions and lootings between DRC/Uganda. Meetings were facilitated between PAAs, local leaders, militaries by the GVTC Secretariat to determine the issues and solutions. It was determined that clarity around the border demarcation would assist in each keeping to their side and security organs could protect their communities from kidnappings and raids without intruding on foreign jurisdiction. As a result, violence in the Sarambwe region had diminished during the time of field research.
Who are the leaders of the parties? At the elite/individual level, what are their objectives, policies, interests and relative strengths and weaknesses?	Community elites are typically the traditional leaders, locally elected officials, spiritual leaders, and wealthy members. They may be guided by customary norms, spiritual beliefs, community obligations, or profit. Community elites are vulnerable to corruption and coercion. PAAs each have a chief warden or conservation area manager and senior wardens, who also report to central PAAs. They are guided by national legislation, management plans, and PA bylaws to manage PA territories, wildlife, and natural resources for future generations. They may be vulnerable to attack by militias (e.g., warden in charge of Virunga NP was nearly killed in 2015) or attempts to corrupt or disempower them (by government, militias, corporations). Government leaders are allegedly guided by law/policy and community/national interests; however they are vulnerable to corruption, acting above the law, and serving external/personal interests.

Context: Global, Regional and State-level Factors

State level	<p>DRC: The current regime has delayed public elections, arrested protestors and is considered extremely corrupt (156 of 176 per Transparency International's Corruption Perceptions Index 2016), while having little control of large parts of the territory.</p> <p>Rwanda: The current regime was re-elected with 99% of the votes and has devoted many resources to strengthening governance, reducing corruption (ranking 50 of 176) and maintaining peace and security. Some question whether near-unanimous support for the on-going president is based on the country's development and security or influenced by fear or otherwise.</p> <p>Uganda: The current regime has been in power for over 35 years and is extending the constitutional age limit in order to continue. It is considered</p>
--------------------	--

	extremely corrupt (ranking 151 of 176) and has been experiencing instability within its police force (murders of top officers and changing appointments). Local insecurity seems to be growing as deadly kidnappings for ransom and robberies abound.
Regional level	The three countries are strongly connected through trade routes, political dynamics, armament of neighboring militias, and resource exploitation. Millions of refugees have been historically displaced within the region. They participate in a number of regional institutions (e.g., AU, EAC, ICGLR, CEPGL).
Global level	The region is rich in high-value natural resources that are coveted and exploited by international actors (primarily North Atlantic and Chinese corporations), but the benefits are captured by elites (political or military) in Uganda and Rwanda, and in the DRC, by armed militias (including the military) and local leaders. Conflicts are affected by the influx of humanitarian aid and donor funding. All investments of monetary or other nature (e.g., capacity development), corporate or donor-based, are susceptible to graft.

3.3.3 Legal mapping in the Greater Virunga Landscape

With this overview mapping of conflicts around the GVL, the corresponding laws or socio-legal mapping can follow (Table 3-7). As noted previously, the reviews of *written law* in this chapter and in Chapter 4 are based only on transboundary legal agreements. This does not include international, regional, or national laws and policies; it refers only to the TBCA agreements listed above in Table 3-5. In this case study, the *living law* analysis is similar the conflict analysis in that it touches on some examples observed through field research, but it does not represent a complete or comprehensive mapping of all the informal, traditional, and customary practices and norms that exist in the landscape. Such a study would require much more in-depth legal anthropology.

Table 3-7 Framework applied to the GVL

Description	Written Law(s) Formal codified laws, regulations or policies	Living Law Informal, traditional or customary practices
International Conflicts		
Border Disputes	<p>2014 MoU between ICGLR, CEPGL & GVTC Art. 4(2) & 7(4)</p> <ul style="list-style-type: none"> - Promote peace and security in border areas - Integrated border management - Development of cross-border trade 	<p>Local level: Affected individuals report to village leader(s) (elected or traditional) and leaders negotiate limits and settlement.</p> <p>State level: Foreign Ministries form border delimitation and demarcation committees to settle border limits; may enforce with military presence.</p>
Militarized Interstate Disputes (MIDs)	Standard clause – dispute resolution by negotiation or mediation	Higher level military/diplomatic channels. GVTC Secretariat convenes cross-border security dialogues.
Inter-State militias	<p>- 2008 Rubavu Declaration</p> <p>- Disarmament and evacuation of armed groups in DRC from PAs</p> <p>2014 MoU between ICGLR, CEPGL & GVTC Art. 4(2), 6 & 8</p> <ul style="list-style-type: none"> - Eradication of armed groups and negative forces in PAs - ICGLR to promote actions aimed at restoring and/or peace building in PAs - GVTC to restore PAs due to armed conflicts 	<p>Local level: Communities may harbor, hire or pay taxes to militias (willingly/coercively). May alert local security/military or PAAs (if wildlife crimes).</p> <p>State level: Defaults to military and security. In PAs, PAAs collaborate with national security organs for safety of tourists and personnel. Request GVTC Secretariat to convene multilateral security meetings. ICGLR Extended Joint Verification Mechanism may investigate and recommendation actions. The UN Organization Stabilization Mission in the DRC (MONUSCO) has limited mandate in DRC around Virunga NP.</p>
International Relations: breakdown or failure of diplomacy	<p>2015 GVTC Treaty Art. 17</p> <ul style="list-style-type: none"> - If negotiation fails, conflicts or disputes are to be referred to mediation or conciliation and if that fails, submitted to arbitration 	When international relations between the three countries broke down during the (Rwanda) Genocide, PAAs maintained communications and coordination of border patrols with support of NGOs.

Inter-State Adjudication	2015 GVTC Treaty Art. 17	Defaults to higher-level political/judicial processes.
Social Conflicts		
Ethnic Conflict	No specific mention	<p>Local level: Customary practices, e.g., ceremony, or negotiations between elders/leaders. Dialogues led by spiritual leaders.</p> <p>State level: Local government or judicial interventions. Increased security presence.</p>
Land/Resource-based Conflicts	<p>2004 Trilateral MoU Art. 3</p> <ul style="list-style-type: none"> - Integrated bio-regional land use planning <p>2015 GVTC Treaty Art. 13(a)</p> <ul style="list-style-type: none"> - Landscape Management Regional Technical Committee 	<p>Local level: Customary practices, e.g., ceremony or negotiations by elders/leaders. Retaliation, tributes, or agreed settlements. Support by local government, judiciary, security forces.</p> <p>State level: Dispute resolution by local government, judicial systems. Increased security presence. If in PAs, PAAs will be involved. If transboundary, GVTC Secretariat may convene dialogues, fact-finding missions, or other activities.</p>
Human-PA Conflicts	<p>2004 Trilateral MoU Art. 3</p> <ul style="list-style-type: none"> - Reduce poverty, enhance conservation benefits <p>2008 Rubavu Declaration op. 1-3</p> <ul style="list-style-type: none"> - Develop livelihoods and ecotourism - Equitable revenue sharing - Finance poverty reduction <p>2015 GVTC Treaty Guiding Principles, Art. 13(a), 14(a)</p> <ul style="list-style-type: none"> - Reduce poverty, improve sustainable livelihoods and participation - Tourism Development and Community Conservation Regional Technical Committee - Regional Transboundary Forum for stakeholders 	<p>Communities air grievances directly to PAAs, typically through village leaders to Community Conservation or Law Enforcement Rangers. May negotiate MoUs to address underlying issues. If antagonism is high, they may abuse rangers, support poachers, encroach PA lands, or poison/kill wildlife. PAAs, NGOs, and GVTC seek to minimize negative impacts to communities and increase benefits (e.g., revenue sharing, alternative livelihoods, employment, roads, schools, health centers, etc.).</p>
Rebel/Secessionist Movement	See Inter-State militias above	See Inter-State militias above

Human Rights Abuses	No specific mention, but some (e.g., GVTC Treaty) refer to domestic, regional and international legal obligations	Communities report grievances directly or with civil society organizations (CSOs)/NGOs to national human rights commissions, judiciary or international organizations. Cross-border violations may raise diplomatic or judicial action (e.g., ICJ Case Concerning Armed Activities on the Territory of the Congo, DRC v. Uganda).
Ecological Conflicts		
PA occupancy by armed militias	See Inter-State militias above	See Inter-State militias above
Illegal/Unsustainable Extraction (ivory, oil/gas, bushmeat, fishing)	<p>2014 MoU between ICGLR, CEPGL & GVTC Art. 7, 8</p> <ul style="list-style-type: none"> - CEPGL to include environment in Regional Economic Programme - CEPGL to conduct comprehensive environmental impact assessments (EIAs) of socio-economic development on ecosystems in the region - GVTC to provide technical support to ensure environmental standards and compliance - GVTC to restore degraded PAs due to illegal exploitation 	<p>Local level: Community anti-poaching units support ranger patrols. Former poacher groups encourage alternatives. Communities arrest or report poachers to local authorities, including PAAs.</p> <p>State level: PAAs share information on wildlife, security, crimes; coordinate patrols and hand over poachers to home country. NGO partnerships to reduce activities or impacts, provide employment, natural resource use assessments, revenue-sharing. Arts. 7&8 of 2014 MoU between ICGLR, CEPGL & GVTC not implemented yet.</p>
Environment and wildlife crimes	<p>2014 MoU between ICGLR, CEPGL & GVTC Art. 7, 8</p> <ul style="list-style-type: none"> - Collaborate to address illegal trade in endangered wild flora and fauna - 2015 GVTC Treaty Art. 7, 13(a) - Partner States to conserve wildlife while in their jurisdiction and to share information - Landscape Management, Community Conservation and 	See Illegal/Unsustainable Extraction above

	<p>Law Enforcement Regional Technical Committees</p> <ul style="list-style-type: none"> - See Illegal/Unsustainable Extraction above 	
Human-Wildlife Conflict	<p>2015 GVTC Treaty Art. 13(a)</p> <ul style="list-style-type: none"> - Community Conservation Regional Technical Committee - See Human-PA conflict above 	<p>Local level: noise-making, revenge killings, poison, guarding crops/animals, planting non-palatable crops, or species-targeted mechanisms (e.g., chili “bombs”, beehives).</p> <p>State level: PAAs use barriers (trenches, thorn bushes, electric fences, etc.) implemented with communities, offer “compassion” arrangements for loss of human life, scare-shoot, provide rangers for safety, revenue-sharing/development projects, and awareness-raising.</p>
Unsustainable human development/growth	<p>2014 MoU between ICGLR, CEPGL & GVTC Art. 7</p> <ul style="list-style-type: none"> - CEPGL to include environment in Regional Economic Programme - CEPGL to conduct comprehensive EIAs of socio-economic development on ecosystems in the region 	<p>In 2017, GVTC issued the first Annual Conservation Status Report (ACSR) for the GVL, identifying armed conflict, human population growth, agriculture, and extractive industries as top threats and will provide baseline data for monitoring. Poverty reduction schemes attempt to reduce impacts and dependence of humans on natural resources. Local governments work towards integrated land use planning, considering the importance of conservation to local economies. Projects to improve health and well-being of humans living near PAs to reduce risks (i.e., zoonosis).</p>
Anthropogenically-Induced Climate Change	No specific mention	GVTC's first ACSR identified climate change and natural disasters as significant threats. A climate change strategy has been drafted and GVTC is seeking funding for implementation. Some research has been conducted on climate change impacts to species and possible resilience measures.
Environmental Disasters	No specific mention	PAAs collaborate for fire management and spread of wildlife diseases (e.g.,

		ebola), generally part of PA management plans. Response to earthquake, flood, or volcanic activities default to State, which may rely heavily on external support (e.g., UN).
--	--	---

3.3.4 Legal criticism in the Greater Virunga Landscape

As Table 3-7 above indicates, *lex scripta* and *lex lata* vary quite a bit. They are not necessarily contradictory, but the *law in practice* frequently extends far beyond what is provided for generically, if at all, in the *written law*. In terms of peacebuilding, the 2004 Trilateral MoU and 2008 Rubavu Declaration, respectively, speak to “building trust, understanding and cooperation amongst [stakeholders] to achieve sustainable conservation and thereby contribute to peace,” asking “governments and donors to support effective peace making processes” (Ministers and High Level Representatives of DRC, Rwanda and Uganda, 2008, op. 7; ORTPN et al., 2004, sec. Art. 3(e)). The 2014 MoU between ICGLR, CEPGL & GVTC notes that “peace, security, stability and socio-economic development go hand in hand with the need for environmental protection and conservation of biodiversity” and thereby the three institutions commit to contribute in accordance with their respective mandates to peace, development and conservation (MoU between ICGLR, CEPGL and GVTC, 2014 pml.). In practice, as the *living law* indicates, there are a plethora of programs or activities in place to help build peace throughout the GVL.

Many peace and conflict resolution mechanisms exist even where *lex scripta* is absent or weak. For example, human-wildlife conflict is not at all addressed in the transboundary legal agreements – at least not directly. At the local level, however, families affected by wildlife use a number of strategies, depending on the species they are engaging. In order to prevent crop damage, “The communities guard, rangers scare them, then the park has also got there a trench,” indicating that multiple interventions are combined (Nyeramihigo, 2017). People (children included) may stay up all night to make noise by banging on drums and pots to scare away animals. Rangers sometimes support them by scare shooting (shooting blanks for noise). Interventions also vary according to species; e.g., some villagers use chili “bombs” (burning balls of soil/chili powder) to smoke elephants or strategically place bee hives. Bee hives, however, are not permitted where there is gorilla trekking, so human-wildlife conflict interventions also need to keep in mind harmony with other PA activities (Anonymous, 2017a). If the animal is considered a “pest species” by law (e.g., baboons), one may be killed or captured to set an example. Sometimes revenge killings or poisoned traps are used (Actman & Bale, 2018). When human deaths are involved, the animal is often demanded dead. As one UWA ranger noted: “A buffalo has...[killed a person] and then the buffalo is there, but in most cases they have chopped the buffalo and taken it away” (Nyeramihigo, 2017).

Typically, interventions will take place at different levels of governance. At the State level, PAAs, NGOs and GVTC collaborate to implement a number of strategies to reduce human-wildlife conflicts. Some of these mechanisms support existing practices used by communities (e.g., beehives) (GVTC & UWA, 2016). Sometimes physical instruments are used; e.g., stone walls,

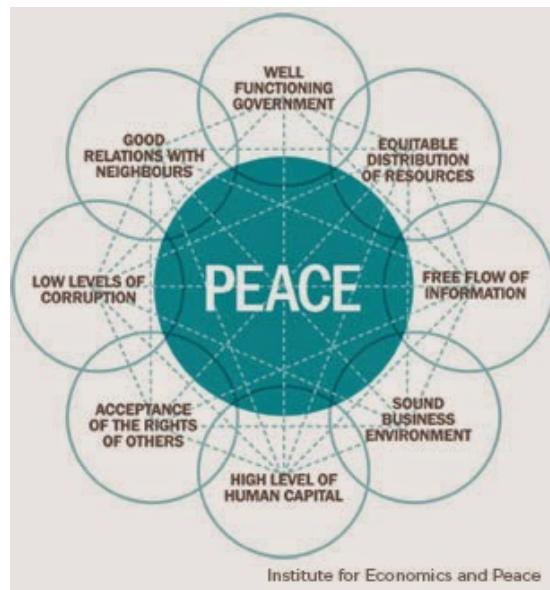
trenches, electric fences. Wildlife monitoring also helps to predict where human-wildlife encounters may happen and to offer preventive measures (e.g., provide safe water access for communities). Rangers may provide security for people entering PAs for resource harvest or transit. Sometimes lands are purchased to provide buffer zones or non-palatable buffer crops are encouraged in lands adjacent to PAs (e.g., tea). In Volcanoes NP (Rwanda), compensation is provided by law for damages and the PAAs are coordinating a buffer zone park expansion with other conservation organizations (Tashobya, 2018). In Uganda, compensation is sometimes arranged (e.g., cost of burials or hospital fees) by PAAs, but these are not provided by law – they are considered a compassion arrangement (Anonymous, 2017a).

The diversity of human-wildlife conflict resolution mechanisms that exist are not yet coordinated across the borders of the three GVL countries. This is not to say that there should ever be a one-size-fits-all approach to human-wildlife conflict across such a diverse landscape; rather, transboundary coordination could focus more on sharing information and results regarding the use and effectiveness of particular interventions, and leverage resources to support implementation.

3.4 Analysis: guidelines for criticism

The final analysis in this process is to critique *law as it is written* and *living law* against *law as it should be* in the GVL. In this case, in order to assess one version of *law as it should be* for peace and conflict resolution or transformation, a positive peace approach to the conflicts mapped above could be used. According to the Institute for Economics and Peace (IES), which produced the first report assessing positive peace worldwide, there are eight pillars of positive peace (Institute for Economics and Peace, 2016a):

Figure 3-1 Pillars of positive peace



Source: (Institute for Economics and Peace, 2016a)

One way to evaluate the TBCA legal frameworks is to identify whether all eight pillars are represented in the transboundary agreements and whether those clauses are sufficient to address challenges to each pillar. Another way is to undergo a participatory process with stakeholders in the land/sea-scape and compile a set of positive peace indicators specific to the TBCA. As this extends beyond the means of this dissertation, this section provides some general recommendations in “criticism” or guidance on how to identify “splices” and gaps between *lex ferenda* and existing law (*de jure* or *de facto*).

3.4.1 Recommendations for criticism

As a first recommendation for critique in the legal mapping process, *all conflicts for which there is yet no legal response should be identified and addressed*, especially where both *written law* and *living law* are absent or insufficient. For example, in the GVL, the issue of environmental disasters is not addressed in transboundary legal agreements and coordination of local level or state responses was not readily apparent from field research. Meanwhile, seasonal flooding is destroying properties in mountain-side villages near Volcanoes NP and community members who raised this issue when interviewed were not certain of solutions. This does not mean that preventative or adaptive measures do not exist. In fact, Volcanoes NP developed a flood management plan in January 2017 with support from the Kingdom of the Netherlands, but this is an area of opportunity for greater transboundary coordination, particularly where the

mountains/volcanoes straddle international boundaries and communities in neighboring countries are facing the same issue with limited knowledge of viable solutions (Water for Growth Rwanda, 2017). Providing explicitly for climate change and environmental disasters in the transboundary agreements could facilitate more integrated management of these issues, which could also improve social and ecological resilience into the future – something which could return peace dividends, particularly in terms of conflict prevention and ecological peacebuilding opportunities for cooperating parties.

This leads to a second recommendation that should result from legal criticism or mapping – *where written law is absent or weak, but living law exists, the written law should be established or fortified in order to support effective interventions on-the-ground*. In some instances, customary law already exists and could be strengthened through formal recognition. There are a number of traditional conflict resolution and peace practices that exist throughout the GVL (see Chapter 5), but these are not captured in transboundary agreements. Legal agreements are products of inter-institutional negotiations, which do not typically incorporate traditional customs, like joint prayer/ceremony or decrees by elders. These practices are powerful for many local communities and should not be disregarded or lost to the witch hunt of colonization or modernization; i.e., stigmatized as culturally ‘backwards’ and therefore, should be abandoned for more ‘civilized’ practices. Support for localized practices can also help to minimize the impact of imposing a singular transboundary paradigm on a mosaic of cultures and peoples occupying a diverse landscape, one of the prominent criticisms of TBCAs (See Zbicz, 2003).

In the same vein, practices on-the-ground that do not derive from long-standing traditions, but have arisen due to localized needs, should also be recognized and supported as appropriate. For example, a common field practice by PAAs is the handing over of cross-border poachers. Typically, criminals caught in one country's jurisdiction need to be formally extradited in order to return to their home country for prosecution. However, due to good relations between PAAs in the three countries, it has been a common practice to hand-over poachers directly along with any supporting evidence. Observations in the field indicate that there is little tracking or monitoring of prosecutions and cases that are brought as a result of cross-border poacher handovers (Kasereka, 2017). However, it was also observed that the PAAs and law enforcement authorities do not always consider prosecution to be the primary means of handling small-scale local poachers; instead, there are programs to reform poachers and bring them into PA-service or a local leader may determine an alternative punishment (e.g., non-monetary fine) (Ndayisaba & Kwizera, 2017; Rujumba, 2017; Tyson Okello, 2017). This signals that cooperative relations between PAAs are functional and to some degree is a gesture towards international peace, with each government respecting the right of the home country to mete justice upon its own citizens rather than subjecting them to a foreign justice system.

Where national laws or localized *living laws* exist, a transboundary written law could harmonize potentially fragmented legal treatment of conflicts in the landscape. In 2017, the GVTC initiated efforts to harmonize laws regarding wildlife crimes, which could have addressed these gaps in prosecution and judicial follow-up, but this appears to have stalled due to lack of funding (GVTC, 2017a). There are many other areas of law that require harmonization in the GVL and these could

be more expeditiously recognized in transboundary agreements or protocols, either as part of GVTC or under another regional institution (e.g., ICGLR, CEPGL), than through separate national legislative processes.

As a third recommendation, a more in-depth study is needed to *determine whether, at the very least, all of the existing conflicts are adequately addressed by existing laws (written or living) and what the appropriate legal formulation should be*. This includes a more nuanced examination of each of the conflict types listed, as many different conflicts fall within each of the broad categories mentioned in the tables above. Some of these may be interrelated and should be similarly addressed in an integrated manner. Lastly, many programs are in place to improve the benefits of conservation to communities, provide alternative sustainable livelihoods, reduce community pressures on natural resources, or transform encounters between humans and wildlife. These should be evaluated for whether they do indeed contribute to reducing social and/or ecological conflicts and if so, they need to be recognized as peace programs and conflict-sensitized.

All conservation and development activities in the region should be conflict-sensitive to avoid triggering or worsening conflicts. In the past, well-intentioned efforts to employ local people to build an elephant/buffalo wall or to train special ranger units to combat PA threats resulted, inadvertently, in payments being robbed by armed rebels and well-equipped rangers being recruited into militia forces (Refisch & Jenson, 2016, p. 10). Furthermore, there has been criticism of neoliberal approaches attempting to integrate conservation and development around PAs, and in the GVL this has been argued to contribute directly to aggravating violence in/around Virunga

NP (Verweijen & Marijnen, 2016). Thus, it is important that all peace/conflict resolution mechanisms included in the transboundary agreements are evaluated for their contribution to peace and not just accepted at face-value, and as appropriate, the legal formulations may need to be improved to ensure conflict-sensitivity. The principle and practice of conflict-sensitivity needs to be recognized in transboundary agreements so that it can be effectively implemented throughout the territory.

3.5 Conclusion

This article provides a framework for critical legal investigation that maps conflict resolution and peace in a landscape's formal and *living laws* in order to better protect places of nature, people(s), and peace. It argues that applying critical legal investigations in TBCAs for peace and CCR can contribute to international, social, and ecological peace across borders. It can be applied in any TBCA or even outside of TBCAs where critical legal analysis of the relationship between place, people(s), and peace is valuable. Critical legal geography (CLG) describes law-making as political spatialized processes that can result in particular violences (e.g., disenfranchisement of local and/or indigenous peoples) or alternatively, promote non-violent processes (e.g., equitable resource sharing) (D. Delaney, 2010). This framework can be used to reveal the injustices of direct and indirect violence, particularly with the chains of explanation deriving from methods of political ecology. The brief application to the GVL case study, however, looks primarily at differences in the

law and does not penetrate further into how those laws came to be that way, where are the power dynamics in the formal and informal lawmaking, etc. Future research should shine light on those deeper understandings. Opportunities for peace in PAs, TBCAs, and Parks for Peace lie somewhere in the political ecology of the gaps between *written law*, *living law*, and *law as it should be*. When these gaps are mapped and explained, they identify where pathways can be developed for the *written law* to be improved for justice, equity, and peace.

This chapter provides an overview of a framework that can be used to transform law in order to transform conflicts in transboundary landscapes. It proposes a political ecology analysis of the TBCA and its legal framework and conflict mapping for the territory, to be followed by legal mapping of the TBCA's *lex scripta* (written law), *lex lata* (living law), and *lex ferenda* (ideal law) and legal criticism. The legal criticism should identify: (1) conflicts that are not addressed in *lex scripta* or *lex lata*; (2) conflicts that are not addressed in *lex scripta* but *lex lata* exists; (3) conflicts that are only weakly addressed in *lex scripta* but a more robust practice exists in *lex lata*; and (4) whether the existing (written or living) laws provide adequately for the conflicts in and around the TBCA. Where gaps between *lex scripta*, *lex lata*, and *lex ferenda* exist, appropriate mechanisms should be incorporated in the transboundary legal frameworks. These mechanisms may draw from customary or traditional practices that exist or from localized practices that have emerged, but all must be evaluated for their contributions towards positive peace and if needed, be revised for conflict-sensitivity.

There is further work needed to better understand the legal changes needed to appropriately transform laws, institutions, and governance, as called for by CCR. This proposed framework will also need to be applied in different types of land- or seascapes exhibiting different types of conflicts in order to determine its utility in a variety of circumstances or to identify improvements to its methodological approach. More effort can also be dedicated to advance this framework as a tool for active research, a process which can contribute to resolving conflicts as part of research engagement with TBCA stakeholders in identifying and mapping the legal roots and interventions to relevant conflicts.

The more that is understood about the interrelated international, social, and ecological pathways to peace, the more the legal routes can also be identified and integrated. This means that *lex ferenda* may want to use IES' eight pillars of positive peace or an alternative approach to evaluate laws for positive peace, as opposed to merely negative peace. The legal interventions should also be assessed within the framework of CCR, looking to conflict prevention, management, settlement, recovery, and peacebuilding to ensure that all stages of conflicts are adequately and appropriately addressed. Ultimately, refining this framework may help in designing TBCAs, whether or not they are formally dedicated to peace, to contribute tangibly to deep conflict transformation, peacebuilding, and greater justice and equity for nature, people(s), and peace.

4 CHAPTER 4: DESIGNING TBCAS FOR PEACE: A REVIEW OF TRANSBOUNDARY AGREEMENTS AND SURVEY OF PRACTITIONERS

4.1 Introducing transboundary legal agreements

This chapter assumes that TBCAs can be vehicles for peace and posits that the peace potential of TBCAs has not yet been realized because they are not being properly designed to transform international, social, and ecological conflicts for positive peace. Design, in this case, refers to the legal formulation and transboundary cooperation mechanisms incorporated into TBCA governance. This includes any formal transboundary agreements as well as informal arrangements. However, since informal governance arrangements are difficult to study without field-based empiricism and their exact articulation cannot be compared in the same way that formal transboundary agreements can be, the legal review in this chapter focuses narrowly on written or formal transboundary agreements (e.g., treaty, MoU/MoA, declaration). This study focuses on the legal design of TBCAs because if ‘law is to space as mind is to body,’ then a TBCA’s legal framework is its governing framework (D. Delaney, 2010, p. 13). In other words, the legal formulation is an articulation of its overall design. Furthermore, if TBCA design truly is what is hindering an environmental cooperation’s progress towards peace, then the formal agreements may provide evidence and insights into where the weaknesses and challenges in legal formulation

are occurring and how they can be improved in order to better support conflict transformation towards international, social, and ecological peace.

4.1.1 Questions and assumptions

One hypothesis is that TBCAs are not providing the peace dividends anticipated or as described in environmental peacebuilding literature due to an absence or paucity of explicit and operative peace mechanisms in formal legal and governance frameworks. Therefore, this research sets out with the expectations that peace would rarely be mentioned in TBCA agreements and if mentioned, it would appear more frequently as preambular aspirations than operative articles. This would reflect a common belief that TBCAs, including Parks for Peace, are at best, created as symbolic gestures to peace and not agents of peace. Alternatively, it may reflect a lack of mandate or capacity on the part of conservation authorities and partners to intervene for peace and conflict resolution. More broadly, it may also indicate a lack of legal expertise in operationalizing peace within governance and regulatory frameworks for transboundary conservation. These speculations speak to a second critical explanation for why TBCAs may not be ‘working’ for peace – implementation. Even if appropriate peace mechanisms are integrated into TBCA agreements, they are toothless without effective implementation.

For similar reasons, it was anticipated that mentions of conflict and conflict resolution would be infrequent. Following the literature reviewed on TBCAs (see Chapter 1), it was also assumed that when identifying the three categories of peace in transboundary agreements, indicators or mechanisms of ecological peace would feature most prominently with social peace featuring the least. International peace indicators were anticipated to just be references to pre-existing peace between the collaborating States. This would support the assumptions presented in Chapters 1 and 2 that TBCAs are created primarily for ecological peace, under conditions of pre-existing international peace, and with potentially negative contribution to social peace.

In order to better understand the role of TBCA agreements in supporting peace and CCR, a legal review of TBCA agreements is supplemented by an online survey distributed to networks of identified transboundary conservation practitioners. The survey requested participants to include transboundary legal agreements in their submissions and these were included in the legal review identifying common practices in legal drafting. Expert interviews were also conducted to better understand the survey findings and blackletter legal analysis. The objective of this study was to improve TBCA legal design by incorporating concepts and methods of CCR in ways that are feasible and supportive of needs and challenges identified by transboundary conservation practice on-the-ground. The third part of this chapter describes the methodology used for the legal review and practitioners' survey. The fourth section presents findings from the legal review, whereafter, the fifth section presents findings from an online survey of TBCA practitioners, and the sixth section concludes with some possible lessons and suggestions for future research.

4.2 How are TBCAs transforming conflicts and building peace around the world?

International law and multilateral agreements speak to international peace, social peace, and ecological peace, including through processes of cross-border collaboration in environmental governance or PAs, providing legal support for TBCAs and peace. However, in individual TBCAs, the legal basis or framework has varied in modality (e.g., treaty vs. MoU), as well as incorporation of international, social, and ecological peace mechanisms. Seemingly, TBCAs have been developed *ad-hoc* around the world with some regional exceptions (e.g., TFCAs in SADC) or cross-pollination between transboundary practitioners through networks like the IUCN WCPA TBC SG, which means they provide examples of (unintentional?) institutional experimentation. Many are also fairly informal collaborations, allowing for institutional tinkering. This case-by-case variation provides reason to analyze the diversity of legal formulations to identify dominant patterns of practice with consideration for the relevance of contextual specification and uptake of endogenous practices. This section outlines the methodology used to understand TBCA legal frameworks for peace and conflict based on a legal review of transboundary agreements and the survey of TBCA practitioners.

For this chapter, the methodology used to understand the development of TBCA legal agreements around the world and their implementation is a two-tiered process evaluating *de jure* protection of peace and *de facto* protection of peace through a legal review of TBCA agreements (*de jure* written law) and an online survey of TBCA practitioners (*de facto* implementation). TBCA agreements were analyzed for peace or conflict resolution through a multi-step process as well.

First, a specific word search for defined terms (peace, conflict, dispute, resolution) and their analogs was conducted to identify direct references and then second, a search for mechanisms addressing different types of international, social, or ecological peace and conflicts was conducted to identify indirect references (e.g., equitable benefits sharing, which can address social conflicts). Each of the references was categorized according to the type of peace or conflict that they address (international/social/ecological). This provided some insights into the legislation of peace and conflict resolution in TBCA legal agreements.

To supplement this legal review, TBCA experts were surveyed through an online questionnaire. Experts were identified primarily through their affiliation with a transboundary conservation network (e.g., IUCN WCPA TBC SG or EUROPARC TransParc Network) or through prior research contacts and referrals. The objectives of the survey were to assess whether TBCAs are contributing to peace and the role of legal agreements governing TBCAs in shaping their capacity to do so. The questions sought to understand the: (1) cooperation in each TBCA (i.e., level of cooperation, priority activities, factors of success); (2) effectiveness of legal agreements in supporting TBCA objectives; and (3) role of legal agreements in supporting conflict resolution or peace. In some instances, interviews were conducted with individuals in lieu of the online survey. These interviews were rather informal and did not follow the questionnaire, but provided insight into issues of peace and conflict in TBCAs. The subsections below elaborate further on the methodology for both the legal review and practitioners' survey.

4.2.1 Methodology: legal review of TBCA agreements

The TBCA agreements reviewed in this chapter were collected through online sources (e.g., SADC agreements available through their TFCA Portal) or requested from contacts in professional networks like the IUCN WCPA TBC SG and respondents to the online survey. There are very few databases of TBCA legal agreements available. One source is the IUCN WCPA TBC SG (www.tbpa.net), which provides copies of 15 TBCA agreements online. The SADC TFCA Network offers an online database through a member portal (<https://tfcaportal.org>). However, this provides legal agreements for only 5 of the 13 SADC TFCAs established or in process, though the website notes that at least 11 have a multilateral MoU, protocol, or a treaty (SADC Secretariat, 2013, p. 10). More established TBCAs with individual websites sometimes posted their legal agreements publicly (e.g., Coral Triangle Initiative between Indonesia, Malaysia, Papua New Guinea, Philippines, Solomon Islands, and Timor Leste - <http://coraltriangleinitiative.org/>). Some TBCA agreements were available from previous research or direct requests to known practitioners, but there was still a need to make a broader request through the online survey. Survey participants were invited to upload TBCA agreements or to email them directly to me as the researcher, but only a few provided copies of the agreements they were involved with. In some instances, follow-up emails were sent to the respondents to request copies of known legal agreements (e.g., Great Altai Transboundary Biosphere Reserve). These respondents helped to provide access to all of the Asian TBCA agreements and one of the Middle East agreements reviewed.

Generally speaking, there are many legal instruments which constitute part of a TBCA legal framework; e.g., all of the international and regional laws previously mentioned. It can also include multilateral agreements establishing a transboundary body (council, committee, advisory group, etc.) with jurisdiction over environment, natural resources, and sustainable development (e.g., Preliminary Convention for the Study of the Use of the Waters of Lake Titicaca, which created the Joint Sub-commission for the Development of the Integrated Region of Lake Titicaca). A TBCA legal framework also includes relevant national laws, including: (1) national designations of a TBCA (e.g. implementing law of a TBCA agreement); (2) domestic legislation gazetting individual PAs constituting part of the TBCA; (3) management plans for individual PAs; (4) organic environmental law or act; (5) protected areas laws and regulations; (6) environmental laws pertaining to forests, water, biodiversity, etc.; and (7) any other laws which may be relevant to specific aspects of transboundary conservation (e.g., criminal law, laws of extradition, and international laws regarding wildlife trafficking or wildlife crimes).

As TBCA legal frameworks are quite extensive and many of the documents difficult to access in different countries (including for language limitations), analysis of comprehensive TBCA legal frameworks falls beyond the scope of this study. For purposes of this research, TBCA agreements or legal instruments refer to any: (1) treaties; (2) MoUs/MoAs; (3) joint declarations or statements; (4) border, cease fire, or peace agreements that implicate a TBCA; (5) protocols regarding transboundary collaboration; (6) documents establishing a TBCA or a TBCA committee, coordinating body, or secretariat; (7) TBCA management plans; and (8) TBCA bylaws or regulations. The TBCA agreements analyzed include only those made available through the

process described above. A complete list of the agreements reviewed or the legal status of the TBCAs identified is provided in Appendix III. Table 4-1 below provides an overview of the regional characteristics for the TBCA agreements reviewed in this chapter.

Table 4-1 Number of TBCA agreements by region

Region (# Countries w/TBCAs)	TBCAs Identified	TBCAs w/o Agreements	TBCAs w/ Agreements	TBCAs w/ Agreement - Not Found	TBCA Legal Status Unknown	Total # of Agreements
N. America (3)	6	2	4	0	0	4
L. America (13)	9	1	6	0	2	14
Europe (24)	13	0	7	0	6	10
Africa (27)	20	0	13	2	7	17
Asia (20)	16	3	6	3	7	11
Middle East (2)	1	0	1	0	0	2
Total (89)	65	6	37	5	22	60

In addition to the limitations mentioned above, there are a significant number of TBCAs with unknown legal status (22). In just over a handful of TBCAs, it was confirmed by TBCA practitioners that no legal agreements exist (6), and in some cases, it was confirmed that a legal agreement exists, but a copy was not made available or readily accessible (5). Therefore, of the 65 TBCAs identified between a total of 89 countries, the agreements for only half of these (32) were obtained. This leaves a large number of TBCAs unevaluated in the legal review. Also, it should be noted that a number of the agreements were available only in French, Spanish, or another language. These other languages were translated through Google Translate, which is very likely not entirely

accurate for purposes of legal interpretation. However, given that most of the legal review focused on the identification of mechanisms that address particular categories of peace and conflict (e.g., references to strengthening friendly relations between States) or elements of a TBCA agreement (e.g., clarification of transboundary activities or establishment of a transboundary institution), and not just direct references to specific terms (i.e., peace or conflict), precise translation was not an inhibitive limitation to the legal review.

4.2.2 Methodology: practitioners' survey on 'TBCAs, Law and Peace'

The online survey was designed to provide practical understanding to the written TBCA agreements. The survey has four sections: (1) TBCA Experience, (2) TBCA Cooperation, (3) TBCA Agreements and (4) TBCAs and Peace (see Appendix VII). The first section seeks to learn about the survey participant's involvement in transboundary conservation. It asks how long they have worked in transboundary conservation, in which TBCAs specifically (listing up to 5), what positions they have held in those TBCAs, and what activities they were involved in. The second section loops for each of the TBCAs they list, seeking to understand more about each TBCA. It asks about the level of transboundary cooperation, when it began, what its initial priorities were and if/how they have changed, what is important for successful cooperation, and whether cooperation added value to the individual PAs. The third section tries to learn about the role of TBCA agreements. It invites participants to submit copies of TBCA agreements they have been involved

in drafting, negotiating, or implementing. It also asks whether the agreements are effective and what is important for effective implementation. The fourth section seeks to identify how TBCAs can contribute to peace. It asks participants whether they agree, based on their experience, that TBCAs contribute to regional peacebuilding and what factors were key to having an impact for peace. If the TBCAs experienced violent conflict, it inquires whether cooperation helped to transform the conflict and whether the legal agreements played a role – if so, which aspects of the agreements were most effective. If no legal instruments exist, participants are asked to discuss alternatives mechanisms to support peace and whether they think a legal instrument would have made a positive difference.

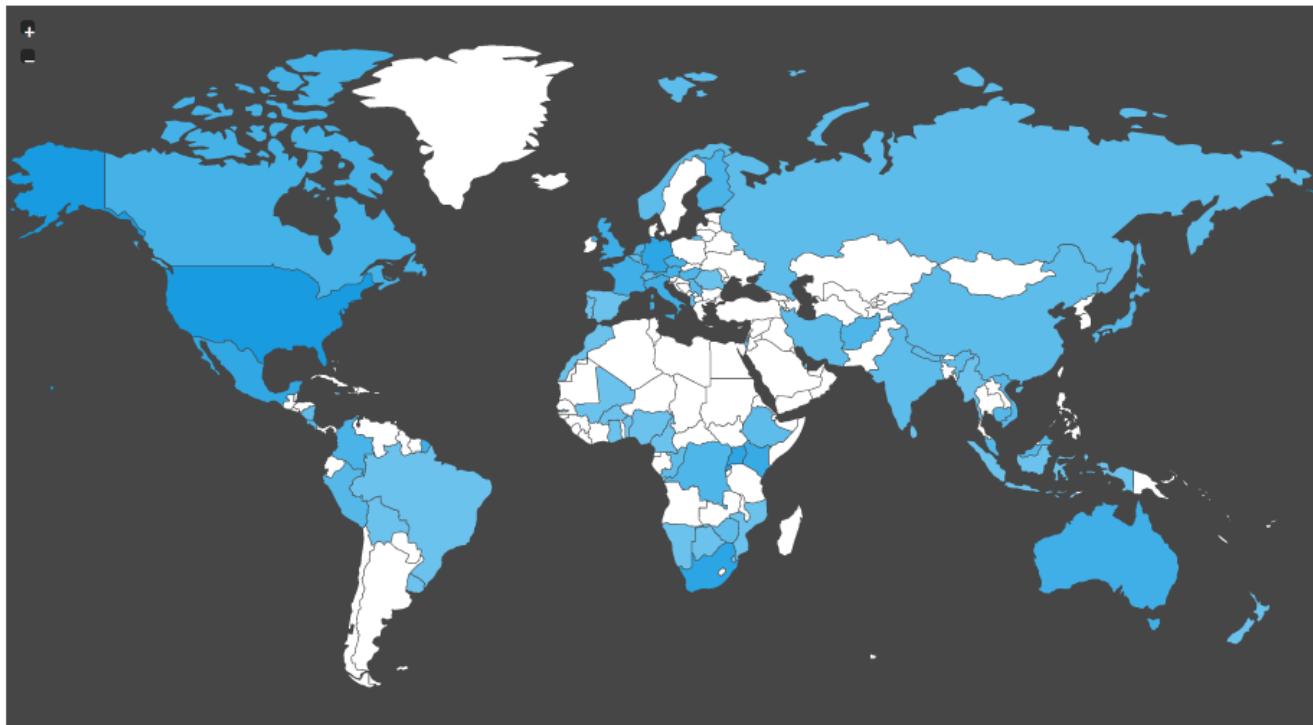
Targeted survey participants were TBCA practitioners, meaning anyone who is or was engaged in some aspect of transboundary cooperation in a TBCA. This includes park managers, researchers, community liaisons, consultants, etc. As the survey was conducted online, participants were sent survey links by email. They were identified through their participation in a few specific networks: (1) IUCN WCPA TBC SG, (2) SADC TFCA Network, (3) EUROPARC TransParc Network, and (4) personal contacts from prior field research and professional networking. In some instances, survey participants recommended others who could similarly or better respond. The survey was available for three months from June – September 2017, but provided only in English, French, and Spanish, which limited survey participation. Table 4-2 provides some general characteristics of the respondents surveyed. A complete list of the TBCAs and countries involved where the survey participants worked is included in Appendix IV.

Table 4-2 Characteristics of TBCA survey respondents

Region	# of Respondents	# of TBCAs
N. America	6	4
L. America	6	12
Europe	23	15
Africa	46	33
Middle East	1	1
Asia	6	12
Total	88	77

Below in Figure 4-2 is a map produced by FluidSurvey of the countries where each of the respondents are based. The blue countries provide some indication of the geographic representation of survey responses; however it does not specify how many respondents were identified in each of the countries. Although the majority of the respondents are based in Africa, large parts of the continent were unrepresented in the responses. Since almost all of the transboundary practitioners who completed the survey are members of at least one international community of transboundary conservationists (e.g., IUCN WCPA TBC SG or EUROPARC), they represent practitioners with a certain level of global engagement in the topic. Many respondents had worked in multiple TBCAs, some of them even spanned multiple regions.

Figure 4-1 Map of survey responses by country (in blue)



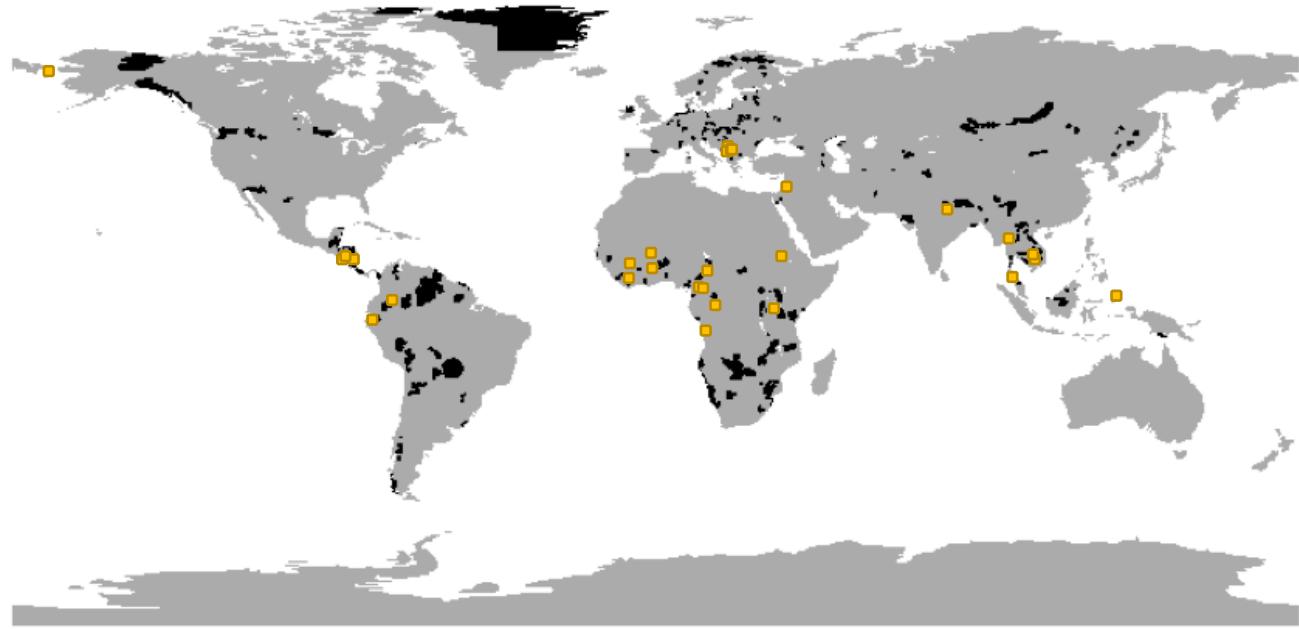
The survey of practitioners has a number of inherent limitations that should be mentioned. As noticeable in Table 4-2 and the map in Figure 4-1 above, the geographic representation from the survey is dominated by Africa (especially Sub-Saharan Africa) and Europe, while Asia and Latin America are starkly under-participating given the number of TBCAs in those regions. There was notably only one respondent from the Middle East. More diverse representation in the legal survey may have required the survey to be translated into other languages; potentially the missing UN languages of Arabic, Chinese, and Russian to begin. This does not, however, explain the under-representation of Latin America, as the survey was provided in Spanish as well. Also, given the diversity of languages used in Asia, Chinese alone would not have been sufficient to incorporate most of the transboundary practitioners in the region. Nevertheless, it may have allowed for more

participation by practitioners in China. It is imperative to mention that given the prevalence of my contacts in the GVL, 23 of the 88 respondents (26.14%) had worked in that landscape amongst others. This indicates a significant bias in the responses not only from the African region, but from one TBCA in particular. Almost all of the 23 GVL respondents, however, have also worked in other TBCAs, so their experiences are not exclusive to that one landscape.

The low-response rate (88 completed out of approximately 560 contacted and 297 who initiated but did not finish) is likely due to survey fatigue and mis-targeted participants. The survey began with a lengthy administrative section (contact information, consent forms, and permissions), followed by a series of questions repeated for up to 5 different TBCAs, which caused the survey to be very time-consuming for practitioners with experience in multiple TBCAs. Most of the respondents stopped before even reaching this point. A follow-up or future survey of TBCA practitioners would try to address the low completion rate by providing a shorter survey and more targeted questions. Further engagement with the survey participants could help to refine the evaluation of responses, particularly the many questions that requested participants to rank a series of options, but which did not provide a weight to distinguish between higher or lower rankings. Question framing is always a challenge with surveys; it is difficult to know whether the right questions were asked in the right way. Some potential respondents were also clear to express the mis-targeting of the survey. In other words, they did not feel that they were appropriate participants despite their membership in a transboundary conservation network.

It is interesting, however, that there are more TBCAs identified by the practitioners who responded than those identified in the legal review (77 vs. 65). This is, in part, due to the fact that a number of the TBCAs listed by the practitioners in the survey are initiatives they had worked on, but that did not come to fruition or maintain sustained cooperation (e.g., Rio San Juan between Costa Rica and Nicaragua). Naturally, these unsuccessful (or stalled) initiatives did not have any transboundary legal agreements to include in the review. Further research could also look into the gaps between this list of 77 TBCAs, those identified in the legal review, and the 2007 Global List of 227 TBCAs to produce an improved list of genuine TBCAs. This requires investigation into whether there is actual cooperation between PAs. Fortunately, this was part of the survey questions, at least for the 77 TBCAs identified by practitioners. A modified map of TBPAs identified by IUCN and UNEP-WCMC according to its 2007 Global List is presented below in Figure 4-2. In this map, the yellow dots represent additional TBCAs identified through the legal review and/or practitioners' survey. The locations are not precise and the size of the dot is standard, regardless of the size of the TBCA.

Figure 4-2 Map of TBCAs around the world



4.3 Findings: understanding TBCA legal agreements

Following the methodology outlined in section 4.1 above, this legal review looks at the conceptualization of peace in transboundary agreements. The main questions are:

- Do the transboundary agreements refer explicitly to peace or conflict resolution? If yes, are references in the preamble and/or operative paragraphs?
- What types of peace and conflict resolution/transformation mechanisms do they incorporate?

- How do they incorporate international peace, social peace and ecological peace?
- What other institutional or alternative mechanisms for peace and conflict resolution do they include?

An initial sample of 65 TBCAs was collated based on 54 listed in the 2007 Global List and 11 known but unlisted TBCAs. The 54 selected from the 2007 Global List include the 44 TBCAs listed by name and 10 others that were unnamed but represent TBCA sites known to me. Of these 65 TBCAs, transboundary agreements were identified for 37 of them. Six of the TBCAs were confirmed to have no formal agreements and 22 may have transboundary agreements, but I was unable to ascertain their legal status. Of the 37 TBCAs confirmed to have transboundary agreements, agreements were not found for five of them; similarly, of the 60 agreements identified, four could not be obtained. Therefore, in total, *56 transboundary legal agreements were reviewed for 32 TBCAs* (see Table 4-1 above). The instruments used were primarily MoUs (42.86%), with the rest taking the form of treaties (23.21%), declarations (21.43%) or other modality (12.5%), such as diplomatic notes. The regional breakdown of agreements reviewed from those identified can be seen in Table 4-3 below. A complete list of TBCAs and agreements identified, with type of agreement (e.g., MoU, Treaty) and agreement date are compiled in Appendix III.

Table 4-3 TBCAs and agreements by region

Region	Total # of TBCAs Identified	# of Agreements (Reviewed/Identified)	# of TBCAs with Agreements (Reviewed/Identified)
N. America	6	4/4	4/4
Latin America	9	13/14	6/6
Europe	13	10/10	7/7
Africa	20 ²	17/19	11/13
Middle East	1	2/2	1/1
Asia	16	10/11	3/6
Total	65	56/60	32/37

As observable from Table 4-3 above and the differing numbers between TBCAs and agreements reviewed and identified, it was not possible to identify and secure transboundary agreements for all of the TBCAs identified. The paucity of information from the Middle East is an unfortunate example. This difficulty is due largely to the challenges of access to publications (language or availability to the public) and limited agreement uploads in responses to the practitioner survey. No named TBCAs from the Middle East are listed in the 2007 Global List and only one transboundary agreement was found by the author, another was provided by the regional coordinator for the IUCN WCPA TBC SG through follow-up communications. There are a few known TBCA proposals (e.g., Golan Renewable Energy Peace Park between Israel and Syria) and TBICCAs in the Middle East, but these were not included as formal agreements have not been identified by the author in any of those territories. The difficulty of obtaining copies of TBCA agreements does not bode well for basic human and environmental rights that call for access to

² This does not include Emerging or Conceptual SADC TFCAs, except for Iona/Skeleton Coast TFCA, which was listed by name in the 2007 Global List.

environmental information, especially anything which can alter land rights and access to natural and cultural resources. It can also affect knowledge of how to participate in TBCA governance.

4.3.1 Locating peace, conflict, and conflict resolution in transboundary agreements

When identifying references to peace, conflict, and conflict resolution, specific words were searched. A preliminary search used the words, “peace,” “conflict,” and “conflict resolution.” Examples of other terminology that were included as references are listed in Table 4-4 below. Alternative phrasing of the terms listed below were also included in the search; e.g. cessation of conflict was included as an analog to “ceasefire” and friendly or neighborly relations were also included as “good relations.”

Table 4-4 Term search for peace, conflict and conflict resolution (other terminology)

Peace	Conflict	Conflict Resolution
Harmony	Dispute	Prevention
Good Relations	Hostilities	Settlement
Tranquility	Armed activities	Dialogue
Ceasefire	Confrontation	Dispute resolution
Solidarity	Breakdown of peace	

4.3.1.1 Peace in TBCA agreements

In total, 108 mentions of peace, including the alternate terms listed above, were found in 20 of the 56 agreements (35.71%). These were typically located in the title of the agreement or TBCA name (22.22%), preamble (31.48%), or operative articles (40.74%). The remaining citations cannot be classified – for example, in the case of the 1981 Cease Fire in the Cordillera del Cóndor, wherein peace is mentioned 15 times (18.52% of total), the agreement occurred through an exchange of diplomatic notes or military letters, which do not follow the format of a MoU or Treaty (Du Bois Gervasi & Sorrosa Encalada, 1981). Explicit use of the word “peace” occurred 66 times, with 31.82% (21 instances) of those appearing in the name of a TBCA, NGO, fund, or peace agreement. The majority of the direct uses of the word “peace” (68.18%) refer to a state of peace. Other indirect mentions of peace can be described as referencing good, neighborly relations (25.93%), the absence or termination of conflict (7.41%), or a general state of harmony and tranquility (5.56%).

4.3.1.2 Conflict in TBCA agreements

Conflict appears much less often, only 43 times in total. Like peace, it appears more often in Latin American (30.23% of all mentions), Middle Eastern (55.81%), and African (11.63%) TBCAs, with

only one mention in Europe in the Ohrid-Prespa Biosphere Reserve Declaration and none in Asia (Republic of Albania et al., 2012, pml.). Ohrid-Prespa is a part of the European Green Belt Initiative, designed to reunite landscapes and communities separated by the Iron Curtain (European Green Belt Association, 2017). The prominence of conflict in Latin American TBCA agreements is due to the case of the Cordillera del Cóndor, a TBCA established as a byproduct of decades of border conflict resolved through a series of peace agreements brokered by Argentina, Brazil, Chile, and the United States. In fact, those peace agreements account for all 15 mentions of conflict in Latin American TBCA agreements.

Similarly, in the Middle East, the one TBCA that was identified and reviewed is the product of a peace treaty between Israel and Jordan. Interestingly, only the peace treaty mentions peace, the MoU establishing the Al Bakoora/Naharyim/Geshar Peace Park does not (Government of the State of Israel & Government of the Hashemite Kingdom of Jordan, 1994; Muaz Ben Jabal Municipality, Beit She'an Valley Regional Council, & Jordan Valley Regional Council, 2007). In Africa, the agreements that mention conflict focus on two borders of Uganda: (1) GVL between DRC, Rwanda, and Uganda and (2) Landscapes for Peace with South Sudan. These TBCAs continue to deal with on-going conflicts and emergence from conflict, and therefore present interesting case studies that are elaborated in Chapters 5 and 6.

4.3.1.3 Conflict resolution in TBCA agreements

Conflict resolution appears more often in the transboundary agreements reviewed (69 times), but over half (53.62%) of the mentions are standard legal text addressing resolution of disputes pertaining to the agreement. The other half refers to conflict resolution in general (e.g., prevention) and/or establishes institutional mechanisms to address conflicts in the TBCA. In the case of the GVL, the transboundary agreement calls on external support (e.g., donors) in disarming and evacuating armed groups from the TBCA and facilitating peacemaking processes (Ministers and High Level Representatives of the Governments of the Democratic Republic of the Congo, the Republic of Rwanda and the Republic of Uganda, 2008, p. Art. 6 & 7). The regional and global breakdowns of all three (peace, conflict, and conflict resolution) appear below in Table 4-5.

Table 4-5 Peace, conflict and conflict resolution in TBCA agreements

Section	Peace					Conflict					Conflict Resolution				
	Exact Word	Exact Word in a Name	Good Relations	No Conflict	State of Harmony	Boundary Dispute	Breakdown of Peace	Conflict Area	Hostile Activities	Prior Conflict	Resource Conflicts	State of Conflict	Agreement Disputes	Ecological Peacebuilding	Institution, Protocol or Mechanism
North America															
Title	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pmbl	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Articles	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0
	2					0					0				
Latin America															
Title	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Pmbl	3	0	4	1	0	1	0	0	0	0	0	2	0	0	1
Articles	9	4	6	2	0	1	0	0	0	0	0	1	5	0	3
Other	8	0	0	1	6	1	1	4	1	0	0	1	0	0	2
Total	22	4	11	4	6	3	1	4	1	0	0	4	5	0	6
	43					13					18				

Europe																	
Title	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pmbl	1	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	
Articles	0	0	0	0	0	0	0	0	0	0	0	4	0	1	0	0	
Other	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	9	8	1	0	0	0	0	0	0	1	0	0	4	0	1	0	
				10				1				5					
Africa																	
Title	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pmbl	4	0	5	0	0	0	0	0	2	1	1	0	0	0	0	2	
Articles	6	0	2	0	0	0	0	0	0	0	0	1	20	1	6	5	
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	11	0	7	0	0	0	0	0	2	1	1	1	20	1	6	7	
				18				5				34					
Middle East																	
Title	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pmbl	12	5	2	0	0	0	0	0	2	0	0	0	0	0	0	1	
Articles	8	0	6	4	0	0	3	0	16	0	0	3	2	1	0	2	
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	22	7	8	4	0	0	3	0	18	0	0	3	2	1	0	3	
				34				24				6					
Asia																	
Title	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pmbl	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
Articles	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	1	0	0	0	0	0	0	0	0	6	0	0	0	0	
				1				0				6					
Global																	
Title	6	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pmbl	20	5	13	1	0	1	0	0	4	2	1	2	0	0	1	5	
Articles	24	5	14	6	0	1	3	0	16	0	0	5	37	2	10	11	
Other	16	8	0	1	6	1	1	4	1	0	0	1	0	0	2	1	
Total	66	21	28	8	6	3	4	4	21	2	1	8	37	2	13	17	
				108 (49.09%)				(19.54%)				69 (31.36%)					

Note: The sections of the agreements are identified as the title of the agreement (Title), preamble (Pmbl), operative articles (articles), or other. Other included, *inter alia*, clauses captured in an Annex or if the agreement followed a different modality that does not exhibit sections already mentioned (e.g., diplomatic note).

4.3.1.4 Sub-categories of peace, conflict, and conflict resolution

The sub-categories of peace, conflict, and conflict resolution listed across the second-to-top row in Table 4-5 above were classifications assigned to the types of mentions that were identified. These were developed through an iterative process based on the types of mechanisms or references that emerged through the legal review. A brief explanation of what each sub-category includes is listed below:

Peace

1. Exact Word: use of the word “peace” explicitly.
2. Exact Word in a Name: use of the word “peace” as part of a name. This could be in the name of an agreement (including the TBCA agreement itself), a TBCA, an NGO, a fund, or other entity.
3. Good Relations: refers to a state of positive (good, friendly, neighborly, close) relations between countries. Includes acknowledgement of existing relations or aspirations towards improved relations.
4. No Conflict: refers to the absence, cessation, or termination of conflict.
5. State of Harmony: refers to a state of peace, harmony, calm, pacifism, etc. Includes existing state or aspirations towards improved state of harmony.

Conflict

1. Boundary Dispute: refers to a territorial dispute between countries. Includes prior or on-going conflicts over borders.
2. Breakdown of Peace: refers to the absence or cessation of peace and the occurrence of conflict.
3. Conflict Area: refers to the place or geophysical territory where conflicts or hostile activities are occurring (i.e., conflict zone).
4. Hostile Activities: refers to any actions or activities by one party that may be considered hostile; e.g., military invasion, acts of terrorism, support to hostile groups, use of inciteful propaganda, military attacks, warfare, etc.
5. Prior Conflict: refers to a conflict in the past that is not currently on-going.

6. Resource Conflicts: refers to conflicts over natural resources.
7. State of Conflict: refers to a state of hostility, difference, or even armed conflict.

Conflict Resolution

1. Agreement Disputes: refers to mechanisms or processes for resolving disagreements about the terms or implementation of the TBCA agreement; e.g., mediation or arbitration upon notice.
2. Ecological Peacebuilding: reference to environmental cooperation or cooperation in environmental matters for the purposes of strengthening peace or resolving conflicts between parties.
3. Institution, Protocol, or Mechanism: refers to the establishment or existence of a transboundary institution (e.g., transboundary secretariat or committee), protocol, or mechanism that has the capacity to resolve conflicts broadly (not just disputes regarding the agreement).
4. General Conflict Resolution: refers to generic statements or principles about the management and resolution of conflicts; e.g., commitment to non-violent resolution of conflicts, principle of amicable resolution of disputes. Also includes references to the end of conflicts (i.e., a conflict has been resolved) and conflict prevention.

In order to elaborate on this work of classifying legal indicators or mechanisms of peace, conflict, and conflict resolution, future researchers may want to develop an alternative set of sub-categories based on CCR theory and literature or according to their own methodologies. Instead of capturing what currently exists in TBCA agreements, these alternative sub-categories could be based on what “should” be included under each category of peace.

4.3.1.5 Peace, conflict, and conflict resolution by region

Following up Table 4-5, it was also interesting to quantify how many TBCAs have incorporated peace, conflict, and conflict resolution terminology in their agreements. Table 4-6 provides the occurrence of each term per region according to the number of agreements and the percentage of TBCAs. Almost one-third (31.25%) of the TBCAs mention the term “peace” explicitly, but half of these form part of a name of an agreement, TBCA, or NGO, so only one-sixth (15.63%) of the explicit mentions actually describe a state of peace between States. Three-quarters (75%) of the TBCAs have some clause concerning settlement of disputes regarding the transboundary agreement, but only four speak specifically of ecological peacebuilding (12.5%) and only 6 (18.75%) identify an institution or mechanism for resolving conflicts between parties. These appear only in the African and Latin American agreements. This seems to indicate more interest in the institutionalization of conflict resolution by the States more concerned with peace and conflict, which is a good sign that there is effort to operationalize peace and conflict resolution rather than just naming an aspiration.

Table 4-6 below does reveal, however, that most TBCAs do not incorporate peace, ecological peacebuilding, or institutional conflict resolution mechanisms into their legal agreements and thereby, supports the hypothesis that TBCAs are not being sufficiently designed for peace and conflict transformation.

Table 4-6 Peace, Conflict, and Conflict Resolution by Region (# of Agreements/% of TBCAs)

	North America	Latin America	Europe	Africa	Middle East	Asia	Global
Exact Word	1 (25.0%)	5 (16.67%)	2 (28.57%)	6 (38.46%)	2 (100%)	0 (0%)	16 (31.25%)
Exact Word in a Name	1 (25.0%)	3 (16.67%)	1 (14.29%)	1 (7.69%)	2 (100%)	0 (0%)	8 (15.63%)
Good Relations	0 (0%)	4 (16.67%)	1 (14.29%)	5 (38.46%)	2 (100%)	1 (16.67%)	13 (28.13%)
No Conflict	0 (0%)	4 (16.67%)	0 (0%)	1 (7.69%)	1 (100%)	0 (0%)	6 (9.38%)
State of Harmony	0 (0%)	3 (16.67%)	1 (14.29%)	5 (38.46%)	2 (100%)	0 (0%)	11 (25.0%)
Boundary Dispute	0 (0%)	3 (16.67%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	3 (3.13%)
Breakdown of Peace	0 (0%)	1 (16.67%)	0 (0%)	1 (7.69%)	0 (0%)	0 (0%)	2 (6.25%)
Conflict Area	0 (0%)	1 (16.67%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (3.13%)
Hostile Activities	0 (0%)	1 (16.67%)	0 (0%)	1 (7.69%)	1 (100%)	0 (0%)	3 (9.38%)
Prior Conflict	0 (0%)	0 (0%)	1 (14.29%)	1 (7.69%)	1 (100%)	0 (0%)	3 (9.38%)
Resource Conflicts	0 (0%)	0 (0%)	0 (0%)	2 (15.38%)	0 (0%)	0 (0%)	2 (6.25%)
State of Conflict	0 (0%)	2 (16.67%)	0 (0%)	0 (0%)	1 (100%)	0 (0%)	7 (15.63%)
Agreement Disputes	0 (0%)	5 (83.33%)	4 (42.86%)	15 (84.62%)	1 (100%)	5 (50.0%)	30 (71.88%)
Ecological Peacebuilding	0 (0%)	0 (0%)	0 (0%)	3 (23.08%)	1 (100%)	0 (0%)	4 (12.5%)
Institution, Protocol or Mechanism	0 (0%)	2 (33.33%)	1 (14.29%)	3 (15.38%)	0 (0%)	0 (0%)	6 (15.63%)
General Conflict Resolution	0 (0%)	3 (16.67%)	0 (0%)	4 (30.77%)	1 (100%)	0 (0%)	8 (18.75%)

Note: The first number presented in this table represents the number of agreements that included mentions of each sub-category of peace, conflict, and conflict resolution. As some TBCAs have more than one agreement as part of its legal framework, the percentage of TBCAs that included mentions of each sub-category was listed below the number of agreements.

A number of additional findings are commentable in Table 4-6 above. First of all, the small sample size in the Middle East (one TBCA) means that if any mention of peace, conflict, or conflict resolution appears in either of the two agreements reviewed, the values for the whole region show

as one-hundred percent. This makes the region's representation of the different categories of terms skew in comparison, making it difficult to compare as a region to the other regions where there are multiple TBCAs present. In contrast, North America has four agreements for four TBCAs reviewed and yet almost none of the terms appeared, except for the use of the word "peace" in relation to the name "peace park" or "park for peace." Similarly, of the ten agreements and six TBCAs in Asia, there was only the mention of "friendly relations" in one of the agreements for the Great Altai Transboundary Biosphere Reserve. The only time the searched terms appeared in the Asian TBCAs is in reference to settlement of disputes regarding the agreement; otherwise, no other obvious conflict resolution mechanism is offered. Settlement of disputes pertaining to the agreements is the most commonly addressed in all TBCAs worldwide, appearing in over 70% of the TBCAs.

The exact word "peace" is actually codified in nearly one-third of all TBCAs and mentions to friendly relations or a general state of peace (which can include use of the exact word "peace") are also not uncommon, appearing in approximately one-quarter of the TBCAs. Peace (over 60% of the TBCAs) and conflict (15.38% of the TBCAs) are captured most frequently in African TBCAs. In Latin America, the percentage is just slightly higher for conflict (16.67%), but this refers to only one TBCA, whereas in Africa it includes both the GVL and Landscapes for Peace. Globally, only four TBCAs mention ecological peacebuilding (GVL, Landscapes for Peace, Nyungwe-Kibira, and the Al Bakoorah/Naharyim/Geshar Peace Park), with only the two case studies in Africa (excluding Nyungwe-Kibira) also addressing conflicts over natural resources as well.

4.3.2 International peace, social peace, and ecological peace in transboundary agreements

As a second layer of review, language referring to international peace, social peace, and ecological peace were searched for in each of the 56 TBCA agreements. For this purpose, a subset of categories was developed for each of the three categories of peace (see Table 4-7). Any reference to the sub-categories below were compiled in order to determine how often and how TBCA agreements are capturing and addressing each category of peace. Originally, sub-categories of transboundary institutions and transboundary exchange were included under international peace, but since they are considered later on as functional elements of collaboration, they are not included in this section of the review. This section of more fundamental aspirations of TBCAs captures broader institutional cooperation in the sub-category of Regional Harmonization, which includes participation in international or other multilateral organizations, agreements or activities.

Table 4-7 International peace, social peace, and ecological peace references

International Peace Relations between countries <i>Cooperation between States/Governments</i>	Social Peace Relations between peoples <i>Cooperation with communities/stakeholders</i>	Ecological Peace Relations with environment <i>Cooperation for environment</i>
<ul style="list-style-type: none"> • Regional harmonization • Peace/good relations between countries • Security cooperation • Benefits, common interests • Existing cooperation 	<ul style="list-style-type: none"> • Cultural identity • Intergenerational justice • Benefits, equitable sharing • Human rights/Rights-based approaches • Participation, transparency, and accountability • Protection of marginalized or vulnerable groups 	<ul style="list-style-type: none"> • Sustainable development • Sustainable resource use/management • Climate change mitigation • Prevention of harm • Environmental awareness, education • Habitat conservation, restoration

Descriptions of what was included in each of these sub-categories is explained further below:

International Peace

1. Regional harmonization: refers to any multilateral or regional integration through institutions (e.g., SADC), joint endeavors (e.g., TBCA or other initiatives), and regional laws/policies. Includes references to existing mechanisms or establishment of new ones and recognition or implementation of existing regional agreements.
2. Peace/good relations: refers to a state of positive (good, friendly, neighborly, close) relations between countries. Includes acknowledgement of existing relations or aspirations towards improved relations.
3. Security cooperation: refers to military cooperation or cooperation between security agents or other actors regarding security-related matters.
4. Benefits, common interests: refers to benefits of cooperation or expressions of common interests and concerns that motivate the parties towards transboundary cooperation.
5. Existing cooperation: refers to acknowledgement of existing cooperation between the parties. Includes the desire to formalize or enhance existing cooperations.

Social Peace

1. Cultural identity: refers to recognition of shared or common cultural identity or the value of cultural exchange.
2. Intergenerational justice: refers to the interests of present and future generations.
3. Benefits, equitable sharing: refers to social benefits from cooperation (e.g., poverty alleviation, tourism revenue, etc.) and may include equitable sharing of resources and benefits.
4. Human rights/Rights-based approaches: refers to the recognition of human rights, principles, or standards of human rights, or the application of rights-based approaches.
5. Participation, transparency, and accountability: refers to indicators of good governance, such as public participation or the right to participate and provision of mechanisms to participate, transparency of information, and accountability.
6. Protection of marginalized or vulnerable groups: refers to the recognition of identity-based groups that are considered marginalized or vulnerable (e.g., women, indigenous peoples, youth, rural poor, etc.). Includes recognition of these groups, as well as provision of mechanisms to protect the interests of these groups.

Ecological Peace

1. Sustainable development: refers to sustainable development explicitly or development that does not compromise the environment.
2. Sustainable use/Natural resource management: refers to the use and management of natural resources and sustainable use in particular. Includes wildlife management, species inventories, etc.
3. Climate change mitigation: refers to the mitigation of climate change, as well as responses to climate change and natural disasters.
4. Prevention of harm: refers to environmental threats or potential harm to the environment; e.g., pollution, forest fires, poaching, etc. Includes acknowledgement of threat and efforts to prevent threats.
5. Environmental awareness: refers to environmental education or activities that help to raise awareness around environmental issues, conservation, prevention of harm, etc.
6. Habitat conservation, restoration: refers to the protection or restoration of habitats (e.g., PAs). Includes establishment of the TBCA itself.

4.3.2.1 International, social, and ecological peace by region

Nearly all of the agreements addressed international and ecological peace to some degree. This is reasonable given that these agreements are the product of multilateral environmental cooperation. The only exceptions are the 5 peace agreements of La Cordillera del Condor which form the basis for the TBCA, but do not actually discuss the TBCA or environmental issues. International peace appears 281 times in the 56 agreements. It features most frequently in African (68 times or 24.2%), the Middle East (62 or 22.06%), and Latin American (61 times or 21.71%) TBCA agreements, but also not uncommon in European (39 times or 13.88%) and Asian TBCAs (38 times or 13.52%). In contrast, there are only 13 mentions (4.62%) in North American agreements. Given that the 4 mentions in the Middle East derive from a single agreement, it is actually close to the global average of 4.11 mentions per agreement – above Europe even at an average of 3.9 mentions per agreement. North America is the only region that falls well below the global average at 3.25 mentions per agreement. A regional breakdown of the findings for each category of international, social, and ecological peace are tabulated below in Table 4-8.

Table 4-8 International peace, social peace and ecological peace in TBCA agreements

Section	International Peace					Social Peace					Ecological Peace					
	Regional Harmonization	Peace/Good Relations	Security Cooperation	Benefits, Common Interests	Existing Cooperation	Cultural Identity	Benefits, Equitable Sharing	Intergenerational Justice	Human rights, Rights-based Approach	Participation, Transparency, Accountability	Protection of Marginalized, Vulnerable Groups	Sustainable Development	Sustainable Resource Use/Management	Climate Change Mitigation	Prevention of Harm	Environmental Awareness
North America																
Preamble	0	2	0	1	3	1	0	2	0	0	0	0	0	0	0	2
Articles	5	0	1	0	1	1	1	0	0	2	0	0	0	0	4	1
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	5	2	1	1	4	2	0	2	0	2	0	1	0	0	4	1
	13					7					8					
Latin America																
Preamble	5	7	0	5	2	1	5	0	0	1	2	4	1	1	1	9
Articles	9	7	8	2	1	0	6	0	4	10	2	1	3	0	1	1
Other	0	2	13	0	0	0	0	0	0	0	0	0	0	0	1	0
Total	14	16	21	7	3	1	11	0	4	11	4	5	4	1	3	18
	61					31					32					
Europe																
Preamble	15	2	0	2	4	3	11	3	0	6	0	8	8	2	0	0
Articles	11	1	1	0	0	2	6	0	2	13	0	6	4	3	11	7
Other	2	1	0	0	0	0	0	0	3	0	1	0	0	0	0	1
Total	28	4	1	2	4	5	17	3	2	22	0	15	12	5	11	7
	39					49					88					
Africa																
Preamble	6	5	0	9	1	0	13	5	1	5	0	6	8	0	4	1
Articles	18	18	7	2	0	2	29	2	6	45	3	14	21	3	21	3
Other	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	3
Total	25	24	7	11	1	2	42	7	7	50	3	20	30	4	25	4
	68					111					158					
Middle East																
Preamble	5	3	2	0	0	1	0	0	1	0	0	1	0	0	0	2
Articles	23	4	21	1	0	3	2	0	4	0	0	2	3	0	12	0
Other	3	0	0	0	0	0	0	0	0	0	0	1	1	0	8	1
Total	31	7	23	1	0	4	2	0	5	0	0	4	4	0	20	1
	62					11					37					
Asia																
Preamble	10	1	0	3	2	1	3	4	0	1	0	0	5	2	9	0
Articles	20	0	1	0	1	0	2	0	0	4	0	3	8	5	5	0
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	30	1	1	3	3	1	5	4	0	5	0	3	13	7	14	0
	38					15					54					
Global																
Preamble	41	20	2	20	12	7	32	14	2	13	2	19	22	5	14	1
Articles	86	30	39	5	3	8	46	2	16	74	5	26	39	11	50	11
Other	6	4	13	0	0	0	0	0	0	3	0	2	2	1	9	1
Total	133	54	54	25	15	15	78	16	18	90	7	47	63	17	73	13
	281 (32.15%)					224 (25.63%)					369 (42.22%)					

Note: The sections of the agreements are identified as the preamble, operative articles (articles), or other. Other included, *inter alia*, clauses captured in an Annex or if the agreement followed a different modality that does not exhibit sections already mentioned (e.g., diplomatic note). The numbers in this table represent the number of times one of the sub-categories of international peace, social peace, and ecological peace appeared in the different sections of TBCA agreements in each region and globally. The totals at the bottom represent the global counts for international peace, social peace, and ecological peace overall (all sub-categories combined) and the percentage in parenthesis represents a percentage of all mentions (international, social, and ecological peace combined = 874 total).

4.3.2.2 Peace and conflict by section of TBCA agreement

As per Table 4-8 above, mentions of international, social, and ecological peace are most frequently found in the articles. International peace appears 163 times or over half (58.01%) in the more operative articles, as opposed to 95 times (33.81%) in the preamble or just 23 times (8.19%) in other sections. Social peace and ecological peace feature approximately two-thirds of the time in the articles; 151 times or 67.41% and 222 times or 60.16% respectively. This compares to 59 times (29.65%) and 98 times (33.91%) respectively in the preamble or just 4 times (2.01%) and 11 times (3.81%) in other paragraphs. Table 4-9 below provides comparison of the number of mentions of each category of peace or conflict and conflict resolution by section.

Table 4-9 Peace and conflict mentions by section of TBCA agreement

Section of Agreement	Peace	Conflict	Conflict Resolution	International Peace	Social Peace	Ecological Peace	Total
Title	7	0	0	--	--	--	7
Preamble	34	10	6	95	69	121	336
Articles	44	25	60	163	151	222	665
Other	23	8	3	23	3	26	86
Total	108	43	69	281	224	369	1,094

This table indicates that over half of all the references to peace, conflict, or conflict resolution, including the three different categories of peace (60.79%), are drafted in the primary articles of the agreement, contradicting the original hypothesis that peace is a preambular aspiration with little operative consideration when it comes to TBCA agreements. If only peace, conflict, and

conflict resolutions are considered (without the three categories of peace), the total mentions in the articles of TBCA agreements is still over half at 58.64%. As noted earlier, however, a large number of conflict resolution measures are designed as standard clauses for dispute resolution in the interpretation or implementation of the agreement itself. It may not have been crafted with the intention of resolving conflicts afflicting a TBCA more broadly (e.g., human-wildlife conflict or warfare).

4.3.2.3 Preferencing approaches to international, social, and ecological peace

As the many mentions of international, social, and ecological peace demonstrate, an intervention captured in a TBCA agreement may have a contribution to peace despite its immediate appearance. For example, most of the social peace indicators were mechanisms of participation and benefit-sharing. These are critical to preventing and resolving conflicts between identity-based groups, but they are not framed in the TBCA agreements as conflict resolution measures. They are merely included as they are. Similarly, a number of the references to ecological peace speak to managing human activities and natural resources so as to ensure their long-term sustainability and to prevent human use and development from undermining conservation. These types of measures are in effect attempting to manage the conflict between humans and nature. This invites us to take a deeper look at what constitutes peace and conflict resolution in legal language and to further

query, what is important to capture in transboundary legal agreements to support all three categories of peace through a TBCA.

As each of the three categories of peace were broken down into sub-categories, it was easy to assess preferences for particular types of mechanisms for each category of peace in the reviewed agreements. Table 4-8 shows that as predicted, there were more mentions of ecological peace (42.2% of all mentions of the three categories of peace) and then international peace (32.2%), followed by social peace (25.6%). When counted according to the number of TBCAs addressing each category of peace and allocated according to sub-category, it becomes more visible which aspects of international, social, and ecological peace the TBCA agreements focused on (Table 4-10).

For example, almost all of the agreements included habitat conservation (90.63%) and regional harmonization (87.5%). This affirms the emphasis on ecological peace and even international peace, while social peace is less apparent. While the agreements often spoke of regional harmonization or integration, these references were primarily about adherence to international law or other multilateral agreements and the formation of transboundary/regional institutions (including the TBCA itself). A sense of common culture was less mentioned (21.88%). Regional harmonization thereby emphasized law and institutions, as opposed to social integration. While social integration may be more ideal from a positive social peace perspective, the value attributed to regional agreements and institutions does indicate the value of this research towards improvement of TBCA laws and institutional design.

Table 4-10 International, social and ecological peace (# of mentions/TBCAs)

	International Peace					Social Peace					Ecological Peace						
	Regional Harmonization	Peace/Good Relations	Security Cooperation	Benefits, Common Interests	Existing Cooperation	Cultural Identity	Benefits, Equitable Sharing	Intergenerational Justice	Human Rights	Participation, Transparency, Accountability	Protection of Marginalized, Vulnerable Groups	Sustainable Development	Sustainable Resource Use/Management	Climate Change Mitigation	Prevention of Harm	Environmental Awareness	Habitat Conservation, Restoration
North America																	
# of Mentions	5	2	1	1	4	2	0	2	0	2	0	1	0	0	4	1	3
# of TBCAs	4	3	2	2	3	1	0	3	0	2	0	1	0	0	2	0	3
Latin America																	
# of Mentions	14	16	21	7	3	1	11	0	4	11	4	5	4	1	3	1	18
# of TBCAs	5	4	2	4	5	1	5	0	2	4	2	3	3	1	3	1	5
Europe																	
# of Mentions	28	4	1	2	4	5	17	3	2	22	0	15	12	5	11	7	38
# of TBCAs	7	3	1	2	3	1	4	1	1	5	0	4	3	3	3	6	6
Africa																	
# of Mentions	25	24	7	11	1	2	42	7	7	50	3	20	30	4	25	4	75
# of TBCAs	8	11	5	8	1	2	10	6	3	9	1	9	9	3	9	3	11
Middle East																	
# of Mentions	31	7	23	1	0	4	2	0	5	0	0	4	4	0	20	1	8
# of TBCAs	1	1	1	1	0	1	1	0	1	0	0	1	1	0	1	1	1
Asia																	
# of Mentions	30	1	1	3	3	1	5	4	0	5	0	3	13	7	14	0	17
# of TBCAs	3	1	1	1	2	1	1	2	0	1	0	1	3	2	3	0	3
Global																	
Global Mentions	133	54	54	25	15	15	78	16	18	90	7	47	63	17	73	13	156
Global TBCAs	28	23	12	18	14	7	21	12	7	21	3	19	19	9	21	11	29

Note: The numbers in this table represent (1) the number of one of the sub-categories of international peace, social peace, and ecological peace appeared in the TBCA agreements in each region and globally and (2) the number of TBCAs region and globally that mention each of the sub-categories of international peace, social peace, and ecological peace. The totals at the bottom represent the global counts by individual mentions and by number of TBCAs for international peace, social peace, and ecological peace overall (by sub-category).

The emphasis on particular approaches to social peace reflects a neoliberal approach to social issues in conservation. Accordingly, PAs seek to minimize costs and increase benefits to

communities. While opportunities may be provided for communities to participate or consult, they fall short of ownership or consent for conservation initiatives. Mentions of social peace in the TBCA agreements focused on benefits from transboundary conservation (and sometimes benefits-sharing) and stakeholder participation (65.63% in both cases) but did not usually include human rights (21.88%) or protection of marginalized or vulnerable peoples (9.38%). They also did not mandate FPIC or minimal standards of access to environmental information, participation, and justice (i.e., Aarhus Convention) as may be required per international or national laws concerning stakeholder consultation (especially indigenous and traditional communities). The lack of protection or recognition of human rights standards falls short of just conservation. The TBCA agreements also failed completely to provide any redress for historical and on-going PA-related injustices. While they may try to increase benefits to communities, without justice, they may not attain positive social peace.

There is also a clear emphasis on negative ecological peace in the TBCA agreements. While the term human-wildlife conflict typically conjures up stories of destructive encounters between humans and wildlife, with wildlife doing most of the damage on human property or life, it probably occurs more frequently in the other direction (Dickman & Hazzah, 2016, pp. 339–340). The 2003 Durban World Parks Congress defined human-wildlife conflict as “when the needs and behaviour of wildlife impact negatively on the goals of humans or when the goals of humans negatively impact the needs of wildlife” (Madden, 2004, p. 248). The TBCA agreements did not mention mechanisms for when wildlife harms human interests, but the majority include concern for or protection against anthropogenic threats to nature (65.63%). This ecocentric approach to

ecological peace may seek to address direct violence to nature, but as noted in Chapter 2, it does not overcome the culture of violence against nature or incorporate a common concern of local communities living in or adjacent to TBCAs. It demonstrates a failure of TBCA agreements to address social peace dimensions of human-wildlife conflict.

Only about one-third of the agreements (34.34%) mentioned environmental education or enhancing environmental awareness and the mentions in total were sparse (13 only). This is an area that could be enhanced in TBCA agreements with the intention of improving human-nature relations, including through the incorporation of indigenous knowledge – not only to better capture rights and responsibilities towards nature, but also to acknowledge indigenous laws and institutions in relation to PAs for which settler forms of knowledge and rules largely remain the dominant paradigm. The agreements never mentioned respect for the rights of nature and our responsibilities in this regard, which are relevant to the cultivation of a culture of positive ecological peace.

4.3.3 A survey of TBCA practitioners on TBCAs, law, and peace

A survey on “TBCAs, Law, and Peace” was circulated to 560 contacts identified as TBCA practitioners and 297 responses were received through the online platform FluidSurveys. Only 88 completed the entire survey and since most did not make it beyond the administrative section

of the survey (i.e., identifying information, consent forms, etc.), those responses were excluded from analyses and these 88 are the only responses reported in this dissertation. As practitioners, the survey respondents represent park wardens and management, field rangers, researchers, consultants, community liaisons or representatives, NGOs, etc., and have often held more than one of these positions, working in more than one TBCA over their career. More than half (57.2%) have spent over 8 years working in TBCAs. The survey responses provided by this group of practitioners provide insight into the practice of TBCAs on-the-ground, adding to our understanding of TBCA objectives, frameworks, and implementation according to the legal agreements reviewed. The legal review indicates that peace and conflict resolution is not obvious at first glance and this is supported by the practitioners' responses.

Of the completed surveys, the 88 practitioners have worked in 77 TBCAs covering all the regions. This compares to 65 TBCAs identified through the legal review (only 32 of which had transboundary agreements that were obtained and analyzed) and 227 identified by the UNEP-WCMC in its 2007 Global List of TBPAs. The 2007 Global List only has 44 named TBCAs, in other words, TBCAs identified by a common name, which can be an indicator of the level of formalization and recognition of that TBCA as a collaborative framework (Lysenko et al., 2007). In this sense, the number of *named* TBCAs (44) is closer to the number of TBCAs identified in the legal review (65), TBCAs with agreements reviewed in this chapter (32), and TBCAs identified in the survey (77), than to the total number of listed TBCAs in the 2007 Global List (227).

A table comparing these lists of TBCAs is collected in Appendix V. Through Appendix V, comparing the named TBCAs from the 2007 Global List, plus the TBCAs identified in the legal review and the survey, and eliminating for repetition (perhaps due to listings under different names or the identification of a TBCA name by practitioners but unnamed in the 2007 Global List), the totals in the right-most column of Table 4-11 were derived. Through this research, a total of 103 unique TBCAs were identified, although not all of these continue to exist today as cross-border collaborations.

Table 4-11 Number of TBCAs identified in 2007 List, legal review, and survey

Region	2007 List	2007 Named	Legal Review	Reviewed Agreements	Survey	Total
N. America	12	6	6	4	4	7
L. America	35	7	9	6	12	18
Europe	82	8	13	7	15	21
Africa	46	15	20	11	33	34
Middle East	1	0	1	1	1	1
Asia	51	8	16	3	12	22
Global	227	44	65	32	77	103

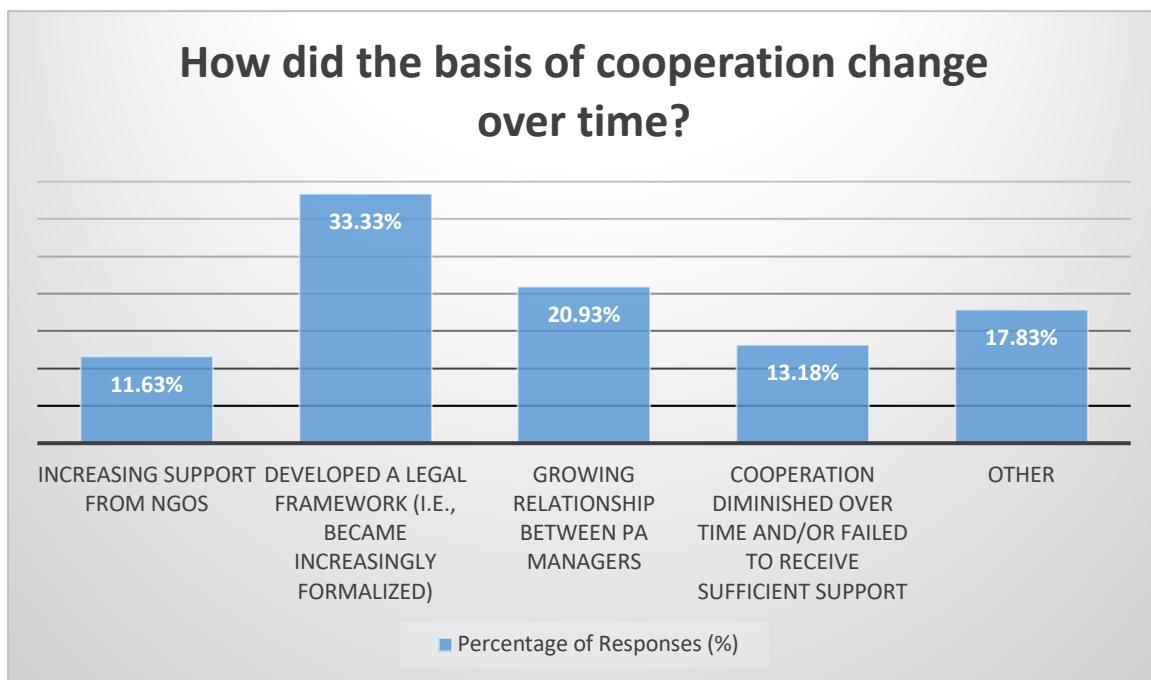
Note: 2007 List = the number of TBCAs listed in the UNEP-WCMC 2007 Global List; 2007 Named = the number of TBCAs listed by name in the UNEP-WCMC 2007 Global List; Legal Review = the number of TBCAs identified through the legal review methodology; Reviewed Agreements = the number of TBCAs for which agreements were obtained and analyzed in the legal review; Survey = the number of TBCAs that were identified by practitioners in the survey responses; Total = the number of TBCAs identified through all processes with redundancy eliminated.

4.3.3.1 TBCA practitioners on bases of cooperation

The first section of the survey sought to understand impetuses for transboundary conservation. What were practitioners cooperating to do and what was the basis for their cooperation – was there a legal mandate, an existing relationship between PAAs, or support from NGOs and the international community? Did their priorities and basis for cooperation change over time and how? According to the survey, the highest priority activities when cooperation first started were: (1) species protection, (2) transboundary planning or strategy, (3) joint patrols, security or intelligence sharing, (4) joint legal action, law enforcement or legal harmonization, (5) tourism, and (6) community outreach. Species protection and transboundary planning or strategy repeatedly identified as the top two priorities *initially* across all of the TBCAs that survey respondents had worked in. These categories remain more or less consistently the *current* priorities with species protection and transboundary planning or strategy as top two, but fundraising becomes a more important area of cooperation. The initial cooperation was often based on either an existing relationship between PA managers (22.96%), a legal mandate or formal agreement (25.51%), or NGO/international support (32.14%). A number of other responses were also recorded and broadly categorized into the following: (1) broader regional integration – e.g., SADC; (2) government support and will; (3) ecological necessity – e.g., integrated river management or transboundary species protection; (4) local leadership – by indigenous communities, individuals, or local authorities; and (5) peace and security – e.g., end of war, border protection.

Just over one-third (30.68%) of the TBCAs experienced a change in the basis of their cooperation over time. Where cooperation grew, these changes were characterized by increasing legal formalization (33.33%), growing relations between PA managers (20.93%), and increasing NGO support (11.63%) (see Figure 4-3 below).

Figure 4-3 Survey responses regarding changes in the basis of cooperation over time



Respondents could choose only one response, so in some cases they selected “Other” (23 responses) and then wrote in a combination of factors (5 responses), while many who replied “Other” described increases in one area coupled by decreases in another (e.g., increasing local collaboration during declining international relations). Where cooperation decreased (13.18%), it was mostly attributed to decreasing or little engagement by governments. This included

declining political relations, disengagement by one partner country, or in one case increasing insecurity.

In a few cases, the change was not straightforward. For example, in the Greater Limpopo TFCA it was noted that even at the cost of declining political relations, the urgency of rhino horn poaching compelled a focus on law enforcement collaboration. In the Beringia Sea, cooperation between agencies in the capital cities diminished, but local level cooperation was considered strong. A number of times, support from NGOs or donors (especially project funding) was able to stimulate greater collaboration. A respondent working in Cross River-Korup-Takamanda commented that NGO funding of planning workshops between authorities strengthened relations between agencies and PAAs in Cameroon and Nigeria, helping it shift from an NGO-supported TBCA to a more government-to-government collaboration. Unfortunately, in Calakmul, a respondent noted that international funding was not harmonized between different donors. In that case, they felt that external support may not have been maximized.

The most important element to the success of a TBCA over time was identified as the development of a legal framework or legal formalization (38.51% of the responses for highest priority). Following this were increasing NGO support and growing personal relationships between PA managers. Other significant mentions were community support, financial support, and political support. The high prioritization of legal formalization in the success of TBCAs could be attributed to the survey's focus on law and the use of transboundary agreements in peace and conflict

resolution through TBCAs, but it is still noteworthy and explored further in the second section of the survey.

4.3.3.2 TBCA practitioners on effectiveness of TBCA agreements

The next section of the survey focuses on TBCA agreements and whether they are effective. Exactly half of the survey participants had participated in the drafting or negotiation of a TBCA agreement. All of the responses opined that TBCA agreements are definitely or somewhat effective in providing a framework for transboundary cooperation. 96.3% felt that TBCA agreements are at least somewhat or definitely effective in providing clarity on the activities that fall within transboundary cooperation and 82.93% said that they are somewhat or definitely effective in providing sufficient legal authority to conduct transboundary activities. 91.36% responded that TBCA agreements are somewhat or definitely effective in encompassing transboundary activities that will fulfill the objectives of the TBCA. Despite this general agreement and the importance of a legal framework to the success of a TBCA noted in the first section of the survey, nearly 70% of the respondents considered implementation of the TBCA agreements only somewhat effective.

Respondents who said that TBCA agreements are not effective explained that domestic laws could supersede, or the agreement was not binding and lacked enforceability. They also cited lack of

participation and resources (human and financial). The political context could also hinder implementation (i.e., lack of political will or unfriendly relations). In a few instances, the legal design was lacking. This could also be true when it comes to addressing peace and conflict resolution. Table 4-12 below captures the responses regarding peace and conflict management.

Table 4-12 Do the legal instruments in the TBCA(s) that you were/are engaged in provide...

	Yes, definitely	Yes, somewhat	No, not really	Not at all	N/A (no agreement)	Total
Guidance on how situations of conflict are to be managed?	18.99%	46.84%	22.78%	6.33%	5.06%	79
Guidance on how to strengthen peace processes, peacebuilding or improve peaceful relations?	10 (12.5%)	29 (36.25%)	28 (35%)	10 (12.5%)	3 (3.75%)	80
Mechanisms for managing or transforming situations of conflict?	15 (18.99%)	34 (43.04%)	18 (22.78%)	7 (8.86%)	5 (6.33%)	79
Mechanisms for peace or peacebuilding?	5 (6.41%)	24 (30.77%)	29 (37.18%)	15 (19.23%)	5 (6.41%)	78
Sufficient legal authority for you to intervene to manage conflict?	16 (20.25%)	25 (31.65%)	19 (24.05%)	11 (13.92%)	8 (10.13%)	79
Sufficient legal authority for you to intervene to undertake peace initiatives?	9 (11.39%)	18 (22.78%)	28 (35.44%)	17 (21.52%)	7 (8.86%)	79

Note: The numbers here represent the percentage of respondents based on the total number listed in the right-most column.

When it comes to peace and conflict resolution, it is less obvious whether the survey participants believe that guidance, mechanisms, and legal authority are being provided for in the TBCA agreements. Between the two (peace and conflict), the agreements seem to better address conflict than peace. 65.82% felt there was somewhat or definitely guidance on how to manage conflicts, while 48.75% felt they somewhat or definitely provide guidance on strengthening peace processes, peacebuilding, or peaceful relations. Similarly, 62.03% felt they somewhat or definitely provide

mechanisms for managing conflict, whereas only 37.18% felt they somewhat or definitely provide mechanisms for peace or peacebuilding. 51.9% somewhat or definitely agreed that TBCA agreements provide sufficient legal authority to intervene to manage conflicts, but only 34.18% somewhat or definitely agreed that they provide sufficient legal authority to intervene in order to undertake peace initiatives.

Of the respondents who felt that TBCA agreements do not provide guidance, mechanisms, or sufficient legal authority, they reasoned that legal authority might be limited or not appropriately situated and that peace and conflict resolution are indirectly accommodated or perhaps just aspirational and not operationalized. Roughly one-quarter of the survey participants (23 or 26.14%) stated that peace and/or conflict resolution were not issues of interest or an objective of the transboundary collaboration. According to these practitioners, peace and conflict resolution may not be significant objectives of TBCA agreements.

What the practitioners surveyed did feel was important for effective implementation were: (1) setting forth clear objectives (vision, goals, and aspirations); (2) setting forth clear areas of cooperation (activities); (3) identifying specific responsibilities for the parties involved; and (4) including all of the relevant parties. It was also important to include: (1) reasons or origins of cooperation; (2) protocols for cooperation; (3) a funding mechanism; and (4) information, knowledge and experience sharing. Less important were: clear definition of the territory and whether the territory was appropriate for the reasons and objectives of the collaboration; mechanisms for conflict or dispute resolution; or monitoring, evaluation, and adaptation.

Corresponding to the elements of TBCA agreements identified by TBCA practitioners, a third layer of review was conducted of the 56 TBCA agreements collected. This sought to identify whether each of the elements of effective implementation were captured in the legal design of the TBCA agreement (Table 4-13). Two of the elements were not included as it would have been impossible to assess by reviewing the TBCA agreements alone – these are the inclusion of all relevant parties and the appropriateness of the territory.

Table 4-13 Number of TBCA agreements that included identified elements of success

Does the TBCA agreement provide...?	Most Important			Important			Least Important	
	Clear Objectives (Vision, Goals, Aspirations)	Areas of Cooperation (Activities)	Specific Responsibilities of Parties	Origins of Cooperation	Protocols of Cooperation	Funding Mechanism	Information and Experience Sharing	Monitoring & Evaluation
Yes	98.2%	98.2%	90.9%	92.9%	53.6%	37.5%	53.6%	44.6%
Somewhat	1.8%	1.8%	10.7%	5.4%	26.8%	35.7%	23.2%	17.9%
No	0%	0%	0%	1.8%	19.6%	26.8%	23.2%	37.5%

Note: The elements of TBCA success are listed by importance in accordance with the responses of survey participants. The percentages in the table indicate the percent of TBCA agreements that did, somewhat, or did not provide for those elements. Total number of agreements = 56.

All of the most important elements, as identified by survey practitioners, were present in nearly all of the TBCA agreements (90-98%) (Table 4-13). The TBCA agreements almost always described the origins of cooperation (92.9%) and the territory of application (78.6%), although these were not necessarily priority elements towards effective implementation. The lesser priority placed by TBCA practitioners surveyed on the other elements was also reflected in their inclusion in TBCA agreements. Protocols for cooperation, funding mechanisms, information or

experience sharing, and monitoring and evaluation were not included approximately one-quarter to one-third of the time (22.2%-37.8%), and in many cases they were only somewhat addressed (11.1%-33.3%). When the survey participants were asked to list other aspects of a TBCA agreement that are important for effective implementation, they mentioned the following factors:

- (1) Good governance
- (2) Transboundary institutional frameworks
- (3) Facilitation of cross-border administrative processes (e.g., transit, visas, employment)
- (4) Regular meetings and communication
- (5) Sustainability of resources (including funding)
- (6) Monitoring and evaluation with authority to enforce
- (7) Domestication and harmonization of national laws, policies and plans
- (8) Participation of relevant stakeholders (e.g., local communities, international community)
- (9) Good will

Many of these additional elements are actually captured already in the existing elements (e.g., regular meetings and communication were considered indicators of information, knowledge, and experience sharing). A number of them were also identified as indicators of international peace, social peace, and ecological peace. The establishment of a transboundary institution, for example, could contribute to international peace, while participation by all relevant stakeholders is important for social peace.

This correlation between the importance of particular elements for the success of transboundary cooperation as identified by TBCA practitioners and the inclusion of those elements in TBCA agreements is interesting. It indicates that practitioners' priorities are being captured in TBCA agreements, but it does not necessarily reflect that these priorities are indeed what is needed to

improve TBCA design for greater contribution to peace and conflict transformation. If TBCA practitioners' interests are indeed being codified in transboundary legal agreements, then improving the legal design of TBCAs for peace and conflict resolution may be a matter of awareness-raising for practitioners.

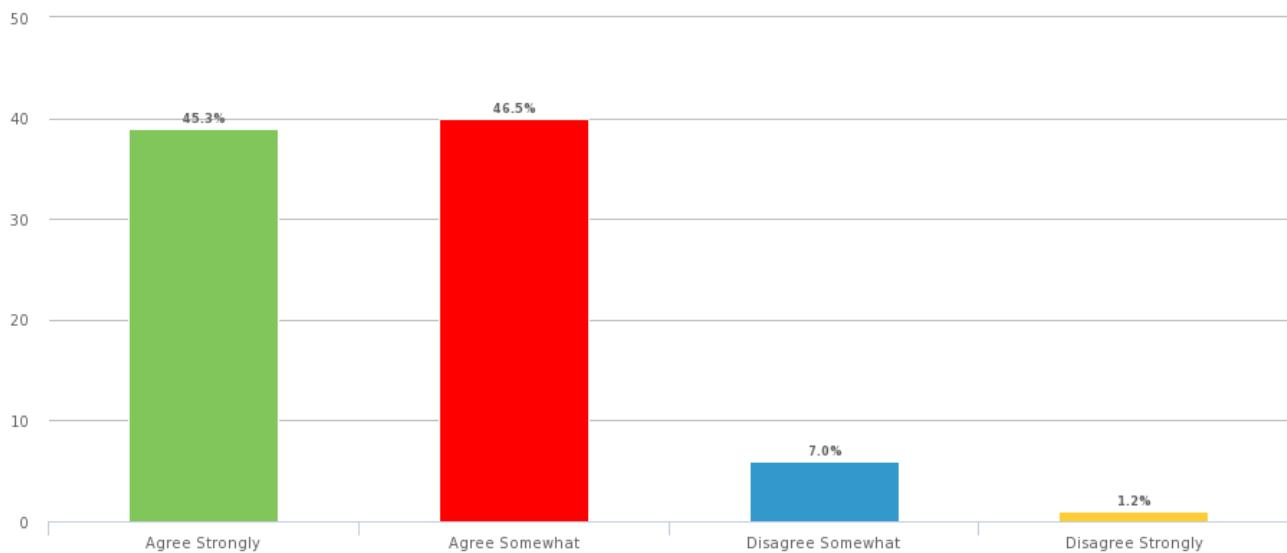
4.3.3.3 TBCA practitioners on peace and conflict resolution

When it came to assessing views on environmental peacebuilding, survey participants were presented with the following statement:

It is theorized that TBCAs contribute to regional peacebuilding by bringing parties on different sides of an international boundary together in environmental cooperation, rather than in conflict or non-engagement.

They were asked whether they agree with the sentence above. Just over 90% agreed somewhat or strongly, splitting almost evenly between the two responses. Only seven disagreed, with one disagreeing strongly (see Figure 4-4).

Figure 4-4 Survey responses to statement on environmental peacebuilding

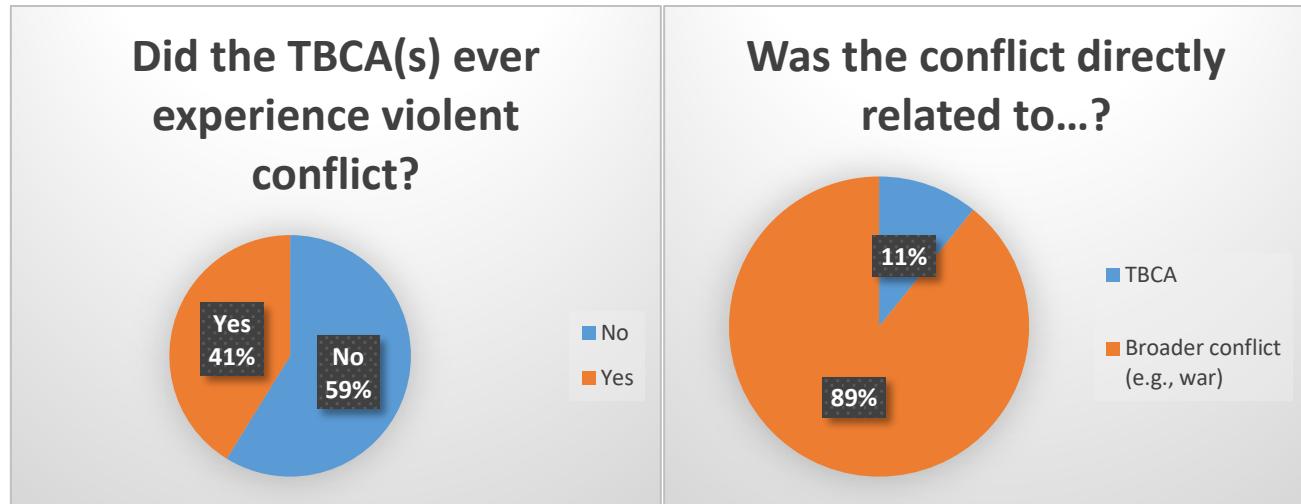


Under this question, respondents were not requested to provide an explanation for their response to this question. However, in part (c) to this question, participants are asked to explain if transboundary cooperation impacted negatively on peace. One of the respondents who had disagreed somewhat to the prior statement noted security on data sharing, while the respondent who disagreed strongly indicated that there was “little [to] no scaling up of the cooperation that could be achieved regarding the management of protected areas to the broader conflicts (dynamics or underlying) - not negative impact but neutral to overall peace building” (Amat, 2017; Ellis, 2017) Similarly, another respondent who had disagreed somewhat indicated that the TBCA “agreement may have facilitated dialogue but it seemed to have no apparent impact on peace building or even security cooperation” (Anonymous, 2017m).

To follow up, participants were asked what key factors of transboundary cooperation impacted on peace (positively or negatively) in the TBCAs they were/are engaged in. In response, they ranked the most significant impact to be improved relations between PA managers, governments, and communities. They also considered the prevention of illegal activities that were contributing to violence in the region (e.g., poaching) and the sharing of critical security information or cross-border security interventions to be important. In some instances, transboundary cooperation was considered to have impacted negatively on peace. This effect was attributed to boundary conflicts (including those of the PAs), lack of trust in facilitators of the transboundary collaboration process, relocation of local populations, or an inability to ameliorate political conflicts (sometimes originating in faraway capitals) despite improved relations between local actors.

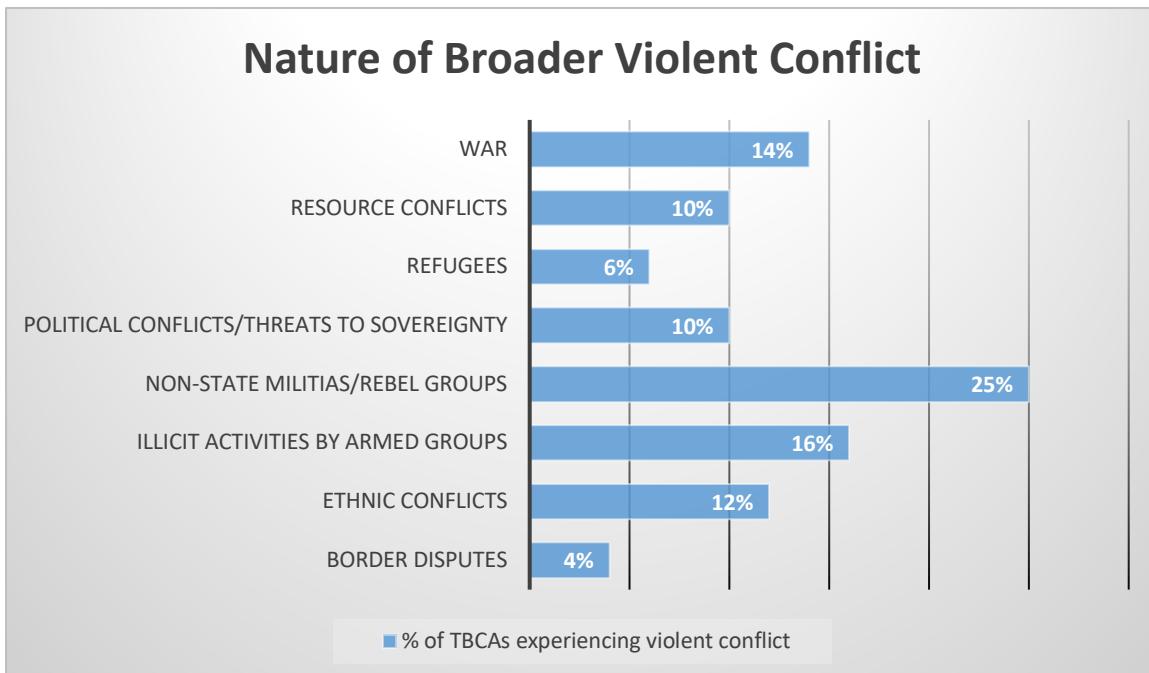
In one comment, when there was conflict in Namibia, Botswana responded by facilitating the passage of displaced people, but it did not contribute to security or peacebuilding proactively, although this would have been in accordance with its TBCA agreement. This resonates with the earlier comments lamenting that environmental cooperation was not scaled up to have an influence on broader conflicts or underlying dynamics to contribute any impact to overall peacebuilding. This is worthy of note as 41.2% of the respondents confirmed that the TBCAs they were engaged in had experienced violent conflict and nearly all of those (89.2%) were related to a broader conflict (e.g., war) (see Figure 4-5).

Figure 4-5 Percentage of TBCAs that experienced violent conflict (survey responses)



These broader conflicts included border disputes, ethnic conflicts (including genocide and apartheid), illicit activities by armed groups (e.g., trafficking), non-state militias or rebel groups, political conflicts and threats to sovereignty, refugees, resource conflicts, and inter-state warfare (see Figure 4-6).

Figure 4-6 Nature of broader violent conflict experienced by TBCAs (survey responses)

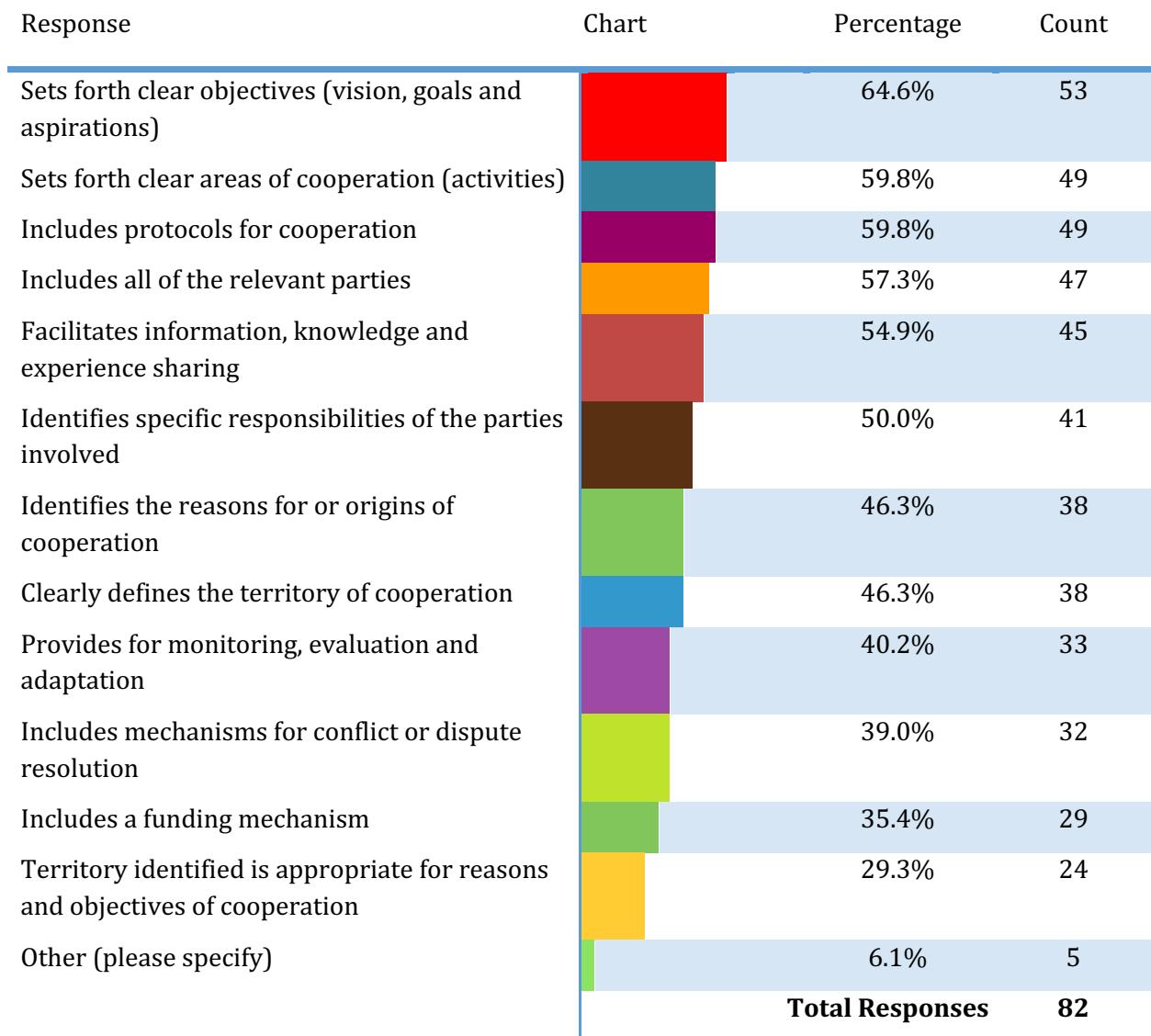


In half of the TBCAs that had experienced violent conflict, the respondents felt that transboundary cooperation helped to transform the conflict and in half, it did not. When asked to describe their experience of how transboundary conservation did or did not help, a variety of scenarios were shared. In 5 out of 38 responses conflict was historical, preceding establishment of the TBCA. In 4 cases, peace and conflict resolution were considered to be outside of the collaboration's mandate and in 2 instances, it only addressed impacts to the PAs directly. In one instance transboundary collaboration even aggravated resource-related conflicts. Where transboundary cooperation had a positive influence in transforming the conflict it had helped to strengthen operational integration between countries, building trust between the parties and political support for their efforts. There was involvement by security organs and in two instances, increased presence on-the-ground.

4.3.3.4 TBCA practitioners on the TBCA agreements

Three-quarters (75.61%) of the respondents agreed that TBCA agreements can somewhat or definitely play a role in how transboundary cooperation contributes to peace. They can help by providing a mandate and institutional framework for action. In some cases, it may be impossible to intervene otherwise; for example, when border-crossings by security or PA personnel are needed. The agreements also facilitate regular interaction and help to maintain communication channels (i.e., habits of cooperation), which facilitate responses when needed as well as personal relationships and trust. This confidence comes in handy when people and staff become displaced and seek refuge in a neighboring territory and can permit a transboundary institution to intervene as a conflict mediator, providing an alternative non-violent mechanism for resolving issues. The transboundary collaboration and its institutional systems may also have the capacity to convene resources, other partners, and funding to support these efforts.

Figure 4-7 Aspects of the legal instruments that are/were most effective in preventing or resolving conflicts, and in supporting peace



Nevertheless, some respondents felt that TBCA legal agreements (and any other formal agreement for that matter) were scrapped or disregarded when real conflicts emerged and, in some cases, were not really implemented on behalf of the transboundary conservation either, lacking political support, resources, and capacity. Sometimes the TBCA agreements did have the positive

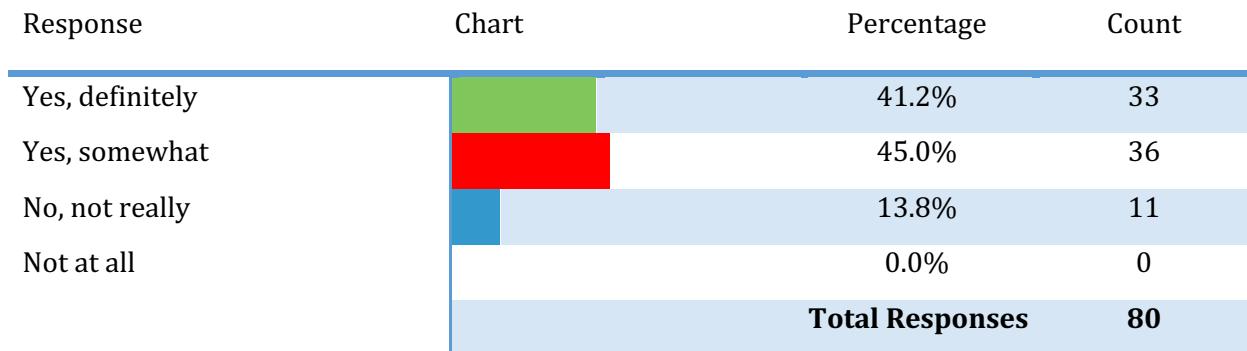
influences described above, but they could not address all of the conflict issues (e.g., refugees, rhino poaching, etc.) and this limited their contribution to conflict transformation and peace.

Survey participants were also asked to identify which elements of TBCA agreements are most effective in preventing or resolving conflicts and in supporting peace (see Figure 4-7). The results were very similar to their responses regarding the most important elements of TBCA agreements in the success of a TBCA. It was most important that the agreement set forth clear objectives (visions, goals, and aspirations) and clear areas of cooperation (activities). Then it was important to include protocols for cooperation; all relevant parties; and facilitation of information, knowledge, and experience sharing. Inclusion of mechanisms for conflict or dispute resolution did not feature highly in importance. Many respondents felt that all of the listed elements are important to improving TBCA agreements to better support peace.

Where no legal instruments (e.g., transboundary agreement) existed, participants were questioned about alternative mechanisms that could be important in supporting peace in and around TBCAs. As before, good relations amongst PA managers was the most significant factor, followed by support from local communities, and partnership with NGOs. Informal support from government or traditional customary practices could also be important. Less important was the presence of peace officers (national or international). Respondents also mentioned other alternatives, such as dialogue, exchange and joint activities, personal commitments and informal agreements, or even economic mechanisms. Generally (86.25%) the participants agreed

somewhat or definitely that where no legal instruments exist, a TBCA agreement could (still) make a positive difference for peace efforts.

Figure 4-8 Whether legal instruments can make a positive difference for TBCA peace efforts



4.4 Analysis of TBCA legal review and survey

Combining information from the legal review of TBCA agreements and online survey of TBCA practitioners provides a fuller understanding of environmental peacebuilding theories and the original hypotheses. Most importantly it helps to explain why peace and conflict are not prominent themes in transboundary agreements and why international, social, and ecological peace are operationalized the way that they are. As discovered in the legal review, TBCA agreements do not often explicitly mention peace, conflict, or conflict resolution and when they do mention peace, it is often in reference to a name or a general state of harmony. It does not define peace or pathways to peace.

Conflict resolution is often captured as a standard dispute resolution clause referring to interpretation of the agreement and applying only to its parties. This almost always refers to a government entity (e.g., PAAs) and does not include local communities (except in the rare cases where an agreement is between local governments), private enterprises or other individuals, and legal entities which might be involved in conflicts affecting the territory and conservation objectives (e.g., mining companies, wildlife traffickers, or rebel groups). The absence of clauses addressing conflict resolution broadly from so many of the agreements may reflect a lack of interest or sense of need to include them. Many of the surveyed practitioners felt that there was/is no conflict in their TBCA, conflict is not a problem for them, and therefore peace or conflict resolution is not an objective of their collaboration. Hence, the absence of peace and conflict in transboundary agreements.

The lack of consideration for peace and conflict may also come from a limited understanding of what these concepts are and how they are relevant to TBCAs and PAAs. Although the survey participants were not asked to define conflict, it could be deduced from their responses that they were responding to the questions from a more limited definition based on violent or armed conflict (i.e., negative peace). Alternatively, it is conceivable that their PAs truly do experience positive peace in all regards (international, social, and ecological) and they should be congratulated and well-studied for having mastered peace and conservation. Arguably, it is also perceived that PA conservation in some regions of the world is just easier than in others with

integrated socio-ecological problems, such as resource capture, poor governance, violent conflict, and high population densities largely or completely dependent on natural resources for subsistence livelihoods (e.g., Europe vs. Africa). This may contribute to a perception of relative peace in some TBCAs.

If PAAs and environmental conservationists were exposed to basic CCR and peace/conflict studies, they may take a different view to peace and conflict around PAs. In one-on-one interviews for this survey, as well as the case studies, I discovered that all of the practitioners I interacted with understood international, social, and ecological conflicts from direct encounters. A follow-up survey could explore these concepts in greater depth, as this initial survey took a more precursory approach to understand generally how practitioners are managing peace and conflict resolution through TBCAs and their agreements.

Whether or not there is a sense of urgent need for peace and conflict resolution, both the legal review and survey indicate that the mechanisms may come in unexpected form. Contrary to the original hypothesis, peace is not merely a preambular aspiration with little operative support. There were more mentions of peace in the articles (26) than in the preamble (19) and an even greater discrepancy in mentions of conflict resolution (49 vs. 5). This is also true of clauses capturing international peace, social peace, and ecological peace. When considering the elements of TBCA agreements that survey respondents felt were most important for transboundary conservation to contribute to peace and conflict resolution, this was also confirmed. The preamble frequently included a description of the parties to the agreement, their reasons for collaboration

and the territory of cooperation – all other elements were relegated to the articles. Objectives of the cross-border collaboration, specific activities and parties' responsibilities were almost entirely located in the articles rather than the preamble. Peace and conflict resolution through TBCAs must be operationalized and institutionalized in order to move beyond idealism and aspiration.

How TBCAs operationalize and institutionalize conflict resolution and peace processes was not initially clear, however. Articles supporting international, social, and ecological peace did not often mention peace, yet they are important to contributing towards peace. For example, mechanisms of participation by local communities and other PA stakeholders can facilitate processes of social peacebuilding and conflict resolution. TBCA agreements are almost always the product of government-to-government negotiations and rarely include other stakeholders. Some exceptions are TBCA collaborations between local communities; e.g., Bjeshkët e Namuna/Prokletije Mountains – a partnership between Local Action Groups in Albania and Montenegro. None of the transboundary agreements included conservation NGOs, although they are almost certainly present in the TBCA and may even be fundamental to TBCA establishment; not to mention, frequently criticized for conservation-induced social conflicts and injustices (E.g., Survival International, 2017b). In the GVL, NGOs are brought into the TBCA legal framework through bilateral agreements with the transboundary institution (see Chapter 5). These agreements fall outside of the scope of the legal review, but they demonstrate how mechanisms (including partnerships) for peace and conflict resolution often do not fall under these explicit banners.

When TBCAs did not have a formal legal agreement, many survey respondents mentioned the support of local communities as very important alternative peace and conflict resolution mechanisms. Furthermore, when transboundary cooperation broke down between governments or capitals, it was often the local actors who sustained activities on-the-ground. This was commented on by a few practitioners and aligns with the findings of Chapter 6. The inclusion of all relevant parties in the agreement generally was considered important for both the success of a TBCA, as well as for a TBCA to contribute towards peace. Thus, it is critical for TBCA agreements to facilitate participation of other stakeholders (especially local actors) in transboundary processes. Yet, statements about stakeholder participation in the agreements did not mention minimum standards of international law (e.g., FPIC or Aarhus Convention) or promotion of social peace as a desired outcome.

Most of the survey participants felt that environmental cooperation can contribute towards peace and conflict resolution and that TBCA agreements play a role. However, it is not apparent whether TBCA agreements as they are frequently designed now are achieving that effect. This lack of impact is meaningful given that a number of practitioners mentioned disregard for legal agreements when political or armed conflicts arose and described circumstances where transboundary conservation did little to nothing to contribute towards broader conflict transformation. In part, the lack of explicit mentions of peace and conflict resolution may mean that transboundary collaboration has no mandate and perhaps by extension, no authority to intervene. Almost 90% of the time that TBCAs experienced violent conflict, the violence was part of a broader conflict. This could magnify a lack of mandate or authority when the root causes of a

conflict are beyond the issues of a PA or TBCA cooperation and PAAs confine themselves to band-aiding the effects to their PA only.

PAAs at the least, should have sufficient capacity to participate in resolving conflicts that have an impact on their conservation mandates. This does not mean that PAAs must become peacekeepers and mediators, but it could mean that they should have the capacity to convene a peace process in their territory, or to sit at the table to contribute perspectives and solutions related to their jurisdiction. It also means that they should have a minimal level of training to ensure that PA management is conflict-sensitive. This includes undertaking conservation programs in ways that are not going to trigger or aggravate social and ecological conflicts, as well as to engage partnerships that can address integrated challenges (e.g., human-wildlife conflict, poaching, poverty, and insecurity).

Some effort to clarify the role of TBCAs and PA governance in peace and conflict resolution could help to fill the gap where the trust, transboundary systems, and relationship-building that occur through sustained cross-border engagement is not scaled up or transferred to transform conflicts more widely. A component of environmental peacebuilding theory is the capacity for habits of cooperation developed through transboundary engagement in natural resources management to have spillover effects into other areas of cooperation (Conca & Dabelko, 2002). However, this may not occur if TBCA practitioners, as they expressed in the survey, do not feel they have sufficient mandate or authority to cross-over into those other areas of need. This highlights the relevance of making peace and conflict resolution mandates explicit in TBCA agreements and the parallel

need to provide sufficient capacity to fulfill that mandate.

International peace and social peace are important to the success and effective implementation of TBCAs and TBCA agreements, whose primary objective may be ecological peace. This is evidenced in the survey responses describing positive changes in transboundary collaboration over time. TBCAs whose cooperation was enhanced typically had the support of their governments and local stakeholders. Many of the elements of success, such as transboundary institutions, information and experience sharing, or inclusion are associated with international and social peace. Therefore, by strengthening mechanisms of international peace and social peace, TBCA practitioners have a better chance at achieving their conservation goals targeted at building ecological peace. This strengthens the argument that these three categories of peace are interrelated and interdependent.

Some comments recounted how breakdowns in international or social peace have impacted negatively on ecological peace. For example, when community relocations were mishandled by a TBCA, creating a lot of anger towards the PA and inciting some to support rhino poaching, which has endangered the security of the TBCA as well as local communities. Improved inclusion of social and international peace in TBCA agreements could enhance TBCA governance in this regard and relates to earlier comments on the need to clarify a TBCA and its' parties' roles in peace and conflict resolution. TBCAs should be well-aware of the conflicts they face throughout all three categories and ensure that their agreements do not promote ecological peace at the sacrifice of social peace or detriment of international peace.

Needless to say, facilitating transboundary capacity to implement TBCA agreements is critical. A TBCA agreement could have all the right language, but it is of little use if it remains only on paper. TBCA agreements must provide for their own functionality. This includes capacity as mentioned previously and resources. Resources can include physical equipment, staff with the necessary skills, and funding. Funding was not identified as a high priority element in TBCA agreements, yet many of the comments about the success or challenges of implementing TBCAs described the influence of funding. Respondents either commented on how funding could strengthen collaboration or how the lack of funding prevented follow-up and continuity. Funding can also have the direct benefit of supporting capacity – physically through equipment and staff or less tangibly, through skill-building and strengthening a practice of cooperation. The survey responses spoke little about capacity-building and what might be needed to strengthen the contribution of TBCAs to peace and conflict resolution, however, they were not explicitly asked this question. There are also downsides to different modalities of funding – e.g., donor funding vs. market-based enterprise. These dynamics need to be evaluated when considering funding streams for sustained transboundary cooperation and efforts towards peace and conflict transformation. Again, conflict-sensitivity is important in this pursuit.

4.5 Conclusion: from limited beginnings to further peace research

The findings from both the legal review and practitioners' survey are illuminating for anyone seeking to better understand TBCA agreements and their relationship to peace and conflict transformation. Of course, the survey findings have their limitations. The survey was ultimately only completed by 88 respondents with the Middle East starkly lacking from representation and Asia significantly underrepresented. Diverse representation may have required the survey to be translated into more languages; potentially the missing UN languages – Arabic, Chinese and Russian – to begin. The survey was admittedly long and looped a series of repeated questions for up to 5 different TBCAs, which caused the survey to be quite exhaustive (and exhausting). This might explain why 297 people had started the survey, but only 88 completed it. Question framing is always a challenge with surveys; it is difficult to know whether the right questions were asked in the right way. Nevertheless, the survey provides interesting insights into TBCAs, law and peace that elaborate initial findings in the legal review. It also provides many signposts for future research. This could include a systematic analysis of TBCAs and peace, looking at datasets of existing TBCAs and indicators of peace, and building on the study of cross-border PA dyads and MIDs by Barquet et al. (Barquet et al., 2014).

A future study evaluating TBCAs and peace indicators, should also be linked to this initial legal review and further legal research. The TBCAs that have been made available here will be included in a legal database (unless consent was withheld). This could be linked with other legal databases,

such as EcoLex and Legal Atlas (www.legal-atlas.net) to foster legal learning and research which correlates these (primarily environmentally-oriented) issues with other broader international and social issues (e.g., human rights, sustainable development, international crime, etc.). Future compilations of TBCA agreements should also look to enhance legal pluralism, capturing indigenous and traditional or customary law in databases typically designed for dominant legal systems. There are a number of TBICCAAs that have been identified around the world and yet these do not exist in the 2007 Global List and rarely in formal legal agreements. Inclusion of these TBCAs will provide a unique challenge to future TBCA, law, and peace researchers, but their contribution may be significant.

In conclusion, TBCAs have potential to contribute to peace and conflict resolution, but there is room to improve their legal design towards that purpose. The findings in this chapter indicate that TBCA agreements could benefit from explicitly mentioning peace, conflict, and conflict resolution, and in expressly linking the goals of contributing towards international, social, and ecological peace to operationalizing mechanisms. Just as it is important to have clarity around activities and responsibilities in transboundary cooperation, the role of transboundary cooperation in broader conflict transformation and peace should be clarified. This means that the capacity of TBCA practitioners to intervene on behalf of broader conflict transformation should be enabled and strengthened, which may require basic training in CCR and a better understanding of how all three categories of peace are essential to the long-term goals of PA conservation. Conflict resolution is not merely a standard clause concerning dispute resolution over interpretation of an agreement, it can shape how conflicts afflicting TBCAs are resolved or how TBCA practitioners

engage in broader conflicts. TBCAs agreements should design intentionally for scaling-up/spill-over effect, which necessitates that TBCA agreements are at the very least, conflict-sensitive and conflict-resilient.

Many efforts around the world to formalize TBCAs in transboundary legal agreements seek to support peace and conflict resolution through environmental collaboration. This study reviewed 56 TBCA agreements for 32 TBCAs and surveyed 88 TBCA practitioners to better understand how TBCA agreements could be enhanced to improve the role of TBCAs in these processes. The legal review and survey reveal that peace and conflict resolution mechanisms come in many forms. The more TBCA agreements can include for these interventions and processes, as well as their own implementation, the more effective they might be in transforming conflict more broadly and truly becoming Parks for Peace.

5 CHAPTER 5: NOMOSCAPING PEACE IN TIMES OF CONFLICT: A CASE STUDY OF THE GREATER VIRUNGA TRANSCOUNDARY COLLABORATION (GVTC) AND CONFLICT RESOLUTION

5.1 Introducing the Greater Virunga Landscape

PAs are susceptible to social and structural violence by nature of being bordered territories with distinct rules related to power, meaning/identity, and access. They typically represent dominant systems of legal authority and in the case of TBCAs, they may represent jurisdictions divided between legal traditions obscuring customary systems. Processes of bordering and norming, or the iterative creation and performance of legal meaning and rulemaking through spacemaking, is known as nomosphering (Blomley, Nicholas et al., 2001). In the GVL, colonially nomosphered conservation injustices overlay and augment post-colonial political-economic and socio-ecological complexities that shape regional futures for peace and security. GVL demographics feature high population density, heavy natural resource dependency, extreme poverty, and are consistently considered a risk to conservation and conflict (Blomley, Nicholas et al., 2001). In this context, TBCAs challenge ecological peacebuilding to evolve beyond generic theories of cooperation towards CCR throughout its territories of practice.

To understand how TBCAs can nomosphere peace during times of conflict, field research was conducted in the GVL from October 2010 – August 2011 and December 2016 – May 2017 (Hsiao, 2015; Hsiao & Wilson, 2012). The first section of this chapter outlines the history of transboundary collaboration, while the second section maps conflict resolution and peace in multilateral agreements. The third section discusses key findings, while arguing that nomosphering peace is not an automatic byproduct of transboundary conservation and therefore, peace needs to be formalized and operationalized appropriately in TBCA agreements. The conclusion provides some lessons and recommendations from the GVL on how to improve TBCA agreements to better protect places for nature, people(s), and peace. [Note: A version of this chapter has been accepted for publication in the IUCN Academy for Environmental Law's E-Journal July 2018. Some of the sections have been edited to reduce repetition with other chapters, but for coherence there is some unavoidable duplicity.]

5.2 Violence in the Greater Virunga Landscape

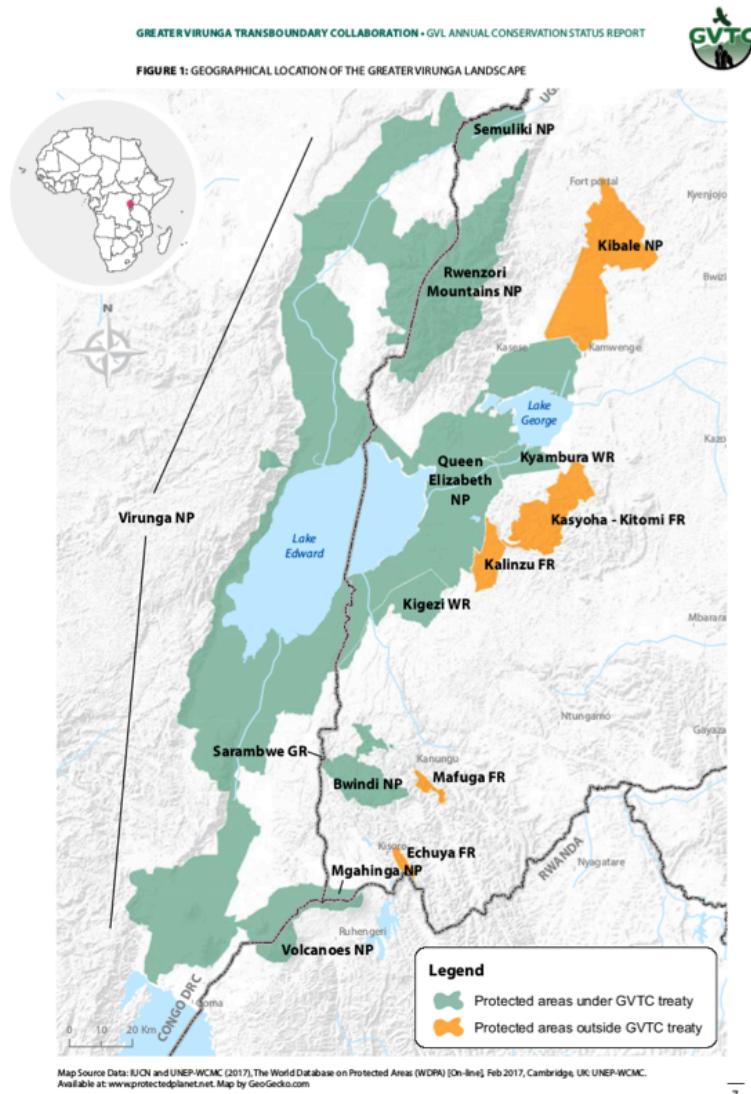
As part of the Albertine Rift, the GVL has some of the highest occurrences of endemic mammal species (at least 34 endemic and 12 near-endemic) of any ecoregion in the world (Kityo et al., 2003, p. 23; Olson et al., 2001, p. 936). The PAs that form the GVL are critical biodiversity corridors for species diversity and dispersal throughout the Albertine Rift (Ayebare et al., 2013). These shared

eco-unique borderlands of the DRC, Rwanda, and Uganda capture one of the most biodiverse regions of the world with one of the most violent histories. As Omeje and Redeker Hepner describe:

"Despite its great potential for development – or perhaps because of it – a variety of complex political conflicts at least partly related to the construction of nation-state borders have plagued the African Great Lakes region: genocide in Rwanda; civil wars in Burundi, Democratic Republic of Congo (DRC), and Uganda; flawed democratic elections and violence in Kenya; ethnic hostilities and pastoral conflicts in most states; as well as boundary disputes, cross-border rebel incursions, and interest-driven political interventionism. [...] Problems of child soldiering; proliferation of small arms and light weapons; sexual slavery, abduction, abuse, and torture of young girls and women in war zones by rebel fighters; refugees and internal displacement of persons; pastoral and communal violence; rebel and militia insurgencies; and epidemics like HIV/AIDS remain significant problems in different parts of the region. [...] The natural resource endowments in the region have represented liabilities as well as potential opportunities, as groups have vied for control over resources amid market pressures and the exigencies of neoliberal development and globalization paradigms." (Omeje & Redeker Hepner, 2013, pp. 1–2)

In the GVL, violence and conflicts have histories that relate to the creation and management of PAs and in return, impact negatively in many ways upon the PAs and transboundary conservation. To offer just one illustration of the challenges in the GVL as a place for nature and people in great need of peace, is the story of the Basongora and Bakonzo in central and northern GVL.

Figure 5-1 Map of Greater Virunga Landscape (GVL)



The Basongora (pastoralists) and Bakonzo (cultivators) of the Semuliki Flats and savannah areas of Queen Elizabeth NP (Uganda) and central Virunga NP (DRC) present the complexity and interconnectedness of international, social, and ecological conflicts, violence and peace in the GVL. At the interface of colonial park gazettements and post-colonial enforcement, the Basongora still

move with cattle through the landscape while the Bakonzo farm park peripheries. The Basongora lost nearly all their traditional land to gazettlement of the two PAs (Matovu, 2012; Young & Sing’Oei, 2011, p. 22). In both Queen Elizabeth and Virunga NPs, the only way to remain inside park boundaries was to settle in designated fishing villages, but this was not their primary traditional livelihood strategy (Musinguzi, 2016). Outside, the Basongora faced land conflicts with the Bakonzo or PAAs for violating laws against trespass, livestock watering, and grazing.

In 2006/2007, 8,000 Basongora with over 50,000 cattle entered Virunga NP for water and pasture, but were pushed back into Queen Elizabeth NP (Kule Bitswande, 2017). Bakonzo, who lost their traditional lands when Rwenzori Mountains NP (Uganda) was gazetted, took advantage of the situation and encroached Queen Elizabeth NP as well (Kule Bitswande, 2017; Minority Rights Group, n.d.). Eventually, ICCN and UWA (PAAs of DRC and Uganda respectively) met to discuss the problem of the Basongora pastoralists and disenfranchised Bakonzo who had settled inside their PAs, elevating the issue to Uganda’s President Museveni and an inter-ministerial committee, which allegedly allocated the “encroachers” 30,000 hectares of land in Uganda (Kule Bitswande, 2017). Tenure of that land settlement remains insecure as do relations between the Basongora and the Bakonzo, who interpreted the land settlement as another indication of President Museveni’s favoritism for pastoralists (his own tribe, Bahima, are also cattle-keepers) (Kule Bitswande, 2017).

The Bakonzo have been antagonistic to the central government in Uganda since colonial times, forming the Rwenzururu Movement against the British and later the National Army for the Liberation of Uganda (NALU) against President Museveni with the support of President Mobutu in

DRC and President Daniel Arap Moi in Kenya (Prunier, 2011, pp. 82–83; Reuss & Titeca, 2016). Around 1995 in DRC, NALU members were introduced to the Khartoum government of Sudan, which was supplying the Interhamwe Hutu militia in Bunia (Prunier, 2011, pp. 86–87). Khartoum connected NALU with a coalition of disenfranchised Baganda anti-Museveni/NRM (National Resistance Movement) militias known as the Allied Democratic Forces (ADF) (Prunier, 2011, pp. 86–87). This birthed the ADF-NALU, which terrorized the Rwenzori Mountains for years and is linked by the International Criminal Police Organization (INTERPOL) to ivory and mineral trafficking amongst other environmental crimes (Hege et al., 2012, p. 23; INTERPOL-UN Environment, 2016, p. 58; Nellemann et al., 2016, p. 71). In retaliation, President Museveni supported the creation of the Parti de Libération Congolais (PLC), an armed group mostly occupied with raiding Bakonzo across the border in Kasese, Uganda (Prunier, 2011, p. 83).

In December 2016, antagonism between Bakonzo and President Museveni's regime flared into an armed siege of the Rwenzururu Palace in Kasese, the slaughter of royal guards and civilians, plus the arrest of Rwenzururu King Charles Wesley Mumbere (Reuss & Titeca, 2016). President Museveni claimed they were mobilizing a secessionist movement armed by Banande tribespeople, who ironically form part of PLC (Reuss & Titeca, 2016). In this conflict constellation, identity-based militias and their backers are linked across borders and are known to use PAs for shelter, food, medicine, and profit, tying even the most oblivious and distant consumers of the North, South, East, and West into a virulent web of violence and conflict (Hege et al., 2012, pp. 3, 23; UNSC, 2016).

5.3 Transboundary conservation in the Greater Virunga Landscape

Within this context, the GVL has a long history of formal and informal transboundary collaboration. Mountain gorilla research in the Virunga Massif began in 1959, leading to recognition that the last of this endangered species roam a colonially-divided ecosystem that requires coordination amongst three countries to protect (Refisch & Jenson, 2016, p. 831). Organized antipoaching patrols and educational programs began in 1979 under the Mountain Gorilla Project in Rwanda. In 1991 this project by the African Wildlife Foundation (AWF), Flora and Fauna International (FFI) and the World Wildlife Fund (WWF) evolved into a transboundary initiative, the IGCP (Gray & Rutagarama, 2011, p. i). North of the Virunga Massif, the Wildlife Conservation Society (WCS) was supporting transboundary ranger patrols and research, providing a foundation to broaden collaboration to the Central Albertine Rift (A. J. Plumptre, Kujirakwinja, & Kobusingye, 2003).

The GVL consists of seven national parks (NPs) – Virunga NP in DRC; Volcanoes NP in Rwanda; and Bwindi Impenetrable NP, Mgahinga Gorilla NP, Rwenzori Mountains NP, Semuliki NP and Queen Elizabeth NP in Uganda – Sarambwe Game Reserve (DRC), and Kigezi and Kyambura Wildlife Reserves (Uganda). It was first recognized in the Trilateral Memorandum of Understanding on “The Collaborative Conservation of the Central Albertine Rift Transfrontier Protected Area Network,” signed in January 2004 by the PAAs (ICCN in DRC, Office Rwandais de Tourisme et des Parcs Nationaux – ORTPN in Rwanda and Uganda Wildlife Authority – UWA in Uganda) (Office Rwandais de Tourisme et des Parcs Nationaux et al., 2004).

The 2004 MoU initiated a pattern of broadening participation and formal agreements. In October 2005 the “Goma Declaration” set out objectives for the Greater Virunga Transboundary Collaboration (GVTC) and established a Secretariat to implement it (Ministry of Environment, Nature Conservation, Water and Forests, DRC, Ministry of Commerce, Industries, Investments Promotion, Tourism and Cooperative, the Republic of Rwanda, & Ministry of Tourism, Trade and Industry, the Republic of Uganda, 2005). When the sole habituated gorilla group in Mgahinga NP (Uganda) crossed to Volcanoes NP (Rwanda), the protected area authorities (PAAs) negotiated a revenue sharing MoU that required the host country to split tourism revenues 50-50 with the habituating country (Uganda Wildlife Authority, Office Rwandais de Tourisme et des Parcs Nationaux, & Institut Congolais pour la Conservation de la Nature, 2006). Shortly after, the 2006-2012 Transboundary Strategic Plan (TSP) introduced transboundary planning and governance to the GVL (Refisch & Jenson, 2016, p. 9). This first TSP created an international multi-institutional scheme to address political oversight (Inter-Ministerial Board), implementation (PAAs and Transboundary Core Secretariat), technical issues (Regional Technical Committees or RTCs on Research, Tourism, Community Conservation & Enterprise and Security & Law Enforcement), and stakeholder participation (Regional Transboundary Forum) (Refisch & Jenson, 2016, p. 9).

In July 2008, following the shocking murder of ten mountain gorillas in Virunga NP, allegedly involving ICCN rangers in the illicit charcoal trade, a Ministerial Declaration was signed in Rubavu (Refisch & Jenson, 2016, p. 10). With funding from the Netherlands, the GVTC Executive Secretariat (GVTC-ES) established itself in Kigali, signing a Headquarters Agreement with the Government of

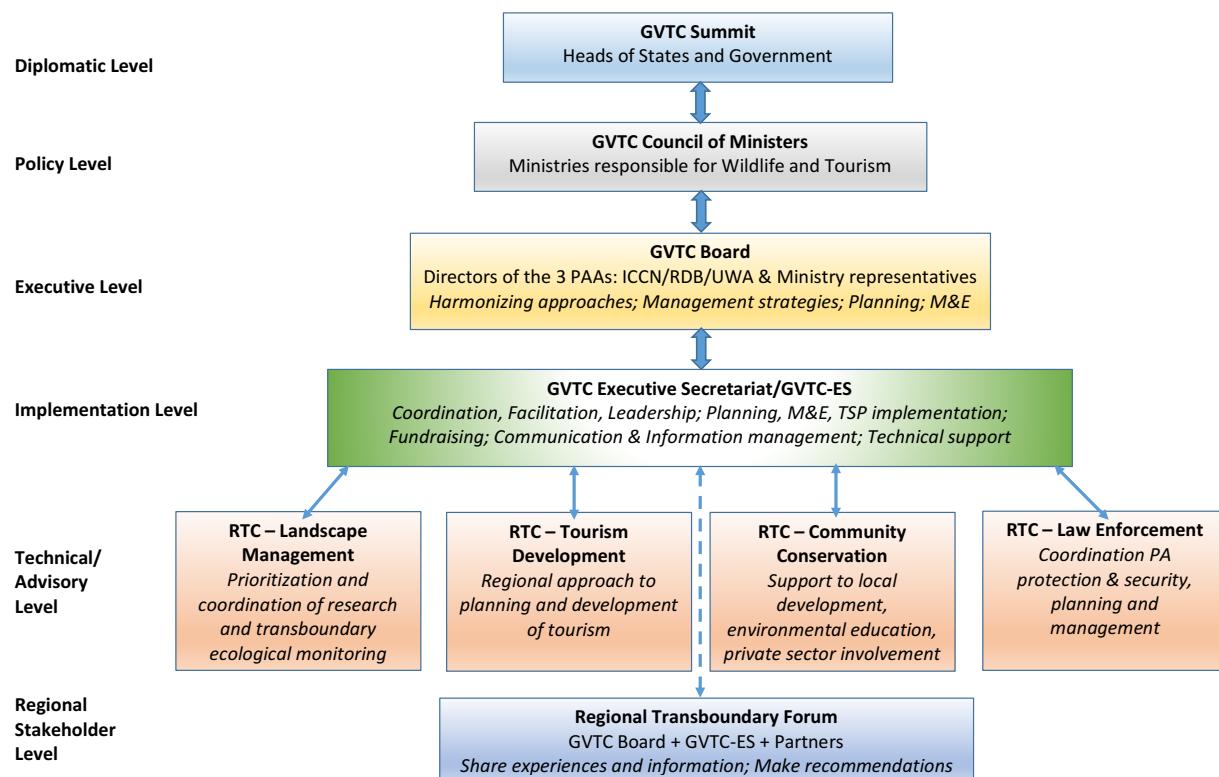
Rwanda in 2013 (GVTC, 2014, pp. 73–80). In 2014, the GVTC-ES signed an MoU with the ICGLR and Economic Community of the Great Lakes Countries (CEPGL) and has similarly formalized collaborative MoUs with other landscape partners (GVTC et al., 2014). Most recently, the GVTC Treaty was signed in October 2015, affirming high-level political support for the growing collaboration, but continues to await ratification in all three parliaments (Democratic Republic of Congo et al., 2015).

5.4 Law and peace in the Albertine Rift

Although the GVTC Treaty does not explicitly reference this complex matrix of violence, conflict, and insecurity, it provides a potentially transformative platform for contemporary conflict resolution by formalizing a governance structure that has been materializing since the 2004 Trilateral MoU. It creates diverse institutional collaboration operating at various levels: (1) Diplomatic – Heads of State/Government; (2) Policy – inter-Ministerial; (3) Executive – involving management-oriented PAAs and their Ministries; (4) Implementation – GVTC-ES is responsible for day-to-day coordination, facilitation and programming; (5) Technical/Advisory – convening thematic experts and partners; and (6) Regional Stakeholders – integrating GVTC's multi-level structure with other conservation, development and landscape actors (See Figure 5-2 below). The Headquarters Agreement gives the GVTC-ES legal personality to engage in bilateral MoUs to develop strategic partnerships; e.g., MoU with ICGLR/CEPGL to eradicate regional militias (GVTC

& Government of the Republic of Rwanda, 2013, p. Art. 3). The flexibility of this governance structure to address conflicts at the appropriate level and to bring the right parties to the table is critical to the GVTC's conflict transformation and peace potential. In international, social, and ecological peace, GVTC laws provide direct and indirect guidance. The legal mechanisms provided for in GVTC agreements are described in the three subsections (5.4.1-5.4.3) below, identifying a fairly diverse set of mechanisms available to address all three categories of peace, if implemented.

Figure 5-2 GVTC governance structure



Adapted from GVTC Transboundary Strategic Plan 2013-2018, based on 2015 GVTC Treaty.

5.4.1 GVTC and international peace

Regarding international peace, the 2004 MoU dedicates transboundary collaboration to “building trust, understanding and cooperation amongst [stakeholders] to achieve sustainable conservation and thereby contribute to peace” (Office Rwandais de Tourisme et des Parcs Nationaux et al., 2004, p. Art. 3(1)(e)). This includes recognition that “the pursuit of peace, security, stability and socio-economic development go hand in hand with the need for environmental protection and conservation of biodiversity” and therefore promotes integrated peace, development, and conservation (GVTC et al., 2014, para. 10). In peacekeeping and peacemaking, it asks governments and development partners to support effective peacemaking processes and to “promote regional security, in particular disarmament and evacuation of armed groups in DRC from protected areas” (Ministers and High Level Representatives of the Governments of the DRC, Rwanda and Uganda, 2008, opp. 6–7), while engaging ICGLR to eradicate armed groups and negative forces from all protected areas (GVTC et al., 2014, p. Arts. 6(3) & 8(6)). Parties to the GVTC Treaty commit “to promote and support safety and security of wildlife resources and tourists” (Democratic Republic of Congo et al., 2015, p. Art. 6(7)). When the March 23 Movement militia group, M23, occupied the trinational volcano Mt. Sabinyo and over 100 rebels attempted to cross from camps in Uganda back to DRC late January 2017, GVTC-ES sat with PAAs and security personnel to share intelligence and neutralize the armed threat. Following joint security operations, UWA reopened tourism to Mt Sabinyo in April.

When it comes to border disputes, the legal framework brings in regional institutions (ICGLR and CEPGL) to integrate border management and development of cross-border trade, while the governance structure provides for dialogue and dispute resolution between the Heads of State/Governments in the Summit, or between Ministries of Foreign Affairs and relevant border committees through the Council of Ministers (Democratic Republic of Congo et al., 2015, p. Arts. 8-10, 17; GVTC, 2014, p. 34; GVTC et al., 2014, p. Art. 4(7)). Whether it is a border dispute or other international conflict, issues can be brought forth for peaceful resolution through the institutional organs of the GVTC at regular meetings or extraordinary meetings, as convened by the GVTC-ES (Democratic Republic of Congo et al., 2015, p. Arts. 9(f), 10(f), 11(g) & 12(h)(iii)).

5.4.2 GVTC and social peace

Social peace is incorporated in the GVTC legal framework less directly and is mostly targeted at poverty reduction, community participation in park programs, and socio-economic development through local tourism. The narrative has long been that park-adjacent communities suffer conservation costs while receiving insufficient benefits, so the GVTC approach to transforming park-community conflict is through reversing that imbalance (GVTC, 2014, pp. 28-29, 2017b, pp. 11, 13). Enhancement of conservation benefits, development of sustainable alternative livelihoods, ecotourism, and equitable revenue sharing are repeatedly highlighted and to be addressed through the two RTCs Tourism Development and Community Conservation (Democratic Republic of Congo

et al., 2015, p. Arts. 3, 5 & 6; Ministers and High Level Representatives of the Governments of the Democratic Republic of the Congo, the Republic of Rwanda and the Republic of Uganda, 2008; Office Rwandais de Tourisme et des Parcs Nationaux et al., 2004, p. Art. 3).

The 2008 Rubavu Declaration directly links security to regional socio-economic potential, inviting governments and development partners to simultaneously support peacemaking and poverty reduction (Ministers and High Level Representatives of the Governments of the Democratic Republic of the Congo, the Republic of Rwanda and the Republic of Uganda, 2008, p. pps. 5-7, ops. 6-7). Embedding the GVL in broader Great Lakes development, the 2014 MoU between ICGLR, CEPGL and GVTC creates permanent cooperation towards integrated planning, cross-border trade and socio-economic development (GVTC et al., 2014, p. Art. 2). At site level, each park implements revenue-sharing to fund ICDPs in park-adjacent districts. In May 2017, Rwanda doubled its gorilla permit fees to \$1,500USD and raised community revenue-sharing from 5% to 10% (Volcanoes National Park Administration, 2017). ICDPs around Volcanoes NP are alleged by park staff to have noticeably eased historic conflicts between parks and people (T. Blomley et al., 2010). Villagers who used to sound alarms warning local poachers as rangers approached are now arresting poachers themselves and turning them in to PAAs (Ndayisaba & Kwizera, 2017). This antagonism-turned-collaboration is perceived by the PAAs as evidence of human-PA conflict transformation brought about by increased economic benefit to PA-adjacent communities. In other words, potential indicators of improved social peace between PAAs and local communities.

There are no specific mechanisms in the transboundary legal framework for social conflicts such as identity-based conflicts or land conflicts, so this defaults to general GVTC governance mechanisms. A recent example involves a border-related land conflict in Sarambwe between DRC and Uganda, which sparked accusations on both sides. The two accounts quoted below demonstrate how citizens on each side of the border frequently blame the other, making it difficult to frame either side as “wrongdoer” or “victim”.

A local leader’s accounts of ICCN abductions of Ugandan villagers near Buhoma, the headquarters of Bwindi NP:

“They came to some few households near the border. They would come at night and force a person to open and [would] take things. The other time, we may find somebody is working along the boundary in the garden and they come, they abduct. [...] At times it’s mixed up, but quite often they dress up with the uniform of the parks of Congo. Conservationists, ICCN. They dress up like that, with guns, but most especially those ones who come to abduct here. They come in that uniform. [...] For him, he suspects even they are the park staff, the Congolese staff, because they are the neighbor behind there. [...] But now he’s saying that after a lot of crisis...Uganda deployed there UPDF. [...] When the security came here, they put a detach[ment] here and the border remains where these ones want, so they are using what? – the land.” (Anonymous, 2017b)

La Voix de la Nature (VONA) coordinator and former ICCN warden in charge of Virunga NP’s central sector, Claude Sikubwabo Kiyengo’s, accounts of UPDF encroachment inside Sarambwe Game Reserve:

"In May [2014], 4 Ugandan soldiers crossed the border into the reserve near the fields cultivated by the Ugandans in Congo. At the end of August 2015, 5 Ugandans entered the reserve in order to conduct pit-sawing. On being encountered by the rangers and trackers, they fled, abandoning three saws. They alerted their soldiers who crossed into the DRC to recover what they had left behind from their 'abductors', whom they 'identified' as Rwandan FDLR rebels. The Ugandans led the heavily armed [UPDF] soldiers all the way to the Sarambwe ranger post. A multitude of soldiers overpowered the rangers and took them by force to make them stand trial there. In spite of the intervention of several persons, these ICCN staff members were taken to the army barracks in Mbarara for interrogation, before being taken to Bwindi, where they were released at the border the day after their arrest." (Meder & Sikubwabo Kiyengo, 2015, p. 10)

As each side made claims that fed on historical distrust and violations of sovereignty, GVTC-ES stepped in to facilitate dialogues between local leaders, PAAs and security personnel, calling for a fact-finding investigation and ultimately proposed resolution of the underlying international border dispute by higher levels of government. It is believed that once the true borderline is known and markers placed, mistaken invasions will cease and each will keep to their side. Even if incursions persist, violations will be more easily identifiable by GVTC partners like the ICGLR Extended Joint Verification Mechanism (EJVM), which can investigate and propose solutions to land conflicts over the shared border.

5.4.3 GVTC and ecological peace

When it comes to ecological peace, the GVTC legal framework primarily addresses violence against nature in the forms of biodiversity or ecosystem services loss, environmental crimes, impacts of human conflicts on the environment and unsustainable development. The entire collaboration strives to ensure conservation of GVL biodiversity. This includes a commitment to conserve wild flora and fauna within each States' jurisdiction and to share information for collaborative management of biodiversity (GVTC et al., 2014, p. Art. 7). Environmental crimes, including wildlife trafficking, are combatted through a range of partnerships. The GVTC-ES holds Chief Wardens' Forums to coordinate border patrols, share law enforcement information and strategize regionally (GVTC, 2014, p. 32). It collaborates with ICGLR and CEPGL to combat illegal trade in endangered species, while facilitating legal harmonization for wildlife crimes (GVTC, 2017a; GVTC et al., 2014, p. Art. 8). Partners like INTERPOL and WCS participate through RTCs (mainly Law Enforcement, but also Landscape Management and Community Conservation) and transboundary projects to build capacity for environmental crimes management (GVTC, 2017d).

Human-wildlife conflict is typically addressed at the site/PA-level through a variety of species-specific interventions, which can categorized as: (1) barriers to limit wildlife movements out of park boundaries – e.g., trenches, chili and beehives for elephants, stone walls for buffaloes, electric fences for all “problem animal” species; (2) education and awareness-raising regarding the value of wildlife and how to prevent damages to life or property; and (3) revenue sharing programs

(Babaasa, Akampulira, & Bitariho, 2013). These are more often found in bilateral MoUs or general GVTC institutional arrangements, like the Community Conservation RTC (GVTC & UWA, 2012, 2016). The MoUs are typically negotiated with the assistance of each PA's community conservation unit.

To address ecological impacts of human activities, GVTC is to provide technical support to CEPGL projects and programs to ensure environmental standards and compliance, including through comprehensive environmental impact assessments, while CEPGL is supposed to consider "environmental issues in the implementation of its Regional Economic Programme," periodically review socio-economic development for comprehensive environmental impacts, and integrate the GVL into its Department for Energy, Infrastructure, Environment and Natural Resources (GVTC et al., 2014, p. Art. 7). This regional approach likely applies to larger-scale development programs for the Great Lakes Region and may not affect smaller more localized projects or activities. For those, it may fall to national legislation regarding environmental protection and impact assessment. For this reason, the PAAs strive to coordinate with local and district-level authorities to harmonize development activities that may impact upon the PAs. Regarding ecological impacts from violent conflict, GVTC has responsibility to restore parks degraded by armed conflicts and illegal exploitation (GVTC et al., 2014, p. Art. 8(6)).

5.5 Contemporary conflict resolution in the Albertine Rift

The previous section provides an overview of the GVTC governance framework and how a variety of peacekeeping, peacemaking and peacebuilding mechanisms that can be drawn upon to intervene in different phases of the peace/conflict spectrum or conflict curve have been formalized over the decades through MoUs, declarations and the 2015 GVTC Treaty. This section highlights the conflict resolution mechanisms on-the-ground that are worthiest of mention: (1) Transboundary Institutions, (2) Transboundary Activities and (3) Traditional or Alternative Mechanisms.

5.5.1 Transformative transboundary institutions

As noted previously, the GVTC governance structure is potentially one of its most powerful tools for contemporary conflict resolution. Its ability to coordinate multilateral, multi-level, multistakeholder dialogue, and decisionmaking as-needed when conflict arises (e.g., Sarambwe) or regularly (e.g., Wardens' Forums/RTCs), creating an adaptive transboundary conflict resolution platform that can specially tailor for each situation. This allows the GVTC to address international, social, and ecological conflicts of various sorts, as well as those which are interlinked and require comprehensive solutions. Transboundary institutions at various levels enable the appropriate

actors to convene and address conflicts through effective mechanisms (e.g., diplomatic relations, policy change, technical implementation), without limiting conflict resolution to one-channel (e.g., diplomacy-only). Even if an organization is unable or unwilling to participate, other partners at other levels can be brought into the fold.

Furthermore, the establishment of the GVTC-ES with legal personhood to coordinate activities and partner directly with key actors in the landscape has been salient. The GVTC-ES' MoU with ICGLR and CEPGL commits two of the Great Lakes Region's multilateral institutions to peace, security, conservation, and sustainable socio-economic development in the GVL. At a transboundary meeting of the Landscape Management and Law Enforcement RTCs organized by GVTC-ES in January 2017, personnel from ICGLR's EJVM sat with park wardens, customs officers, judiciary, conservation NGOs, and academics to solidify "peace and security" as a priority objective for the Law Enforcement RTC and each partner identified their role in that pursuit. In a follow-up meeting in June 2017, a roundtable of military representatives, PAAs, ICGLR and government representatives from DRC and Uganda enumerated a series of conflict issues (e.g., deployment of Forces Armées de la République Démocratique du Congo or FARDC soldiers in designated 'no man's land,' Sarambwe border violations, transboundary crimes, illegal fishing and the presence of armed groups in PAs) (GVTC, 2017c).

5.5.2 Transboundary activities: engaging for peace

Related to the development of transformative transboundary institutions is on-going coordination of cross-border activities. This includes research and monitoring, law enforcement and patrols, stakeholder meetings, revenue-sharing, tourism and community development, plus ICDP implementation. Transboundary activities unite stakeholders to share perspectives, propose solutions, even provide lessons learned from experiences on-the-ground. For PAAs who typically manage remote sites with limited connectivity to information and resources, co-learning is invaluable and enables effective mechanisms to be optimized. In 2016/2017, two transboundary projects launched to specifically address regional conflicts – Netherlands Initiative for Capacity Development in Higher Education (NICHE) and Water4Virunga. NICHE will develop natural resources conflict resolution curricula, provide scholarships for Masters/PhD-level studies and produce training programs on conflict-sensitive conservation (Kyomuhendo Byaruhanga, 2017). Water4Virunga, also a 4-year Netherlands-funded project, will construct water infrastructure for communities that are water insecure and vulnerable to water conflicts (GVTC, 2017e). In some cases, the most available water source for a community derives from a neighboring country; in these cases, Water4Virunga has the means to overcome international jurisdictions to reduce water conflicts and insecurity for thousands living around the GVL.

The GVTC-ES is also working on a GVL tourism development strategy and revised revenue-sharing policies and guidelines, both are relevant to address underlying socio-economic conditions for

conflict (GVTC & UWA, 2011). However, it is not clear that neoliberal approaches to conservation are effective towards conflict transformation and peace. On the DRC side, researchers in Virunga NP have been very critical, condemning heavily exaggerated park benefits for development, job creation, revenue-sharing, and livelihood alternatives, accompanied by heavy-handed “green militarization” of PA law enforcement (e.g., burning of homes and fields “encroaching” within PA boundaries), for aggravating (violent) PA-community conflicts (Hochleithner, 2017; Marijnen & Verweijen, 2016; Sjöstedt, 2017; Verweijen & Marijnen, 2016).

In Rwanda and Uganda, the criticism is more nuanced. A 2010 assessment of ICDPs in Bwindi and Mgahinga NPs (Uganda) indicated that 15 years of ICDPs helped improve community perceptions of PAs and even enhanced PA-community cooperation in certain areas (e.g., firefighting), though it did not reduce illegal activities or increase reporting (T. Blomley et al., 2010). A 20-year review of IGCP’s work in the GVL found ICDPs difficult to implement successfully, though they did succeed in developing mountain gorilla tourism, which provided a revenue stream to the governments that improved government perceptions of nature conservation and receptiveness to institutionalizing community conservation (including revenue-sharing) within their own programs and management (Gray & Rutagarama, 2011, pp. 7–8). In field interviews, PAAs in Rwanda and Uganda reflected that PA-community relations have improved in many ways. It should be noted that in addition to revenue-sharing and ICDPs, UWA permits both resource use and co-management of natural resources, and RDB provides compensation for crop destruction by wildlife. Thus, it is difficult to determine whether better PA-community relations are purely economically-driven or also rights-based.

As the diversity of transboundary activities grows, so does the diversity of partners. GVTC evolved from a joint endeavor of PAAs supported by select NGOs to include multilateral institutions (e.g., CEPGL, INTERPOL), all levels of government (from heads of villages to Heads of State/Government), security organs (ICGLR, militaries, police, customs, judiciary), private sector (e.g., tourism operators), academia and research institutions (e.g., Institute for Tropical Forest Conservation – ITFC, University of Rwanda) and Community-Based Organizations in addition to NGOs. This has enriched collective efforts in the landscape and brought new conflict management and peace-oriented perspectives to previously disparate endeavors. It illustrates how traditional security can be enhanced through transboundary collaboration and how traditional security approaches can improve conservation (e.g., Sabinyo), as well as how alternatives to traditional securitization (NICHE, Water4Virunga) and non-traditional (security) partners can be engaged to address conflict drivers and build peace (e.g., local leaders).

5.5.3 Traditional or alternative mechanisms for peace

As the GVTC expands its partnerships and approaches to contemporary conflict resolution, it might look to traditional and alternative peace mechanisms which already exist in the landscape. These include stretcher groups, traditional chiefs/elders and faith-driven peace processes. In mountainous areas, stretcher groups are effective community systems of norming and conflict

resolution. People typically join the same stretcher group their parents belong to or if they have moved away from their family village, will join the closest one. Stretcher groups meet regularly and mobilize to carry members through the mountains to nearby services when they become ill, injured or die. They also convene to address local conflicts. Once resolutions are determined, everyone complies as no one wants to be kicked out and shunned.

In many rural communities, local leaders, including elders and chiefs, continue to hold authority (Anonymous, 2017a). In North Kivu, even for researchers, it is unwritten protocol that a person operating in a particular chief's territory must present themselves and seek permission. When suspicions or situations arise concerning the person or group of people, authorities will often inquire first with the local chief (Anonymous, 2017c). Where militias control a territory and exploit natural resources, it is tacitly, explicitly, or coercively with the chief's knowledge and sanction. This makes cooperation with traditional chiefs incredibly important in neutralizing negative forces. Local leaders are often first resort when solving social conflicts within the community and a key liaison with PAAs when park-community conflicts arise (Anonymous, 2017b).

Spiritual leaders can also be influential at community-level and even across borders. Locally speaking, one of the most positively perceived colonial legacies is religion, hence its continued social authority (Whetho & Okeke Uzodike, 2009). Religious leaders, like the Catholic Diocese, have been directly involved in regional peace processes – ideally, their influence should be positively harnessed to prevent or manage conflicts, deflect peace spoilers and build peace

(Natalya Clark, 2013, pp. 218–220). Traditional systems or authorities are locally important for conflict resolution and can be effective where government institutions are weak or institutional counterparts are unavailable.

5.6 Conclusions

For decades no formal transboundary legal agreements existed in the GVL, yet transboundary collaboration took place and survived through all forms of human strife, including violent conflict, genocide, extreme poverty, etc. The survival of transboundary cooperation is frequently attributed to the need and desire to protect mountain gorillas (Uwingeli, 2017). A common interest in protecting and preserving the last of these charismatic megafauna and the highly lucrative tourism income attached to their safety, well-being, and accessibility seems to have triumphed over the conflicts of humankind. As the mountain gorilla population grew, so did formalization of transboundary collaboration in the GVL. The progression of GVTC laws indicates that transboundary cooperation can exist without formal legal agreements, including soft laws like MoUs, but there may be value in “legalizing” a TBCA. Transboundary agreements can help sustain actions on-the-ground and long-term political buy-in. Once the GVTC Treaty is ratified by the three parliaments, the collaboration will enjoy high-level commitment that binds on all successive governments. General principles of international law pertaining to treaties (e.g., *pacta sunt servanda* which commits parties to uphold agreements in goodwill) oblige all three States to the

governing principles and commitments, and restrains them from undermining them in any way (United Nations, 1969, p. Arts. 18 & 26). This makes formal agreements (especially binding ones) for a TBCA incredibly important.

Following the same logic that formalizing commitments matters, it is important to include a clear peace mandate and mechanisms for conflict transformation and peace in TBCA laws. Making peace explicit can maximize the conflict transformation and peace potential by making the objective known, providing parties with necessary capacities and ensuring that conservation is not just a bystander to conflict. Legally recognizing peace empowers actors in the landscape to optimize conservation for peace (“do good”), avoiding inadvertent violence or conflict collateral (“do no harm”). As is occurring in the GVL, sharing a common objective towards peace and conflict resolution allows parties to broaden their partnerships with peace and security sectors, including development organizations and non-conservation actors who can address all aspects of contemporary conflict resolution. Without clear jurisdiction, PAAs or environmental ministries may find it difficult to justify engagement with issues which are traditionally considered matters of security or national development and exhibiting less obvious relationships to wildlife and nature. Ultimately, if humans are to cease their vicious war against nature, it will require the participation of all sectors of society, not just the environmentalists.

Of course, it is insufficient to just state a generic aspiration for peace in TBCA laws. Appropriate mechanisms must be included to provide the range of interventions and programs required to address peace and conflict resolution, from brokering peace amidst violence to transforming

cultural, economic and political drivers or even climate change as they impact upon peace and conflict dynamics. The GVTC Treaty itself does not mention peace, but it does speak to some of the underlying factors for conflict in the region, namely socio-economic conditions and sustainable development. It also formalizes a governance structure that has developed over decades of cooperation, surviving great violence and hostile perceptions towards parks and wildlife, and will continue to address conflicts as they emerge. There are also some clear gaps in the legal framework – for example, the absence of legal measures that address all existing conflicts in the landscape (e.g., identity-based conflicts, land/resource conflicts, historical injustices, indigenous/community rights) – that may handicap efforts towards positive peace. As a framework, the legal agreements provide promise, but there is still a long way to go before full implementation is achieved and furthermore, for implementation to fully comply with principles of positive peace.

GVTC's ability to optimize its cross-border institutional peacebuilding or conflict transformation potential is currently severely limited, however, due to resource constraints (human resources, capacity, funding, etc.) related to political buy-in (treaty remains unratified and the institutional mechanism is not funded by member states), and impacted by priority interests (oftentimes donor-driven) and areas of expertise (e.g., conservation vs. conflict transformation). The GVTC-ES' capacity to convene a diverse range of actors often comes down to financial resources, as people need to be brought in from remote corners of the GVL landscape (and even outside). Transboundary activities are also impacted by political will to participate. Joint border patrols have not been occurring for some time because the DRC PAAs have been preoccupied with triage

conservation and have not prioritized collaboration with neighboring PAAs (Anonymous, 2017c). With more resources and the political support of treaty ratification, the GVTC could potentially support a broader range of targeted and comprehensive mechanisms to build durable and just peace.

This can include incorporation and even strengthening of local and traditional peace practices which may be small-scale but weld social legitimacy. Traditional practices risk weakening as society, culture and landscapes change rapidly. Legal pluralism can help to preserve and protect these indigenous peace processes which can supplement higher-level mechanisms when institutions or governments are unable or unwilling. A focus on customary peace practices provide an alternative to the more criticized approaches of liberal peace, neoliberal conservation and green militarization. As experiences in the countries imply, social conflicts and ecological conflicts between communities, PAAs and wildlife will need more than an economic fix. Making peace in places for nature and people require collaboration to extend beyond PAAs and other conservation partners working across international boundaries to include cooperation with communities around park borders.

The IUCN definition of Parks for Peace requires formal dedication of a TBCA to “peace and cooperation,” indicating that there is value in naming peace explicitly. It also emphasizes the distinction between Parks for Peace and any other TBCA. Although the GVTC does not yet consider the GVL a park for peace, it remains one of its nobler aspirations. Even if GVL realities are complex and insecure, an increasingly clear and enabling legal framework, formal transboundary

institutions and on-going cross-border activities designed to transform conflicts and cultivate peace provide key and critical building blocks in the construction of that dream. This chapter outlines the potential for nomoscaping peace in the GVL through its framework of transboundary agreements, cross-border institutions and activities, and integration of traditional/local peace processes and mechanisms. Many obstacles in implementation and gaps in the legal framework will need to be overcome if transboundary conservation is to transform conflicts in the region or to address all of the academic critiques of PAs and TBCAs. On-going critical nomospheric investigations can help to address these on-going challenges and advance the mission of nomoscaping peace throughout the GVL, one of the world's most bioculturally precious and socio-politically unique regions of the world.

6 CHAPTER 6: CONNECTING TRANSBOUNDARY LANDSCAPES: CONSERVATION AND PEACE IN THE GVL AND KIDEPO LANDSCAPE

6.1 Introducing TBCAs and violent conflict

Biodiversity hotspots around the world are under threat from a number of human activities, including land and forest conversion or degradation, pollution, over-exploitation of natural resources, and armed conflict. (Hanson et al., 2009; Myers, 1988; Myers, Mittermeier, Mittermeier, Da Fonseca, & Kent, 2000; UNEP, 2012). Major armed conflicts (>1,000 casualties) afflicted two-thirds (23) of the world's recognized biodiversity hotspots between 1950 and 2000 (Hanson et al., 2009, p. 3). Although ten of the countries hosting biodiversity hotspots were untouched by major armed conflicts, they may have experienced conflicts of lesser scale (<1,000 casualties). Utilizing the concepts of peace (negative and positive) and conflict (violent and non-violent) as understood through three categories (international, social, and ecological), it is hard to imagine that any place is free of the impacts of conflict. Needless to say, the impacts of armed or violent conflict on both people and the environment are particularly tragic.

The impacts of armed conflict on nature can be direct and indirect. Direct impacts (tactical pathways) include physical destruction or degradation of land, resources, or species, which can be intended tactics of war (e.g., fire-bombing forests) or the result of conflict-related activities (e.g.,

exploitation of wildlife for conflict-supporting revenues) (Austin & Bruch, 2000; Bella, 2017; Price, 2003). Indirect impacts (non-tactical pathways) include the effects of conflict-displaced peoples (i.e., refugees and IDPs) and disruption or changes to institutional and economic systems (Bella, 2017; Gaynor et al., 2016). Although some claim that violent conflict can have the positive effect of keeping people and development out of natural environments, thereby inadvertently safeguarding them and even providing opportunity for ecological regeneration (e.g., Demilitarized Zone between the Koreas), many of the effects are indisputably negative (Gaynor et al., 2016, p. 534; Kim, 1997; Le Billon, 1999; A. J. Plumptre et al., 2001). These impacts can affect nature conservation, PAs, TBCAs, and even Parks for Peace, as the case studies in this chapter show.

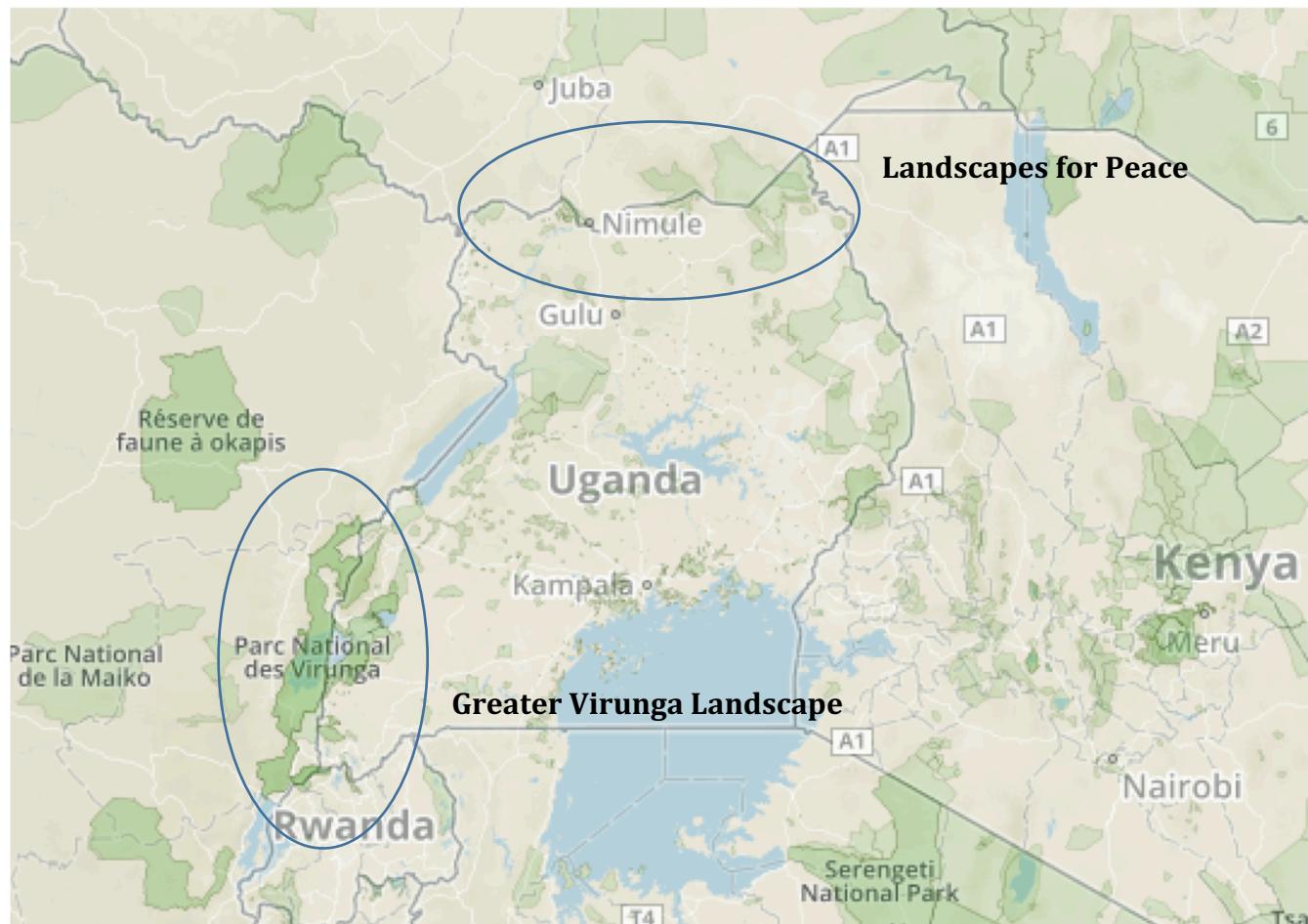
This chapter looks at the GVL and Kidepo Landscape, one of four TBCAs within the broader Landscapes for Peace between South Sudan and Uganda. Both of these landscapes suffer from conflicts of various types, including armed conflict and insecurity. This chapter utilizes the framework developed in Chapter 3 to map the conflicts and laws addressing peace and conflict resolution within the two case studies to identify what is needed institutionally and legally for TBCAs seeking to sustain cooperation throughout violence and perhaps even to transform the conflicts that surround them. It focuses on the different legal approaches to transboundary cooperation that have been designed in the two TBCAs and discusses pros and cons of each modality in the context of conflict resolution and peacebuilding. As each of these case studies presents different peace and conflict issues and TBCA adaptations, their experiences can inform the development of TBCAs in other border areas of the Great Rift Valley or regions of the world. Ideally, this will teach us something of how TBCA cooperation and peace can inspire better

connectivity between land- and sea-scapes everywhere, especially in places where even negative peace evades.

6.2 TBCAs and the ever-elusive peace

Africa's Great Rift Valley encompasses the West (Albertine) Rift Valley and East (Kenya/Gregory) Rift Valley. Where East Africa meets West Africa, the Albertine Rift spans Lake Albert to Lake Tanganyika and to the east, the Gregory Rift runs from the Afar region of Ethiopia south to Mount Kilimanjaro in Tanzania (Seimon & Plumptre, 2012). In the heart of the Albertine Rift is a TBCA known as the GVL between DRC, Rwanda, and Uganda. In the heart of the Gregory Rift is a series of smaller TBCAs or Landscapes for Peace between South Sudan and Uganda. Each of these TBCAs has developed uniquely, though they share at least one common factor – a border with Uganda – making UWA a key partner in all three landscapes. They also experience many similar conservation challenges and opportunities, making them interesting sites of comparison. As two separate landscapes, they have long been connected through regional politics and conflicts, as well as ancient wildlife and transhumance migrations.

Figure 6-1 Map of GVL and Landscapes for Peace



6.2.1 Parks for Peace (and conflict?)

The most fundamental argument for TBCAs is the solution they provide for species and ecosystems requiring connectivity (i.e., territory) unhindered by political or human divides (Vasilijević et al. 2015, xi). The cooperation exists primarily to support ecological connectivity, whether it is for

wildlife or for waterways (Sadoff, Greiber, Smith, & Bergkamp, 2008, p. 6). TBCAs for peace or Parks for Peace attribute another value to transboundary conservation – *peace* – or the possibility that cooperation can triumph over the game theory narrative of self-interested States (Lejano, 2007). Waterton-Glacier, for example, celebrates existing peace between two States (WGIPP Association, nd). La Cordillera del Condor was designated to resolve a long-time border dispute (S. H. Ali, 2018). Some TBCAs have aspirations for peace exactly because they are still experiencing violent conflict (e.g., GVL) (Ruzigandekwe, 2017). In these TBCAs, wildlife poaching, trafficking, and other international environmental crimes can be highly lucrative industries and have been linked to terrorism, non-state militias, contraband, and human trafficking, amongst other human rights violations (Environmental Investigation Agency, 2014; UNSC, 2012).

The United Nations Office of Drugs and Crime (UNODC) has cautioned against exaggerating the contribution of environmental crimes to the subsistence of non-state armed groups in conflict areas. In Garamba National Park (DRC), they claim that “there are so many armed groups present that ivory is unlikely to provide a sustain-able income to any of them” (UNODC, 2016, p. 19). Rather than blaming the conflict, they blame corruption for elephant mortality and ivory trafficking. However, they also note that the IUCN Species Survival Commission (SSC) reports 453,392 elephants in 43 countries at peace and just 20,405 in 11 countries with insurgencies (UNODC, 2016, p. 20). The numbers speak and environmental security scholars have not hesitated to link negative forces financed in part by environmental crimes to insecurity worldwide, not just for wildlife and people within the neat bounds of a TBCA (Lagrone & Busby, 2015). It is undeniable that in some

places nature and peace are challenged by the presence of violent conflict, corruption, and high-value natural resources (Rustad, Lujala, & Le Billon, 2012).

What can TBCAs offer biodiverse land/seascapes in conflict afflicted borderlands? When the IUCN first proposed a definition of Parks for Peace, it considered these places a “particular sub-set of protected areas where there is a clear biodiversity objective, a clear peace objective *and* co-operation between at least two countries or sub-national jurisdictions” (Sandwith et al., 2001, p. 4). The updated definition refers to Parks for Peace as a “special designation...dedicated to the promotion, celebration and/or commemoration of peace and cooperation,” harkening more strongly to a Waterton-Glacier International Peace Park approach to TBCAs for peace (Vasiljević et al. 2015, 14). Peace in this sense could be described as a symbolic designation, rather than an objective of transboundary conservation. Perhaps this retreat from a stronger position on TBCAs and peace is related to a lack of overwhelming evidence indicating that TBCAs can and are impacting positively on peace and conflict transformation in violent borderlands.

In 1991, Luther Brock suggested that “ecological cooperation is a dependent variable that reflects the state of overall relations more than it influences the relations” (Brock, 1991, p. 414). Rather than shy away from high expectations of TBCAs and environmental cooperation as an independent variable capable of shaping relations between peoples, this chapter looks at how TBCAs in violent borderlands are addressing conflict with a vision towards peace. It does not elaborate on the violences of TBCAs as a construct (e.g., imperial histories, neoliberal policies, green militarization), as this emerges inherently through the conflicts and solutions practiced on-the-ground (see

Chapters 1 & 2) (Ramutsindela 2016; Büscher 2013; Verweijen and Marijnen 2016). These case studies illustrate the challenges and the hopes of transboundary cooperation despite violent conflict, looking toward sustainable, if not regenerative, post-conflict peace.

6.2.2 Stories of transboundary collaboration in the Great Rift Valley

Africa's Great Rift Valley is a key region to highlight for a number of reasons. Naturally, it is one of the most biodiverse regions of the world and in terms of violence and conflict, possibly one of the most threatened (Omeje & Redeker Hepner, 2013; A. Plumptre et al., 2003). Most of its PAs are in the frontier lands, marked by porous borders where species, including people, move back and forth regardless of where military and customs posts are located. Geographically, it is defined by some of the continent's most prominent features – the fertile Rift Valley below its Albertine water towers, headwaters to the continent's two largest river systems, the Nile and Congo Rivers, and the Great Lakes, all of which provide sustenance and economic resources for millions (Roberts, 2006; Seimon & Plumptre, 2012).

6.2.2.1 Ecological connectivity

Both the GVL and Landscapes for Peace have known violent conflict and colonization and are interwoven by their historic wildlife and transhumance migrations. Elephants used to move between the Landscapes for Peace and GVL, but are now prevented by human settlements and habitat fragmentation from agricultural land conversion (Anonymous, 2017i). Elephants still move between the four sub-TBCAs of the Landscapes for Peace, crossing from Kidepo Valley National Park (NP) in Uganda to Kidepo Wildlife Reserve in South Sudan and then back again through Moyo-Nimule, some reaching as far south as Murchison Falls National Park in Uganda (Anonymous, 2017i). Historically, this would have been part of their journey onwards to the GVL, but that route is now blocked by human settlements. According to one UWA staff, this is evidenced by the concentration of human-elephant conflicts where traditional corridors now encounter human communities (Anonymous, 2017i; 2007). The GVL is assessed as one of the most critical ecological connectivity corridors in the Albertine Rift for threatened and endemic species and their resilience to anthropogenically-induced climate change (Ayebare et al., 2013).

The PAs within the GVL also provide important refuge for wildlife affected by violence on one side of the border. A 2007 report on elephant conservation in the GVL observed a growing elephant population in Uganda's Queen Elizabeth NP that was alleged to be inexplicable by birth rate alone (A. Plumptre et al., 2007). It was concluded that elephants were fleeing ivory poaching by armed militias and the Congolese military (FARDC) in Virunga NP. Follow-up studies indicated that the

Ugandan elephants may indeed be growing at a natural replacement rate, and more tragically, the stark contrast to the Congolese elephant population is due to large-scale slaughter of elephants in the DRC (Anonymous, 2017c). The hope of Congolese conservationists is that a healthy population in Uganda may one day help to repopulate what has been lost in the DRC due to insecurity, poverty, and poor governance (Anonymous, 2017c). This highlights the value of transboundary conservation, as well as connectivity between the two transboundary landscapes. Elephants crossing from Uganda to South Sudan face the same threat of poaching by armed militias or military (Sudanese People's Liberation Army – SPLA), spurning a strong desire on the part of the UWA to collaborate with South Sudanese partners to ensure their safe return (Anonymous, 2017i).

6.2.2.2 Socio-political connectivity

The socio-political context of these two TBCAs are complex and vary village-to-village, but there are some noteworthy linkages. Human demographics around the TBCAs are often characterized as natural resource dependent for subsistence and livelihoods, economically poor, and in times of conflict or post-conflict peace, present a threat to the PAs (Greater Virunga Transboundary Collaboration 2017, 8–12; Plumptre et al. 2004; United Nations Development Programme 2010). In some places, ethnic groups or tribes share relations straddling the border (e.g., the Bakonzo and Banyarwanda), whereas in others, they inter-raid (e.g., Karamojong, Dading'a, Jie and Dodoth between South Sudan and Uganda) (Leff 2009; Prunier 2011, 82–83). Some of the more isolated

mountain peoples represent highly stigmatized ethnic minority groups, such as the Batwa in the GVL and Ik in Kidepo (Hart-Davis, 1994). All of the TBCA-adjacent communities share a story of conservation-induced displacement as colonial administrators gazetted forest, hunting and wildlife reserves and post-colonial independent States asserted their permanent sovereignty over natural resources through para-military protection of reserves turned NPs (Matovu 2012; Young and Sing'Oei 2011, 22; Hart-Davis 1994).

At times, contingents of these identity-based groups have occupied or “encroached” PA lands and resources in direct conflict with central governments or PAAs. For example, the Mai-Mai militias who exhort taxes from fishing villages around Lake Edward, or the more regionally connected ADF-NALU, who took over the Rwenzori Mountains and trafficked minerals and ivory to perpetuate their reign of terror (Hege et al., 2012, p. 23; Hoffman, 2015; Hoffman, Vlassenroot, & Marchais, 2016; INTERPOL-UN Environment, 2016, p. 58; Kavira Luneghe, 2017; Kule Bitswande, 2017). The ADF-NALU were recruited by President Mobutu (DRC) to destabilize the Ugandan border and while having taken refuge in the DRC, were also liaising with Sudanese intelligence and security supplying the Interhamwe Hutu militia or genocidaires in Rwanda (Prunier 2011, 86–87). It is likely the conflicts, politics, and socio-economic circumstances have spilled across the borders of these States since their delineation during the Scramble for Africa by European colonials (Griffiths, 1986). Clearly, peace or conflict in one nation affects peace and conflict in the whole region, and it has not been easy for PAAs to transform these historical conflicts and improve human-PA relations, as well as human-wildlife relations.

Transboundary conservation in each of these landscapes developed uniquely, but not without some common influences. The common (government) denominator is UWA, providing some consistency in PA governance from one side of the border, including certain key personnel in the central Kampala office. Big international NGOs that have promoted, established, or implemented TBCAs in other regions of the world have also participated in each of these landscapes; namely IUCN, WCS, WWF, and AWF. This provides some “internationalizing” influence as well as institutional learning from other TBCAs – including in the case of WCS, between GVL and the Landscapes for Peace as it participated actively and substantially in the development of both (Anonymous, 2016b). Despite these common influences, the results have differed in many ways.

6.2.2.3 Notes on methodology for field research

This research seeks to learn from the commonalities and the differences and how they impact on the ability of transboundary conservation to transform conflicts and build peace at landscape and regional levels. The case studies that follow provide a brief description of the bioregion, a simplified mapping of the peace and conflict issues in and around the TBCA, a history of its transboundary collaboration and an overview of the legal framework, with an emphasis on how peace and conflict resolution are incorporated in formal legal agreements.

Field interviews were conducted in both the GVL and Kidepo Valley NP in December 2016 – May 2017. Due to insecurity in South Sudan, visits to the Landscapes for Peace were restricted to the Ugandan side and due to time and resource constraints, only Kidepo Valley NP or the Kidepo Landscape was covered out of the four sub-TBCAs. Members of WCS, who had initially supported transboundary conservation in the Landscapes for Peace, reported that cross-border collaboration had halted due to insecurity in South Sudan, therefore more field time was spent in the GVL than in Kidepo Valley NP (Uganda) (Anonymous, 2016b; A. J. Plumptre, 2016).

Field research was based on observation and semi-informal interviews with PA managers and staff, namely in the Law Enforcement, Community Conservation, and Research and Monitoring departments. The Community Conservation Wardens served as liaisons to other interviewees, providing contacts and sometimes coordinating meetings, which when needed were translated on-site by a Community Conservation Ranger. Other stakeholders interviewed include: security officers (military, police, intelligence), local government representatives (village-level and district-level), NGOs engaged in transboundary activities, academics, and Community-Based Organizations (CBOs). The GVTC-ES was also very helpful in providing a number of contacts and access to transboundary meetings.

Communities that were bordering both the TBCA and international boundary were targeted for a better understanding of cross-border social dynamics and conflicts, and to identify traditional conflict resolution mechanisms. Interviews involving local languages were transcribed, but not translated due to resource limitations. The implications are that the author's understanding of

interview participants' responses is based entirely on rangers' translations during the time of interview and may be misinterpreted or biased, especially given the possible influence of a ranger's presence on interviewees' willingness to speak freely. As much as possible, information is further confirmed through secondary literature, media publications, or other interviews.

6.3 The Greater Virunga Landscape

6.3.1 General description of the Greater Virunga Landscape bioregion

The heart of the Albertine Rift was claimed in the “Great Scramble for Africa” and divided by the British and Belgians at the 1894 Conference of Berlin between DRC, Rwanda, and Uganda (Griffiths, 1986). Most prominent are its megamountains tracing continental divides and feeding watersheds of Africa’s two most important rivers, the Congo and the Nile (Liniger, Weingartner, & Grosjean, 1998). Today, the peak of Mount Sabinyo marks the trinational division of the Virunga Massif. From there the border between DRC and Uganda follows Ishasha River north through Lake Edward, traces Lubilia River through the Rwenzori summits to Lamia River, where it joins River Semliki and empties into Lake Albert (Roberts, 2006). This water tower and biodiversity hotspot hosts over 400 endemic species and at least 70 threatened species in one of the world’s most resource rich landscapes, featuring parts of the Congo Basin (second forest lung to the Amazon), African

Great Lakes (Albert, Edward, Kivu) with large fishing industries sitting atop oil and gas reserves, precious metals (e.g., gold, rare earth, coltan) and fertile agricultural land (A. Plumptre et al., 2003). The growing human population of 100 to 1,000 people per km² bordering the TBCA often experience the landscape through economic poverty, natural resource dependency, conflict, corruption, environmental change, and insecurity (GVTC, 2017b, pp. 8–16).

6.3.2 Issues of peace and conflict in the Greater Virunga Landscape

When it comes to the three GVL countries of DRC, Rwanda, and Uganda, there is a long history of violence, suspicion, and manipulation. Colonization and the Scramble for Africa were disruptive forces, leading to divided tribes (e.g., Banyarwanda, Twa) and lumping of hostile tribes (e.g., Rwenzururu and Baganda), fueling ethnic conflicts (Prunier 2011, 1–2). Related social conflicts have transgressed the national boundaries; e.g., the Bahutu-Batutsi conflict is not a Rwandese genocide neatly contained within its territory. Ethnic violence continues to challenge communities in the border areas of the Virunga Massif (Prunier, 2011). The Hutu “genocidaires” often known as the Interhamwe or Democratic Forces for the Liberation of Rwanda (FDLR) are still cited by villagers and security personnel in the Virunga Massif as a threat to security and peace (See Hanyurwimfura, 2017; Nshimirimana, 2017; Nyeramihigo, 2017; UPDF Colonel, 2017).

Description of Interhamwe kidnappings by a local leader near Queen Elizabeth NP (Uganda):

"So those Interhamwe, they came from Rwanda and then they hide in Congo forest where they come out to hijack people. [...] Those hijackers - the Interhamwe - they can cross in Uganda, they get like a neighbour and they say: 'Please [made up name], go and open Karori's ...take us to Karori's place and it is you to call him to open at night.' So, because the neighbour, when he calls Karori...he will automatically open - he will not fear. So they get Karori and take him. [...] So it is the neighbour who will now inform that these are the people who came: 'They got him like this, they took me to open' - like that, yeah, he will spread the message." (Hanyurwimfura, 2017)

Although it is often alleged that Interhamwe conduct armed raids across the Ugandan and Rwandan border from eastern DRC, it is unclear whether these attacks are ethnically or economically-motivated.

Other ethnically-identified militias, such as the ADF-NALU described in Chapter 3, also engage in armed poaching and resource trafficking, contributing to ecological conflicts, including with PAAs (Anonymous, 2017e; Howden, 2009; Verweijen & Marijnen, 2016, pp. 13, 15). Even the Mai-Mai around the central sector of Virunga NP, who largely derive from local communities in the territories they control were described by the local leader of Karambi village in Uganda as a tribe of its own (Nyeramihigo, 2017). The name Mai-Mai refers to "resistance fighters who are invincible" and many of them "are formed on an ethnic basis to protect their communities from 'invasion' or domination by other ethnic groups," but they are sometimes of mixed identity (i.e., Nande, Hunde and Nyanga tribes) (Anonymous, 2018).

Conflicts in the GVL have already been elaborated in Chapters 3 and 5, so only an extraction of the conflict mapping in Chapter 3 is reproduced in Table 6-1 below.

Table 6-1 International, social and ecological conflicts in the GVL

Conflict Type	Description
International/Political	Border Disputes Inter-State Militias Localized Violent Incursions (militias, militaries)
Social	Human-PA Conflicts Ethnic Conflicts Land/Resource-Based Conflicts Rebel/Secessionist Movement Human Rights Abuses
Ecological	Environment and Wildlife Crimes Human-Wildlife Conflict Illegal/Unsustainable Extraction (e.g., oil/gas, fishing) Unsustainable Human Development/Growth Anthropogenically-Induced Climate Change PA Occupancy by Armed Militias Environmental Disasters

6.3.3 History of transboundary collaboration in the Greater Virunga Landscape

Adding to Chapters 3 and 5, the history of TBCAs in Africa is said to originate in the GVL, beginning with the designation of Albert NP in 1925 “to protect mountain gorilla populations on the boundary between the [Belgian] colonies of Ruanda-Urundi and the Congo” (van der Linde, Zbicz, & Stevens,

2001, p. 3; Vasiljević et al., 2015, p. 4). With independence, Albert NP became Virunga NP in the DRC and Volcanoes NP in Rwanda. Just prior to that, early mountain gorilla research was initiated by George Schaller and his protégée Dian Fossey in 1959 (Refisch & Jenson, 2016, p. 5). In 1979 a coalition of international NGOs, the AWF, FFI, and WWF, founded the Mountain Gorilla Project (MGP) in Rwanda (Gray & Rutagarama, 2011, p. 5). Half of the world's mountain gorilla population actually inhabit two NPs in Uganda (Bwindi Impenetrable NP and Mgahinga Gorilla NP), so in 1991, the MGP evolved into the trinational IGCP (Refisch & Jenson, 2016, pp. 5–6).

As IGCP supported transboundary technical meetings in the Virunga Massif (DRC, Rwanda) – Bwindi (Uganda) territory, WCS discovered that the PAAs in DRC and Uganda, ICCN and UWA respectively, had begun informally cooperating in the elephant corridors and savannah lands to the north. In 2003, they facilitated a transboundary meeting between PAAs and local governments in the central and northern sectors of Virunga NP (DRC) and adjacent Ugandan NPs, Queen Elizabeth, Rwenzori Mountains, and Semuliki (A. J. Plumptre et al., 2003, pp. 3–4). As these PAs form part of the critical Central Albertine corridor and share a number of transboundary interests (e.g., illegal fishing in Lake Edward, elephant poaching, human-wildlife conflict, etc.), they were soon after included in the first formal recognition of the Central Albertine Rift Transfrontier Conservation Area Network under a 2004 MoU between the three PAAs (Office Rwandais de Tourisme et des Parcs Nationaux et al., 2004).

Transboundary collaboration in the GVL is often described as a story of “bottom-up” collaboration with cooperation beginning at the “local” level between wardens and NGOs, then rising up to the

ministries and Heads of State many years later (Refisch & Jenson, 2016, p. 6). The 2004 MoU and other transboundary agreements leading up to the 2015 GVTC Treaty, form a paper trail marking the GVTC's era of institutional codification and formalization – a “bottom-up” development only in terms of its initiation from local institutions (PAAs) to inter-national institution-making (GVTC-ES). It was not “bottom-up” in the sense of having origins in the local communities or evolving as a grassroots movement. It has always been heavily supported by international NGOs (i.e., IGCP, a coalition program by three of the world’s largest environmental NGOs, and WCS) and foreign donors (namely the Dutch government and US donors). Even with formal recognition of the transboundary landscape and cross-border institutions, GVTC continues to rely on external support. While the GVTC Treaty remains unratified, the national governments are not obliged to fulfill their financial duties to the GVTC. Currently, the GVTC-ES relies entirely on external donor funding for salaries and project finances, with PAAs subsidizing costs of activities which fall within their purview (e.g., patrols) (Ruzigandekwe, 2018).

6.3.4 How peace is incorporated in the Greater Virunga Landscape legal framework

As described in Chapters 3 and 5, even though the GVTC Treaty does not explicitly refer to peace or conflict, a number of the GVTC’s activities address peace and conflict resolution through a multi-level inter-institutional framework. Interventions typically occur at the Implementation or Technical level, involving GVTC ES and PAAs; e.g., installation of beehives along PA periphery as

human-elephant conflict interventions (GVTC & UWA, 2016). When appropriate, issues are raised to the Board, Council, or Summit; e.g., when accusations of kidnappings, theft, and military incursions along the Sarambwe border were plaguing PA-adjacent communities, a fact-finding mission and meetings between PAAs, local authorities, and military were facilitated by GVTC-ES (Meder & Sikubwabo Kiyengo, 2015). The mission and meetings clarified the situation on-the-ground, improved cooperation between national armies, FARDC and UPDF, as well as local authorities, and provided resolutions for the Board and relevant Ministers to transform border conflicts not only in Sarambwe, but along other areas of common concern (e.g., Kagezi, Lake Edward) within the GVL (Byamukama & Ochen Ochen, 2016; Lutaichirwa Mul wahale, Sekandi, & Muamba Tshibasu, 2017; Mateke, Lutaichirwa Mul wahale, & Muamba Tshibasu, 2017).

The independence and credibility of the GVTC ES has been fundamental in promoting environmental conflict resolution in the GVL. This has allowed the GVTC-ES to facilitate meetings between security personnel in the three countries, which has strengthened partnership and communication between security organs on issues affecting the landscape and surrounding communities (Anonymous, 2017f). In 2018, a communique resulting from a round table dialogue facilitated by the GVTC ES on wildlife conservation and development between DRC and Uganda committed to establish a “permanent framework for communication and information sharing between local administrative entities and security authorities,” demonstrating that environmental cooperation can indeed be infectious – initiating with PAAs and leading to cooperation between other local and government entities more directly concerned with broader regional peace and security (Lutaichirwa Mul wahale et al., 2017). The long-term spillover effects remain to be seen

and it is worth noting that the GVTC ES will need to take measures in its close alliance with security organs and other state authorities to not alienate local communities because of perceived or actual ‘green militarization’ (See Duffy, 2014; Verweijen & Marijnen, 2016).

There are a number of other institutions which operate throughout the region that could be of greater support to peace and conflict transformation in the GVL. GVTC’s partnership with ICGLR is relatively nascent and has helped to unify military cooperation, but functionally-speaking the ICGLR is considered a weak institution and has not yet demonstrated effective influence in conflict transformation throughout the Great Lakes (See Anonymous, 2017e). Closer alliance with GVTC could provide mutual support to both their mandates in the region, particularly in terms of integrated peace. The EAC has participated in GVTC efforts towards legal harmonization of wildlife crimes and is in the process of developing a regional wildlife policy, but has not yet taken on a TBCA policy the way SADC has (GVTC, 2017a). UN agencies abound throughout the landscape, but their efforts have not been appropriately synergized to support the GVTC – not to mention the UN mission in DRC (MONUSCO) has been caught trafficking ivory and minerals from Virunga NP (Anonymous, 2017c).

Regional partnerships for peace must be undertaken with some caution. One researcher has described the European Commission’s armament and training of Virunga NP ranger forces in fulfilment of UNESCO World Heritage Committee decisions, in contrast to the lack of support by UN Peacekeeping forces as authorized by the UN Security Council, as potential threats to post-conflict peace (Sjöstedt, 2017). Sjöstedt questions whether conservation should be financing the

introduction of more guns to an already violent landscape and speaks to the undermining effect of ‘green militarization’ on stable peace. The dangers of ‘green militarization’ in the GVL are not just about negative community relations, it is also about sleeping with the enemy. When elements of MONUSCO, the national armies, or other security partners are compromised, engagement must consider safeguards, transparency, accountability, and conflict-sensitivity (See e.g., Dranginis, 2015, 2016).

The PAAs have undertaken a number of conflict resolution programs themselves. These include revenue sharing and development projects with local communities to reduce the costs of conservation (e.g., through human-wildlife interventions) and more equitably distribute the benefits (Ndayisaba & Kwizera, 2017; Nshimirama, 2017). These neoliberal conservation programs have been likened to counter-insurgency tactics, but as noted in Chapter 5, reception by communities is mixed (Verweijen & Marijnen, 2016). As an alternative to state-based mechanisms that risk aggravating social conflicts (e.g., PA-community relations), ecological conflicts (e.g., revenge killings of wildlife), and potentially even international conflicts (e.g., providing special training for rangers who are later recruited by resource-trafficking militias), the GVTC could look to traditional authorities for indigenous/endogenous peace and conflict resolution mechanisms. As described in Chapter 5, this might involve customary or even spiritual leaders and local institutions like stretcher groups (Hsiao, 2017). It is uncertain whether localized interventions can be scaled up or applied across the landscape. Initially these efforts may want to target cultures/ethnic groups that span the border or undertake a participatory period of process-design.

6.4 Landscapes for Peace with South Sudan: Kidepo Landscape

6.4.1 General description of the Kidepo Landscape bioregion

The Landscapes for Peace identified by MoU between South Sudan and Uganda in 2007 appear as four islands perched on a border infamous for its stories of violence, famine, and child soldiers (Fekadu Mulugeta, 2017; Knighton, 2006). Before that, these landscapes were part of an ancient elephant corridor dotting their path between East Madi and Murchison Falls (Mugumya Nyindo, Muhweezi, & Kiconco, 2011, p. 61). Now they are classified as four smaller TBCAs composed of the individual PAs listed in Table 6-2.

Table 6-2 Protected areas in Landscapes for Peace



The map illustrates the Kidepo Landscape, spanning parts of South Sudan and Uganda. Key features include the Imatong Massif, Kidepo Valley National Park, Karenga Community Wildlife Management Area, and Matheniko Wildlife Reserve. Major rivers like the Juba, Yei, Moyo, and Nimule are shown, along with roads A43 and A1.

Kidepo Landscape	
South Sudan	Kidepo Game Reserve, Didinga and Dongotona mountains
Uganda	Kidepo Valley NP, Nyangea-Napore, Morungole, Zulia and Rom Forest Reserves and Karenga Community Wildlife Reserve
Imatong Massif Peace Landscape	
South Sudan	Imatong Mountains
Uganda	Agoro-Agu Forest Reserve
Otzi-Nimule Landscape	
South Sudan	Nimule NP
Uganda	Otzi and Era Forest Reserves
Mt Kei-Aloma Plateau Landscape	
South Sudan	Aloma plateau (including Iwatoka Mountain)
Uganda	Mount Kei Forest Reserve

These areas feature some of the last-remaining natural woodland patches and important wetlands of the Nile and Congo River basins (UNDP, 2010, p. ii). Nimule funnels the White Nile River, tracing back to Lakes Albert and Victoria, while the Imatong and Didinga Mountains form a watershed between the Nile and Congo river systems (UNDP, 2010, p. 7). Kidepo Valley specifically, is an attractive wildlife destination because the Narus Valley provides a perennial water source and open gathering space for a diversity of species (UWA, 2018).

Before Idi Amin, the Kidepo Valley was considered prime hunting land, but wildlife populations declined dramatically during the decades of terror and civil war that followed (Rugadya & Kamusiime, 2013, p. 34). In some areas, however, vegetation regenerated as internally displaced people (IDPs) moved away into camps and urban areas (Nampindo, Picton Phillipps, & Plumptre, 2005, pp. 9–10). Since peace returned to northern Uganda and Karamoja, it is believed that charismatic species like elephants and lions have been increasing in numbers (Aleper & Moe, 2006; Okot Omoya et al., 2013). This indicates that the Ugandan PAs might be critical refuges for wildlife afflicted by insecurity in South Sudan. Uganda is also a major sanctuary for human refugees, many of whom pass through the Kidepo Landscape (Anonymous, 2017j).

Insecurity and poor governance are two of the greatest threats to the Kidepo Landscape, but while peace grows in the Kidepo Valley on the Uganda-side, threats turn to post-conflict development, resettlement, land grabbing, or other social and ecological conflicts resulting from increasing human populations and activities (Carmody & Taylor, 2016; Rugadya & Kamusiime, 2013; Sundal, 2010; Wolf, 2010). As a high-level Government of South Sudan official was once quoted, “we could not have progressed in our struggle without wildlife meat, and we now must protect wildlife as a Peace Dividend” (UNDP, 2010, p. 11). Clearly, the relationship between people and wildlife during peace and conflict varies and the Kidepo Landscape is currently straddling both sides of the line.

6.4.2 Issues of conflict and peace in the Kidepo Landscape

People have long moved through the Kidepo Landscape with their livestock, interacting with each other, other tribes, and with nature (Abach, nd, 2017; Opiyo, 2011). Many Karamojong sub-clusters, in Uganda the Dodoth and Napore, and in South Sudan, the Didinga, Jie and Toposa are well-known for their (agro-)pastoralism and inter-tribal conflicts (Abach, nd; Leff, 2009; Okongo, 2017). Also intersecting in the Kidepo border area are the Turkana warriors from Kenya and the Ik, who literally eek out their existence at the cross-roads of all these other tribes (Dyer, Omondi, & Wantsusi, 2008; Turnbull, 1987). Ik settlements sit within a key cattle rustling corridor used by Didinga from the north, Turkana from the east and Karamojong and Jie from the west (Anonymous, 2017i). This makes it extremely challenging to accumulate material wealth, so the Ik historically subsisted on hunting and gathering rather than cattle-keeping or cultivating (Hart-Davis, 1994).

After their traditional lands were gazetted into Kidepo Valley NP, the insecurity of cross-border raiding and famine crippled development and prosperity, leading the Ik to abandon their own sick or elderly during the peak famines of the 1960s (Harmon, 1987; Hart-Davis, 1994; Turnbull, 1987). Along with the Batwa, whose traditional lands straddle the DRC/Uganda border, Ik and the other Karamojong ethnic groups are considered the most marginalized minority in Uganda (FPP, UOBGU, & IWGIA, 2009; Okiror, 2008). The formerly small-scale cultural clashes between cattle warriors have become armed massacres linked to communities and criminal networks across the borders (Leff, 2009, p. 191; Mkutu, 2008, p. 100). Armament in Karamoja has always been linked to wildlife,

with the first arms being introduced by ivory hunters and traders around 1910 (Mkutu, 2008, p. 103). Disarmament has been coercively attempted numerous times, leading to armed resistance and hostilities against the UPDF and central government (Mkutu, 2008, p. 100; Stites & Akabwai, 2010).

Despite local violence, relations between Kampala and Juba have generally been good, particularly considering President Museveni's support to the SPLA while fighting the Lord's Resistance Army (LRA) and Khartoum-government (Nicolaisen, Heggli Sagmo, & Rolandsen, 2015; Prunier, 2011, p. 87). Kidepo's conflicts are generally local or regional with cross-border linkages and not international conflicts between the States of South Sudan and Uganda. As the more stable neighbor, Uganda is one of the world's top refugee-receiving countries, officially hosting over one million from South Sudan alone (UN News Service, 2017). There are also an unknown number of unofficial refugees, who have integrated into Ugandan communities rather than settle in refugee camps where their livelihood opportunities are severely limited (Okongo, 2017). In April 2017, drought-induced famine brought over 60,000 Turkana 'refugees' with 127,000 livestock from Kenya into the Uganda-side of Karamoja (Caldwell, 2017).

Intractable insecurity in South Sudan may be taking its toll on South Sudan-Ugandan relations, however. South Sudanese rebels have been accused of recruiting fighters from Ugandan refugee camps, which does not help Uganda's reputation for harboring rebels or enemies of its neighboring States (Correspondent, 2017; Kamoga, 2017; UNSC, 2017). There are some concerns that relations have strained also due to conditions and perceptions of refugees; increasing conflicts over

undemarcated borders (which in one instance led to 10 deaths and several thousand displaced when Uganda attempted to conduct its national census in disputed territories of Moyo and Kajo Kejji in September 2014) and natural resources (primarily water and land); and the over-extension of Uganda's military support in South Sudan (e.g., deployment of UPDF to combat opposition around Juba) (Nicolaisen et al., 2015).

With resettlement or the return of Karamojong and Luo to lands abandoned during the LRA conflict, refugee proliferation, and post-conflict development interests, land conflicts, and fear of land grabbing abound. Some local residents blame UWA for converting community lands to PAs while they had fled LRA violence; now finding themselves displaced from their ancestral homesteads after government-imposed post-conflict resettlement (Carmody & Taylor, 2016, pp. 114–116). Rugadya and Kamusiime note that “today the demarcation of the gazetted areas is perceived as land grabbing. Even though it was common knowledge that much of the land in the region was under protected status” (Rugadya & Kamusiime, 2013, p. 40). UWA had based its boundary demarcations on land surveys taken when people had abandoned the lands, so they recently underwent a more participatory boundary demarcation process supported by AWF (Anonymous, 2017h; Rugadya & Kamusiime, 2013, p. 40). According to some scholars, coercive disarmament, extreme poverty, and low levels of formal education or exposure to property laws, communal land and resource laws, put these communities and their rights at risk of “ceasefire capitalism” or land grabbing through military-state formation for exploitation by extractive industries and transnational corporations (Carmody & Taylor, 2016; Rugadya & Kamusiime, 2013; Woods, 2011). The Kidepo Landscape remains in a state of negative peace at best, with great insecurity, especially

in South Sudan. Table 6-3 provides a list of some of the major categories of conflicts in the TBCA.

Table 6-3 International, social and ecological conflicts in the Kidepo Landscape

Conflict Type	Description
International Peace	Border Disputes (Logaba/Moyo/Yumbe/Adjumani/Lamwo) Localized Violent Incursions (inter-ethnic, not militarized) Political Relations Generally Good
Social Peace	Human-PA Conflicts Ethnic Conflicts: armed cattle raids Land/Resource-Based Conflicts: land grabbing, drought and water conflicts also tied to ethnic conflicts Rebel/Secessionist Movement (South Sudan) Human Rights Abuses
Ecological Peace	Environment and Wildlife Crimes Human-Wildlife Conflict Illegal/Unsustainable Extraction Unsustainable Human Development/Growth: post-conflict resettlement and infrastructure Anthropogenically-Induced Climate Change PA Occupancy by Armed Militias (South Sudan) Environmental Disasters: drought-induced famine

6.4.3 History of transboundary collaboration in the Kidepo Landscape

Transboundary conservation in the Kidepo Landscape has a much shorter history than in the GVL. There was some informal cross-border collaboration when South Sudan was still a part of Sudan, but that is not well-documented and likely ceased during the various conflict years. In 2005, WCS funded by the United States Agency for International Development (USAID), produced a report on

“The Impact of Conflict in Northern Uganda on the Environment and Natural Resource Management,” which included consideration of three potential peace parks in the Imatong Massif, Greater Kidepo, and Otzi-Nimule (Nampindo et al., 2005). Between 2007-2010, WCS in partnership with UWA conducted aerial surveys to determine what wildlife was left after the war (UNDP, 2010, p. ii). They found that with IDPs moving towards roads, urban centers, and military posts, much of the vegetation had regenerated and recovered to pre-war conditions over 25 years before (Anonymous, 2016b). As part of a broader strategy to rebuild the PAs system in South Sudan and integrate them into a post-conflict nation-building and development strategy, WCS and USAID supported dialogues between the nascent Government of South Sudan and the Government of Uganda, which resulted in an MoU in 2007 “On the Management of Transboundary Conservation Landscapes for Peace” (Governments of Southern Sudan and the Republic of Uganda, 2007). That same year, South Sudan and Uganda signed a bilateral “Agreement on Technical, Economic, Political, Social and Cultural Cooperation,” indicating that relations between the newly independent nation and its southern ally were strong.

In 2009, WCS received a USAID grant to implement the transboundary program (Anonymous, 2016b). Initial high-level meetings were held until 2011, but according to WCS:

“these did not really quickly translate into real action on the ground, seeing rangers on the other side coming to Uganda or rangers from this side going to the other side. The type of surveillance that was being done was purely aerial, flying over the area and the SPLA allowing UWA to fly over the boundaries but not going beyond 20km, coming back, basically helping to track illegal armed people in the region” (Anonymous, 2016b).

According to UWA, there were cross-border visits and coordinated patrols, but when insecurity returned to South Sudan in 2014, these diminished and became largely one-way visits of the South Sudanese going to Uganda and then none at all (Anonymous, 2017i). With peace in northern Uganda, UWA is eager to secure the support of their South Sudanese counterparts in protecting big game species (especially elephants) as they migrate seasonally out of Ugandan protection and into conflict zones in the north (Anonymous, 2017i). The Kidepo Valley NP Law Enforcement Warden remarked that “we have the will to do it. The other side, they’re not in a position to do it, just because of the insecurity that is there...if South Sudan does not get peace, our borders and our animals cannot be safe still” (Okiring, 2017).

Unfortunately, by accounts from UWA and WCS, South Sudanese PAAs have fled Kidepo Wildlife Reserve due to the resurgence of overwhelming insecurity since 2016 (Anonymous, 2016b, 2017i; Okiring, 2017). Without an official counterpart, UWA has tried to collaborate with the South Sudanese military personnel stationed in and around the park, but military units are constantly reassigned to other territories resulting in insufficient consistency to sustain cross-border cooperation (Anonymous, 2017i). Furthermore, the South Sudanese army has been openly linked to ivory and other resource trafficking out of Kidepo Game Reserve and has not yet expressed an interest in wildlife protection (J. Delaney & Sautner, 2016; Doki, 2014). As is common in TBCAs facing violent conflict, cross-border cooperation has stalemated earlier dreams for a newly seceded nation flexing its diplomatic relations to wield its natural resources for the protection of national heritage, regeneration of wildlife, and sustainable development for long-term stable peace (See Waisová, 2015).

6.4.4 How peace is incorporated in the Kidepo Landscape legal framework

Lack of collaboration between PAs in South Sudan and Uganda means the 2007 MoU on Landscapes for Peace is unimplemented and could become ‘paper parks.’ The 2007 MoU had high hopes for post-conflict peace:

“Conscious that these areas and their people have suffered as a result of armed conflict over the past many years and the return of peace to the region presents an opportunity to continue building on this peace to reduce the potential for conflict over natural resources.” (Governments of Southern Sudan and the Republic of Uganda, 2007, para. 3)

It called for the establishment of an Inter-governmental Steering Committee and Site Technical Committees to operationalize the MoU and the transboundary collaboration was to “deliberately support conflict resolution and promote peace and stability in the border areas” and “establish dialogue, build trust and confidence between our peoples” (Governments of Southern Sudan and the Republic of Uganda, 2007, p. Arts. 3, 9). As the primary proponent of transboundary conservation in the Landscapes for Peace, WCS considered the main objective to be peacebuilding, but having received criticism of the concept Parks for Peace or Peace Parks, they opted to call it Landscapes for Peace instead (Anonymous, 2016b; A. J. Plumptre, 2010). WCS believed that supporting international peace would in turn strengthen ecological peace for species that crossed between the two countries and with the political climate of that time, it was essentially obligatory to speak of peace in order to open doors for a conversation on conservation (Anonymous, 2016b).

When USAID funding to WCS' facilitation of transboundary activities ended and insecurity compelled the South Sudanese PAAs to flee their jurisdictions, transboundary activities lost the continuity of support that was so important to sustaining collaboration in the GVL throughout conflict (Martin et al., 2011; A. J. Plumptre, 2003, pp. 83–84). Plumptre's survey of PA staff in Volcanoes NP in the GVL and Nyungwe NP (part of another TBCA on the Burundi-Rwanda border) who stayed on "despite the loss of all senior staff, the suspension of regular salaries, and threats to their lives" during the war and genocide of the 1990s identified junior staff, maintained presence of long-term projects with funding, care for employees (including families of murdered staff), good communication (with capital and safe zones), and education of local communities as key (A. J. Plumptre, 2003, pp. 85–89). In times of crisis, support on-the-ground could translate to sustained transboundary cooperation – or at least the presence of a transboundary counterpart.

In UWA's case, the Kidepo Landscape PAAs have tried to maintain some semblance of cross-border engagement. Without a PA counterpart and little success partnering with the military, UWA is now piggy-backing on local peace processes facilitated by the Catholic Diocese (Lobeerei, 2017). In May 2017, the Catholic Diocese facilitated a youth dialogue, bringing approximately 50 young people from Birra, Lotukei, and Mening in South Sudan to Karenga, Uganda where the Kidepo Valley NP headquarters is based (Anonymous, 2017i; Lobeerei, 2017). UWA staff participated in this 2-day event, educating the youth on the importance of wildlife, the potential for peace through conservation and benefits of collaboration, then toured them around Kidepo Valley NP so that they could see the abundance of wildlife and tourism revenues that thrive with peace (Anonymous,

2017l). When South Sudanese poachers are arrested in Uganda, there is some coordination with local leaders to handle turnovers or prosecutions and if needed, UWA or its UPDF liaisons communicate with the SPLA regarding security matters (Okiring, 2017).

The recurrence of UWA arresting South Sudanese for poaching or trespassing with livestock in the park has been generating animosity by the communities across the border against the rangers (Lobeerei, 2017). During a field visit in May 2017, I was advised that field interviews with an UWA escort on the South Sudan side would not be advisable given the recent arrests by UWA of a number of South Sudanese poachers from the border-adjacent villages (Oryema, 2017). The local Catholic priest suggested that I accompany him instead, as his clerical garb serves as a well-accepted cloak of neutrality on the other side of the border. In Uganda, when arrests are made in a particular village, usually some community outreach activity will follow (Okiring, 2017). However, given that the South Sudanese communities fall outside of their jurisdiction, UWA is not able to follow-up in this way to smooth over community-PA relations and there is no other PAA to support them in lieu (Anonymous, 2017i). Without the environmental awareness-raising opportunities provided by the Catholic peace processes, the villages on the South Sudanese side may emerge from these ongoing conflicts with little regard for the wildlife or PA-status of Kidepo Wildlife Reserve.

Prior to the insecurity, UWA had supported its South Sudanese counterparts in Kidepo Wildlife Reserve to conduct community education programs, preaching on the values of protecting wildlife and the benefits of conservation (Anonymous, 2017i). Plumptre's study also proposed that environmental education and awareness of local communities is important to supporting rangers

in continuing their work during armed conflict (A. J. Plumptre, 2003, pp. 85–89). Therefore it is important that UWA continue its collaboration with the Catholic Diocese to maintain the message of conservation while insecurity in South Sudan persists. Unfortunately, environmental education and awareness is not mentioned at all in the 2007 MoU. Even in the GVL, only a generic reference to promotion of biodiversity conservation is included once.

Overall, transboundary cooperation has not been abandoned, although the current level of cooperation is low. The hope is that with greater stability in South Sudan, the PAAs might return to Kidepo Wildlife Reserve and more integrated collaboration can continue (Anonymous, 2016b, 2017i). In the meantime, there may be a few alternatives. A UWA Legal Officer suggested that the issue of transboundary conservation could be raised through the EAC by the two governments in a manner similar to, or potentially under, the Northern Corridor Integration Projects (NCIP) (Anonymous, 2016a). The NCIP permits Member States to ‘fast-track’ regional projects (e.g., Standard Gauge Railway) that the rest of the EAC may not yet be prepared to engage in (Anonymous, 2017d). Kenya, Rwanda, and Uganda began the NCIP, adding South Sudan once it achieved EAC membership (NCIP, 2018). Under the NCIP is a Cluster on Mutual Peace and Security Cooperation, as well as a Cluster on Tourism, either or both of which could undertake operationalization of the Landscapes for Peace in its current circumstances. Other multilateral regional institutions could potentially do the same; e.g., ICGLR or the Inter-Governmental Authority on Development (IGAD).

There are also non-State options. In the GVL, it was helpful to have an NGO-State model of cooperation when State-to-State relations were challenged by conflict (Martin et al., 2011). The Landscapes for Peace initiative originated with this type of NGO-State relationship under WCS's programs funded by USAID, but without the renewal of USAID funding, even the NGO-State partnership has ceased to facilitate cross-border activities. WCS or another NGO operating in the region (e.g., AWF, IUCN) could seek new long-term funds to support transboundary projects that can be sustained despite insecurity (maybe even to transform conflict) and in the absence of PAAs in South Sudan. It should be noted, however, that WCS had opted not to pursue this path originally because they felt that the governments should take over the process and own it if it was genuinely valuable to them (Anonymous, 2016b). As an alternative to NGO-State partnership leading to State governments taking ownership of transboundary conservation (as attempted in the GVL), the championing NGO(s) could develop community-based security and conservation projects on both sides of the border and take a TBICCA approach. Given that Kidepo Valley NP is adjacent to the Karenga Community Conservation Area (KCCA) where most of the wildlife ranges seasonally and the pastoral communities of both countries have a long history of co-existence with wildlife, transboundary conservation involving communities is an imperative.

The border is currently much more porous to local communities than it is to UWA staff and these communities, despite all the inter-raiding, share common practices and ceremonies in peacemaking that endure today (Abach, 2017). Traditionally, clan issues can be resolved when elders gather at sacred tree groves or 'shrines' to discuss their conflicts (Abach, 2017; Oryema, 2017).

"We try also as a sub-county to resolve the clan issues by bringing back the elders together and they talk together. Some Karamojong they come, they say 'we are killing ourselves, these things have brought us bad omen.' So there are some of these places that people have been going for these kind of, what people call *kalongat*. They go there sometimes to pray, to possibly take away some bad happenings within the society."

(Abach, 2017)

This authority also extends to manage environmental matters:

"Well, in one way or another, in terms of environmental protection, the shrines and the authority of the elders was actually more holding. Look, for example, this area that we are sitting in. This area could be bare by now. There wouldn't be there any of these trees. It used to be clean, but far back '95, '96, '91, the elders sat and said, 'Nobody...', the community sat and said, 'We should not cut these trees. Let's leave them.' It used to be shrubs, small shrubs, but now they have grown and become big trees. So people said, 'Let's leave them, protect them, so that they can protect these stones from rolling down to us.' So it was done and that's why these small things are surviving, otherwise by now we'd have stones rolling because it was really terrible by then. There would be complete erosion." (Abach, 2017)

Research in Nepal has shown that strong community governance of natural resources improves both community resistance and forest resilience to occupation by insurgents (Baral, 2009). For multiple reasons, evolution of a transboundary community-based approach to cooperation in the Kidepo Landscape could be meaningful (See Hsiao, 2010). Given the intertwined histories and cultures of communities on both sides of the border, it could be possible with the guidance of traditional elders, participation of young warriors, and the financial backing of long-term donors.

6.5 Designing transboundary collaboration for conflict-resilience

The GVL is now an internationally recognized multilateral inter-institutional collaboration, but not so many years ago, it was in a similar situation to the Landscapes for Peace. The need for transboundary cooperation to protect the world's only mountain gorillas was evident since the first Albertine PA's inception, but it was not until decades later that cross-border planning and coordinated activities began to happen (Gray & Rutagarama, 2011). Although the Landscapes for Peace initiative started over 10 years ago, it is still just beginning in many ways.

Even for the much longer established GVTC, multilateral cooperation remains fragile. Virunga NP's Chief Park Warden Emmanuel de Merode is frequently criticized for his lack of participation in transboundary activities. During field research, ICCN officials from Kinshasa or even Goma attended regional meetings but coordinated patrols and wardens' meetings at PA-level had ceased without de Merode's support (Anonymous, 2017g). It is difficult to opine whether his approach to conservation triage in the highly insecure Virunga NP where rangers are killed regularly and even tourism was shut down from May-December 2018 after the kidnapping of two British tourists is more pragmatic, or whether the transboundary cooperation could provide added-value towards his efforts (Bottrill et al., 2008; Sims, 2018). Perhaps if the contribution of TBCAs towards peace were more remarkable, this would not be a question.

6.5.1 Bottom-up vs. top-down approaches to TBCA design

Meanwhile, as higher-level formalization and political activities have increased in the GVL, the original backbone of field-level PAA cooperation (coordinated patrols) seems to be diminished. The wardens still have opportunities to meet when other transboundary gatherings happen, and the mountain gorilla census launched in March 2018 is still underway in Bwindi Impenetrable NP and Sarambwe NP in DRC. The lack of coordinated patrols does not signify a complete breakdown in field cooperation and a shift away from the traditional security and law enforcement partnership towards relationship-building and on-going research may have a positive effect for strengthening social peace. Nevertheless, the sustainability of the GVTC's activities are at least somewhat challenged given that the GVTC-ES relies heavily on one donor for its funding (GVTC Secretariat, 2018a).

Both TBCAs started with an MoU, but the GVL was more of a 'bottom-up' approach beginning with PAAs. The Landscapes for Peace MoU is signed by the corresponding Ministers of Environment on behalf of their respective Governments, marking a much higher-level inter-governmental agreement. Naturally there are advantages and disadvantages to different levels of entry into transboundary collaboration. GVL's approach – partnership of PAAs supported by NGOs – was deemed appropriate by its early proponents because of the poor relations between central governments (Martin et al., 2011). A more 'top-down' approach can work when relations between governments are stronger, as between South Sudan and Uganda. According to John Hanks, the first

CEO of the Peace Parks Foundation in Southern Africa, “if you can have this high level of political support it definitely makes a difference in getting things up and running” (Hanks, 2017). Hanks also notes that once the green light is given by the Heads of State, it is imperative that the other levels of government push forward operationalizing cooperation.

“I think we were successful because we had this high-level of government support and that was backed up by doing a lot of work with the government departments in each of the countries concerned.” (Hanks, 2017)

Schoon’s analysis of institutional path dependence in the Greater Limpopo Transfrontier Park (GLTP) and Kgalagadi TFCA observes that “the bottom-up genesis of a transboundary park results in more collaborative responses at an operational level than a top-down origination,” which in turn, he posits supports greater institutional resilience (Schoon, 2013, p. 425). Adding support to Hanks’ observation of the value of high-level collaborations, Schoon notes that in the GLTP, “the top-down emergence of the transboundary park has resulted in a high degree of success in the achievement of goals requiring senior government officials and crossing a breadth of governmental ministries” (Schoon, 2013, p. 426). In other words, TBCAs initiated at a high-level are better at dealing with high-level matters and TBCAs initiated at the operational level are better at maintaining operations throughout different circumstances. In the survey of TBCA practitioners (Chapter 4), it is noted that political support is important to the success of cross-border conservation and in times of conflict, lack of political will can be fatal. If Schoon’s hypothesis that institutional design at the outset of collaboration can determine path dependence for institutional resilience is true, then it is possible that the Landscapes for Peace initiative was inappropriately designed.

Given the fragility of peace in the region, a more 'bottom-up' approach could have provided a baseline of operational cooperation that if bolstered by Plumptre's suggestions based on the experiences of Nyungwe NP and Volcanoes NP in the GVL, might have produced a different pathway of greater resilience (A. J. Plumptre, 2003). It may have also benefited from a grass-roots approach, creating instead, a community-based TBCA that takes advantage of a long history of peacemaking and biocultural connectivity by agro-pastoral communities moving across the borders (See Hsiao, 2010). The communities have been maintaining peace dialogues since 1998:

"Of recent, early 2000's late '90s, we integrate ourselves into mitigating human conflict across the border, especially talking to our fellow brothers along the border that we are only given these borders because of this colonial type era when they came and told us, gave us these lines, but we are all one and these animals, they are all ours. So we talked together, we had meetings. Of course you cannot change a person shortly, it is a gradual process. We took time talking to them, coming back talking to them, coming back talking to them, coming back talking to them. So we had several meetings...We started in '98, '99, all the way up to last year we had meetings in South Sudan. Different actors, we started as local government. We brought up local development partners. We had organizations like the church also contributed, the Catholic Church...and many others that I cannot mention, both in South Sudan and here. But we were all trying to mitigate the conflict and we have been able to mitigate at State level with State Ministers, at the county levels with county leadership and at karaal level with karaal leaders. We had all those interventions, even had the youth at the church level and had some exchanges about the youth across the borders." (Abach, 2017)

It appears the community peace dialogues of South Sudan and Uganda already have a multi-institutional bilateral structure similar to the GVTC. UWA's integration into the community dialogues would help to complement this by supplementing the environmental dimensions, which

are inherently closely linked to social conflicts in the region. The agro-pastoral conflicts of Karamoja are “influenced by climatic variations and consequent drought and food crises,” then made worse by environmental degradation that deteriorated land productivity (Opiyo, 2011, p. 22). A ‘greening’ of the existing peace dialogues could address root causes of conflict, providing an interesting twist on ecological peacebuilding that is typically premised on a converse causal relationship whereby ecological cooperation strengthens relations and dialogue options for peace. In this case, peace dialogues could pave the path back to ecological cooperation.

The status of the two TBCA’s legal frameworks are a reflection of the robustness of their transboundary cooperation. Naturally, multilateral agreements require time and ongoing coordination and discussions to produce outcomes (Hanks, 2017). The GVTC Treaty negotiations spanned a decade and still remains unratified almost three years after its signing. Nevertheless, GVL cooperation remained active during this time, providing consistent impetus for higher-level formalization that could strengthen arrangements on-the-ground (GVTC Secretariat, 2018a, 2018b, 2018c). Kidepo Landscape cooperation, however, has ceased between the original partners to the 2007 MoU and remains active only with local leaders, religious groups, and to some degree, with the military (Anonymous, 2017i; Okiring, 2017). This suggests the importance of engaging all relevant stakeholders in transboundary agreements, a finding which was also echoed in the survey of TBCA practitioners.

TBCA agreements are rarely negotiated between non-State partners. A few exceptions are, *inter alia*: (1) the Bjeshkët e Namuna/Prokletije Mountains TBCA between Albania and Montenegro

which is a cooperation between Local Action Groups; (2) the Balkan Transboundary Peace Park initiative between Albania, Montenegro and Kosovo which is represented by a coalition of civil society and local authorities; or (3) the Nawt-sa-Maat Alliance for the Salish Seas between Canada and the USA by an alliance of First Nations (LAG of Albania & LAG of Montenegro, nd; Local Authorities of Municipalities/Districts of Shkodra, Bajram Curri, Plava, Rozaje, Peja and Decani, 2006; Sparrow, Brown, Lane Jr., Bob, & Frank, 2014). It is common, however for PAA signatories to TBCA agreements to later sign MoUs with community organizations or groups for resource-use, PA access, human-wildlife conflict interventions, etc. In the Kidepo Landscape and other sub-TBCAs of the Landscapes for Peace, UWA could enter into MoUs with local leaders and partners to formalize some of the transboundary dialogues that have been happening and to engage in further work to support cross-border conservation and conflict transformation. This would build on the existing transboundary legal framework currently premised on a single inoperative MoU and recalibrate the institutional pathway for the Kidepo Valley/Landscapes for Peace.

6.5.2 Naming peace explicitly

The existing legal frameworks for the GVL and Kidepo Valley address peace to some degree (at least in verbiage), but they do not explicitly address all aspects of international, social, and ecological peace. Table 6-4 lists specific references in each of the TBCA agreements that refer to the various conflicts mapped in Tables 6-2 and 6-3 under each of the three categories of peace.

Table 6-4 Mapping law and peace in the GVL and Kidepo Valley

		Greater Virunga Landscape	Kidepo Valley
Legal Instruments		Treaty: 2015 GVTC Treaty MoUs: 2014 ICGLR/CEPGL, 2013 HQ Agmt, 2006 Revenue Sharing, 2004 Trilateral MoU Declarations: 2008 Rubavu Declaration, 2005 Goma Declaration Other: 2009 GVTC Board Minutes	MoUs: 2007 MoU
Int'l Peace	Peacebuilding	2004 Trilateral MoU Art. 3(e) 2014 MoU ICGLR/CEPGL pp. 10, Art. 4(2) 2015 GVTC Treaty Art. 6	2007 MoU pp. 1, 3, 4
	Peacemaking	2008 Rubavu Declaration op. 7	2007 MoU Art. 12
	Dispute Resolution	2004 Trilateral MoU Art. 8 2006 Revenue Sharing Art. 8 2009 GVTC Board Minutes para. 6(e) 2013 HQ Agmt Art. 15 2014 MoU ICGLR/CEPGL Art. 15 2015 GVTC Treaty Art. 17	2007 MoU Art. 12
	Border Disputes	2014 MoU ICGLR/CEPGL Arts. 4(2), 7(4)	2007 MoU Arts. 8, 9
	Inter-State/Local Militias	2008 Rubavu Declaration pp. 6, op. 6 2014 MoU ICGLR/CEPGL Arts. 4(2), 6	No references
	Refugees/Displaced Peoples	2014 MoU ICGLR/CEPGL Art. 6	No references
	Human-PA Conflicts	No specific references: enhancing benefits, poverty reduction, livelihoods development, participation 2004 Trilateral MoU Arts. 3(e, i) 2005 Goma Declaration pp.1, Art. 4 2006 Revenue Sharing pp. 6 2008 Rubavu Declaration pp. 5, ops. 1, 2, 3 2014 MoU ICGLR/CEPGL Art. 7 2015 GVTC Treaty Art. 5 Guiding Principles I(c) & (e), Arts. 13(a), 14(a)	2007 MoU Arts. 8 & 9 (participation), 10 (socio-economic development, livelihoods)
Social Peace	Ethnic Conflicts	No references	2007 MoU pp. 3
	Land/Resource Conflicts	No references: land use planning and management 2004 Trilateral MoU Art. 3 2015 GVTC Treaty Art. 13(a)	2007 MoU pp. 3
	Rebel/Secessionist Movements	No specific references: see Armed Groups	No references

	Human Rights Abuse	No references	No references
Eco-Peace	Environment and Wildlife Crimes	2014 MoU ICGLR/CEPGL Arts. 7 & 8 2015 GVTC Treaty Art. 13(a)	General references to conservation, ecological integrity and sustainable management: 2007 MoU pp. 1, Art. 6
	Human-Wildlife Conflict	No specific references: see Human-PA Conflict	
	Illegal/Unsustainable Extraction	2014 ICGLR/CEPGL MoU Arts. 7, 8 2015 GVTC Treaty Art. 13(a)(i & iv)	
	Unsustainable Human Development	2004 Trilateral MoU Art. 3(c) 2014 ICGLR/CEPGL MoU Arts. 7, 8 2015 GVTC Treaty Arts. 5(d), 7, 13(a)	
	Climate Change	2014 ICGLR/CEPGL MoU Art. 8(1)	
	PA Occupancy by Armed Militias	2008 Rubavu Declaration pp. 6, op. 6 2014 ICGLR/CEPGL MoU Arts. 4(2), 6	
	Environmental Disasters	No references	

As is evident in the table, not all of the conflicts identified in the landscapes are explicitly addressed in their legal framework. Furthermore, when considering stages of conflict, which provide nuanced approaches to conflict intervention (e.g., polarization, war, reconciliation, etc.), there is even less specificity. The GVTC agreements speak to environmental peacebuilding and support to peace processes and the Landscapes for Peace 2007 MoU talks about preventing resource conflicts, but this does not provide clarity as to how or whether the explicit mention of resource conflict prevention excludes interventions for conflict containment and settlement.

As with ‘bottom-up’ vs. top-down’ institutional design, there are pros and cons to taking a more ambiguous or generic approach as opposed to detail and specificity in legal drafting. Too much direction could limit or restrict approaches, while lack of direction could limit the authority of actors intervening on behalf of peace or conflict transformation. State institutions like PAAs must act within their mandates, which are typically biodiversity protection, ecotourism, and PA

management. Conflict intervention and transformation could be perceived to fall outside of their legislated roles and responsibilities. TBCA agreements provide an opportunity to broaden the scope of their work to include cross-border relations, typically the ambit of foreign ministries, and coordinated border patrols, the work of militaries. If the legal agreements are going to support PAAs in conflict resolution and peace, those mandates need to be made clear.

The GVTC has managed to some degree to bridge these gaps through its RTCs. During the January 2017 Law Enforcement RTC meeting in Goma that I attended as an observer, the group of military officers, police, customs agents, judiciary, and PA wardens from the three countries determined that its first priority was “Peace and Security” and then proceeded to outline a series of activities and responsibilities towards securing that common goal (Uwingeli, 2017). In this way, explicit mention of joint security interventions in the GVTC Treaty is not as necessary, given that it has established (or formalized) a functioning multilateral coalition between partners that are separately mandated with corresponding duties. In other words, customs agents, police, PA wardens, and the military do not all share the same mandate when it comes to peace and security, but they do each carry their own piece of the puzzle that is important towards achieving that common goal. Furthermore, the Chief Park Warden of Volcanoes NP (Rwanda) attributed this broadened inclusivity to the signing of the Treaty:

“But, you know, engaging people is the most useful, productive approach and without the treaty you can't achieve it easily, because bringing onboard these institutions is very difficult...the legal framework is very, very important. So before we were doing just, like crisis management, but when you have the treaty, engaging other institutions becomes very easy. And now, exactly the example I've given, when I was meeting those I was feeling like "Wow, this is how we should

be meeting" (laughing). There's no meeting as wardens without police, without the army, without customs, because after all what we are discussing is...we need them, more than they need us" (Uwingeli, 2017).

This provides some attestation to the importance of formalizing transboundary conservation in multilateral agreements – and furthermore, mechanisms of inclusion for other stakeholders.

6.5.3 A community-based approach

In the Kidepo Landscape, the broader umbrella or institutional system is not as clear since the Inter-governmental Steering Committee and Site Technical Committees, which could have operated in much the same way as the GVTC-ES and RTCs respectively, never materialized. This highlights the need to either: (1) implement and operationalize the existing MoU or (2) to formalize the semi-operational systems which do exist on-the-ground. In practice, the latter could give teeth to the prior. In other words, support to functional forms of localized transboundary cooperation and conflict transformation between South Sudan and Uganda could serve to implement and operationalize the MoU. The organizational structures it produces could become the Committees that were originally mandated in the MoU. As one possibility, the Catholic Diocese could invite villages, local leaders, elders et al. to form an inter-community steering committee and relevant technical committees. This would create a community-based TBCA rather than the originally

envisioned PAA-to-PAA or government-to-government authority, but it may be more feasible and effective given on-going conditions.

Community-based approaches have their advantages. In contrast, the GVL approach under the Law Enforcement RTC risks ‘green militarization’ of the landscape. While it is noteworthy that they have also partnered with CEPGL to institute a multi-prong approach to peace – one through traditional security and the other through economic development – the economic approach to peace or liberal peace does have its critics; as does the neoliberal approach to conservation, including TBCAs (Büscher, 2013; Gelpi & Grieco, 2008; Heynen et al., 2007). It will be interesting to see how the higher-education approach through NICHE in the GVL can influence an alternative approach to peace and conservation that aligns with Plumptre’s recommendations {Citation}. Similarly, it will be informative to process-track the development of UWA’s more community-based approach to transboundary conservation in the Kidepo Landscape in partnering with traditional leaders and religious groups.

6.6 Conclusion

The GVL and Kidepo Landscape are unique and intertwined in so many ways. Their experiences in developing legal frameworks for transboundary conservation and institutionalizing peace and conflict resolution are fascinating and provide a number of lessons as well as questions. Long-time

relationships and donor funding have facilitated the advancement of more formal and higher-level transboundary conservation in the GVL, while insecurity and lack of resources has hindered cooperation in the Kidepo Landscape. Both of their legal frameworks address peace and provide some guidance on conflict resolution, without restricting innovation in interpretation. In the Kidepo Landscape, UWA has taken a very different approach from the State-guided process that now exists in the GVL. There, they partner with local and religious leaders to add an environmental dimension to on-going peace dialogues, while doing their best to protect wildlife resources on the Ugandan side. This provides some reprieve for conflict-afflicted wildlife in South Sudan and a safe space along the migratory corridors that span States. When transboundary collaboration was difficult in the GVL due to insecurity, a wildlife refuge was also the best that the PAAs could try maintain (Kalpers, 2001; Kanyamibwa, 1998; A. J. Plumptre et al., 2001).

In comparing these two landscapes, further understanding was given to how institutional design affects pathway resilience. Transboundary collaboration in the Landscapes for Peace may have originated at a local-level, but the transboundary agreement was developed at a higher level. It established an Inter-governmental Steering Committee that never came into being rather than formalizing a transboundary institutional structure that already existed. A high-level agreement with strong political support to resource and operationalize a TBCA may be more appropriate for TBCAs with stable conditions. *Where violent conflict plagues TBCA territories, it is more important to operationalize the local-level activities through PA-level support designed for conflict-resilience and conflict-sensitivity* (see Chapter 3) and then to recognize these collaborations through agreements that can provide longer-term stability to their on-going efforts. The establishment of

credible multilateral inter-institutional mechanisms can be effective (i.e., GVTC), but it is especially critical that existing peace mechanisms (i.e., security organs or cultural leaders) are recognized and facilitated in partnership with PAAs so that TBCAs can be better capacitated for peace and conflict resolution.

Typically, when evaluating cooperation between PAs of a TBCA, on-going activities between PAAs are surveyed (Zbicz, 1999). This can leave out important partnerships that are critical to supporting peace more broadly and the underlying causes of international, social, and ecological conflicts. While it is true that cooperation between PAAs in the GVL is substantial, it is also their alliance with other actors, such as security organs, NGOs, and regional institutions that can be transformative for insecurity in the landscape. In the case of Kidepo, this means partnering with traditional leaders or elders and religious groups. As a norm of practice, these partners do not participate in TBCA legal agreements as signatories, but they can be brought in through institutional MoUs (e.g., 2015 MoU between ICGLR, CEPGL, and GVTC). This broadens the scope of diplomacy for TBCA legal agreements, elaborating beyond the more common inter-governmental agreements. For TBCAs to succeed, they need peace to support conservation and that means that conservation needs to support peace. This means not only the ecological peacebuilding concept of cooperation in natural resource governance, but also the participation of conservation entities in the more traditional world of peace and conflict resolution.

7. CHAPTER 7: CONCLUSIONS FOR AN EMPIRICAL EVOLUTION OF TBCA LAW

7.1 In Summary

While scholars debate whether we are living in a more peaceful world or not, the reality is that we exist in a world that is not free from violence (Institute for Economics and Peace, 2017; Østerud, 2008; Pinker, 2011). Violence persists between States, but more frequently within States and climate change is just one manifestation of a long history of violence against nature (Institute for Economics and Peace, 2017; Pachauri & Meyer, 2014, pp. 16, 54, 71, 73; Rüttinger, Smith, Stang, Tänzler, & Vivekananda, 2015; Stockholm International Peace Research Institute, 2016). As argued in this dissertation, the three categories of international peace, social peace, and ecological peace are interrelated, integrated, and interdependent, just as solutions towards positive peace in all three areas must be interlinked (E.g., Pachauri & Meyer, 2014, pp. 54, 97, 104).

Theoretically, PAs are gazetted or established for their contribution to the protection of significant biodiversity (e.g., biodiversity hotspots), but in a few locations they were established as part of an effort to strengthen cooperation between neighboring States (e.g., European Green Belt Initiative) (European Green Belt Association, 2017; Jepson, Whittaker, & Lourie, 2011). For decades now the peacebuilding potential of TBCAs, especially Parks for Peace, has been promoted by advocates of

transboundary conservation (S. Ali, 2007; Sandwith et al., 2001; Westing, 1993). Given the expanding estate of PAs and TBCAs globally, it is worth understanding what the role of TBCAs can be in transforming conflicts and violence for a more peaceful world (UNEP-WCMC & IUCN, 2016). If they can indeed ameliorate the negative impacts of violence and produce positive peace dividends, then TBCAs have important relevance as an incubator for peace and can pave way for the expansion of ecological ‘zones of peace’ around the world.

Since the 1990s, a growing body of literature around PAs and TBCAs conveyed a complex relationship between nature conservation, conflict, and peace. TBCA scholarship indicates that transboundary conservation itself can contribute to conflicts (Andersson et al., 2013; Büscher, 2010; See Duffy, 2001; King, 2010). The ‘fortress’ model of PA conservation has been heavily criticized for its coercive expulsion of people living in PAs, sometimes linked to the cultural genocide of indigenous peoples (See Brockington, 2002; Dowie, 2009; Redford & Fearn, 2007). Aggravating social violence in a landscape, even historical injustices, can further complicate existing conflicts and deserves to be addressed (Verweijen & Marijnen, 2016). While the question is increasingly being asked as to whether or not transboundary conservation can build peace through cross-border protected areas management, the question of whether TBCAs have been appropriately designed for peace and conflict resolution is less queried. I would also propose that addressing peace and conflict resolution is not just a side-benefit of transboundary conservation, but an imperative.

In this dissertation, design refers to the legal and governance framework which stipulates why a TBCA is being created (origins and objectives), how it shall be constituted and governed (parties, institutions), as well as who is responsible for what activities within the territory in order to achieve its goals or principles, and any other aspect of its constitution. The most formal manifestation of a TBCA's legal and governance framework is its dossier of transboundary legal agreements. Hence, this dissertation proposes that if TBCAs are to provide the peace dividends desired, their legal agreements need to be explicitly designed for three categories of peace – international peace, social peace, and ecological peace. In this regard, integrating peace refers to the incorporation of peace into TBCA agreements and transboundary conservation practice, as well as integration between and across the three categories of peace – international peace, social peace, and ecological peace. Generally, the objective of this dissertation was to understand how TBCAs can be more effective at protecting places of nature, people(s), *and* peace.

This research was undertaken through a legal analysis of TBCA legal agreements, an online survey of TBCA practitioners, and field interviews in two TBCAs. It analyzed 56 multilateral TBCA agreements for peace and conflict resolution, demonstrating that relatively few TBCA agreements even mention the words peace or conflict resolution and the mechanisms of cooperation and governance are rarely explicit as to how they should contribute towards peace. The survey of 88 TBCA practitioners provided additional insights as to how TBCA agreements can better support peace and conflict resolution through cross-border cooperation. Rather than highlight specific peace or conflict resolution mechanisms, TBCA practitioners focused on governance mechanisms (e.g., establishment of formal transboundary institutions) and strengthening opportunities for

direct engagement between partners. The emphasis on consistent cross-border engagement speaks to the value of developing “a habit of cooperation,” as espoused in ecological peacebuilding (Conca & Dabelko, 2002). Two case studies based on field research in border landscapes of Uganda (GVL and Kidepo Landscape) affirm that consistency in engagement, particularly at the local-level, is necessary to sustain on-going cooperation.

However, cooperation in conservation alone is not enough. If peace and conflict resolution are not explicit mandates alongside conservation, the conservation efforts themselves may have little impact towards peace and may even (unintentionally) contribute to conflict or be derailed by violent conflict. The findings of each chapter are further discussed below, as well as the various limitations of this research, which can lead us to future research directions.

7.2 Research findings and contributions

The chapters of this dissertation provide a number of research findings and conclusions that address the original research questions and hypotheses, while contributing new or more nuanced knowledge of TBCAs, TBCA agreements, and peace and conflict resolution through environmental cooperation.

7.2.1 Research hypotheses

This dissertation sought broadly to answer the question of whether TBCAs and Parks for Peace are ‘working’ in terms of peace and more specifically, how TBCA legal agreements can contribute to that objective. It argues that TBCAs are not providing the peace dividends anticipated because they are not adequately addressing international, social, and ecological peace in their legal design. In other words, TBCAs do not provide a comprehensive framework for conflict resolution between States, between people(s), and between humans and the rest of nature, and thereby are not proving effective towards those goals of positive peace.

According to the literature and the findings of this research, the answer to the first question of whether TBCAs are ‘working’ for peace is an unequivocal maybe. TBCAs harness undeniable potential to contribute to greater peace and conflict transformation and in many instances they do, but this is not a universal experience. Even in a single TBCA, the approaches used to address one conflict (e.g., rebel militias from a neighboring State occupying a PA and trafficking natural resources for arms) may not be easily copied and pasted to address other conflicts (e.g., systemic poverty, human-wildlife conflict, and historical PA displacement that compel PA-adjacent farmers to be recruited by resource traffickers), although they may be seen to be part and parcel of the same threat to PA resources (i.e., poaching). The challenge of TBCA legal agreements is that they must provide a universal framework for governing TBCA cooperation in whatever matters it confronts. Hence, the importance of creating an enduring multilateral partnership.

Each of the chapters of this paper explores these issues behind the overarching research question in a different way. The first chapter discusses the literature, providing interdisciplinary perspectives on the complexities of TBCAs and conflicts that affect places of nature, people, and peace in and around transboundary landscapes. The second chapter elaborates on concepts of peace, particularly in three categories: international peace, social peace, and ecological peace. The third chapter develops a socio-legal framework for evaluating TBCAs for peace, by proposing that the legal frameworks be looked at as they are written (*lex scripta*), as they are in practice (*lex lata*), and for what they should be (*lex ferenda*) according to CCR. The fourth chapter looks at 56 TBCA agreements and analyzes them for key elements identified by the three categories of peace that this dissertation argues are essential for positive peace and in part based on the responses of the online survey of TBCA practitioners. The fifth chapter provides a case study of the GVL, while the sixth chapter looks at both the GVL and Kidepo Valley in the Landscapes for Peace. The contrasts and comparisons between the two landscapes provide some additional nuances to how peace and conflict resolution can be better instrumentalized in TBCA agreements for TBCAs experiencing violent conflict. This is meaningful, not just in terms of conflict-resilience for TBCAs, but also for the practice of transboundary conservation universally, as it strives to better support conflict transformation in all three categories and stable positive peace.

The review of legal agreements, practitioner survey, and case studies indicate that institutional design may be the most important factor for TBCAs and their capacity to contribute to peace and conflict resolution. In mobilizing transboundary institutional systems, it can help to provide a clear

mandate towards positive peace. That clarity should include for conflict sensitivity (do no harm) and conflict transformation (added value) towards integrated peaces or all three categories of international peace, social peace, and ecological peace. It should also include sustainability or resilience mechanisms for cooperation during times of conflict, which necessitates multi-level alliances and support to actors on-the-ground. Therefore, the original argument towards improving TBCA design can be modified to place emphasis on conflict-resilient, conflict-sensitive, and conflict transformative institutional design with integration of international, social, and ecological peace as clear collaborative objectives.

7.2.2 Chapter findings

7.2.2.1 *Take-aways from Chapter 1*

Chapter 1 or the Introduction looks at the concepts of peace and conflict in TBCAs through a globalized narrative of TBCAs for peace and the political ecology of TBCAs as spaces of violence. A growing body of scholarship on TBCAs indicates that transboundary conservation itself can contribute to conflicts (Andersson et al., 2013; Büscher, 2010; See Duffy, 2001; King, 2010). Generally these critiques that TBCAs can be externally-imposed colonial modalities of conservation that exclude or disrupt local and indigenous peoples and their biocultural knowledge

and resource management systems while promoting neoliberal policies of nature commodification (e.g., expat-targeted ecotourism or trophy hunting) apply broadly to the conventional PA paradigm, often described as ‘fortress’ conservation, and are not unique to TBCAs (See Brockington, 2002; Büscher, 2013; Lele et al., 2010). However, aggravating social conflicts in a violent landscape or place of violent conflict, can further complicate the armed conflict and deserves to be addressed (Verweijen & Marijnen, 2016).

As socio-politically constructed territories defined by laws (formal and informal), TBCAs redefine the nomospheres of borderlands. The transboundary agreements create areas of cooperation between States and actors (typically PAAs and their partner organizations), attempt to harmonize or coordinate certain activities within the defined zone in order to reach common objectives, and purposefully or inadvertently play a role in peace and conflict. Law can intentionally or unintentionally become an instrument of violence, so it is imperative that in transforming TBCA conflicts, law itself is transformed towards international, social, and ecological peace. This chapter proposes that law can be transformed in order to transform conflict through CCR-oriented critical legal studies. As an introduction, it puts forward a problem statement and then outlines the subsequent chapters of the thesis and how they contribute towards understanding the related research questions and addressing the inherent and designed challenges of TBCAs.

7.2.2.2 *Take-aways from Chapter 2*

Chapter 2 demonstrates how the three categories of peace – international, social, and ecological – are interrelated, interdependent, and integral to positive peace. International peace is the peace or absence of violent conflict that exists between States or the territorial jurisdictions of nation-states and their governments. In the literature, it is not clear that TBCAs are vehicles of international conflict transformation; rather, there is more evidence that TBCA cooperation is inhibited by international conflict and if not undertaken appropriately, can aggravate or trigger conflicts (Sandwith & Besançon, 2010; See Waisová, 2015). It seems TBCAs may require international peace as a pre-requisite and offer little contribution to on-going international peace.

Very important to resolving the criticisms of TBCAs and conflicts in and around transboundary landscapes (Chapter 1), but often weakly addressed in their agreements (Chapter 4), is social peace. Social peace is peace or the absence of violent conflict between people(s), communities, or identity-based groups (cultures, philosophies, ethnic heritages, ideologies, gender, etc.). Social conflict is seen as resulting out of a need for social change of existing norms and power structures (Ramsbotham et al., 2011, p. 25). Given the colonial history of so many PAs, including TBCAs, and the dominant ‘fortress model’ (aka ‘fences and fines’) approach to PAs and TBCAs, positive social peace around TBCAs may require reconciliation for historical injustices and a reconnection between people and place. In this case, places of nature, in particular. Fundamentally, human

security is linked to ecological security, making both essential to social peace and international peace (Azar, 1990).

Ecological Peace is harmony between human communities and non-human communities, including other elements or processes of nature, and ultimately is about sustaining the peaceful coexistence of people and place. Environmental security has advanced significantly in the last decades to link human and environmental well-being with inter- and intra-national peace (Commission on Human Security, 2003, p. 3). It also warns against traditional security responses (i.e., militarization) in transforming socio-economic, political, and cultural undercurrents of conflict. In all three categories of peace, the role of TBCAs for peace or for potential violence and conflict is illustrated, demonstrating that in transforming direct, structural, and cultural violence in all three categories of peace, justice and law play important roles.

7.2.2.3 Take-aways from Chapter 3

Chapter 3 proposes a framework for mapping socio-legal TBCA landscapes for peace that can be used to improve legal design of TBCAs. The framework recognizes that there is more than one definition of a TBCA for peace or Park for Peace and suggests that this framework can be equally applied to any land-/sea-scape, including sub-national interjurisdictional collaborations (e.g., Australian Alps). The socio-legal framework is premised on Roberto Unger's CLS approach of

mapping and criticism and adapted to transform law towards CCR (R. Unger, 1996). It begins with a political ecology of a TBCA with a focus on the development of its legal framework and how that facilitates socio-political-economic or socio-ecological changes that contribute towards transformation of conflicts and peace. Then conflict mapping using the framework of international peace, social peace, and ecological peace is undertaken to identify conflicts, conflict triggers, and conflict dynamics in the landscape. A critical legal analysis follows with a traditional blackletter legal review of the codified legal framework for peace and conflict transformation in a TBCA (i.e., written law). This is followed by a mapping of living law, focusing on how peacebuilding or conflicts are managed on-the-ground. Criticism is applied last to identify gaps between living law and law as it should be based on principles of CCR and positive peace. These gaps represent transformational opportunities for peace and CCR and possibly even a Theory of Change.

Socio-legal mapping in the GVL demonstrated that a complete framework analysis is an extensive process and it may be worthwhile to target specific conflicts or sites when undertaking a full analysis; the GVL example is rather superficial as a result. The mapping of written and living law also indicates that peace and conflict resolution processes at different levels (e.g., State-level vs. local-level) may vary, providing alternative channels of intervention that may be more or less appropriate according to the circumstances. It also illustrates the challenges of implementing legal agreements; e.g., the 2008 Rubavu Declaration calls for the eradication of militias and armed groups from PAs in the DRC, which remains one of the most eminent threats to the GVL one decade later.

In evolving TBCA laws to transform conflict, this chapter recommends: (1) addressing issues of peace and conflict which are not explicitly addressed in the written or *living law*, (2) where *written law* is silent but *living law* exists, *written law* should be adapted to facilitate effective interventions on-the-ground, (3) further research to assess the effectiveness of *written* and *living laws* in resolving specific conflicts and what legal formulations would be appropriate for strengthening effective mechanisms, and (4) a review of all interventions for conflict-sensitivity, particularly in implementation so as to avoid inadvertent negative impacts. It should be noted that these are general recommendations for how TBCAs laws can be improved for CCR. In applying the framework to specific conflicts or territories, the final analysis should produce specific recommendations for changes to law and policy.

7.2.2.4 *Take-aways from Chapter 4*

Chapter 4 outlines components of a TBCA legal framework (e.g., MEAs, national laws) and undertakes a review of transboundary legal agreements for 32 TBCAs and surveys 88 practitioners with experience in 78 different TBCAs in order to provide a better technical understanding of how TBCA legal agreements can support peace and conflict resolution. Most agreements do not explicitly mention peace, conflict, or conflict resolution and when they do mention peace, it is often in reference to a name rather than an outcome or process. Peace, conflict, conflict resolution, international, social, and ecological peace are most frequently mentioned in the articles rather than

in the preamble or other sections of the agreements (e.g., Annex). This finding contradicts the hypothesis that peace is more often an aspirational preambular statement rather than an operative clause. Peace and conflict resolution in TBCA agreements was not obvious at first glance, but it was possible to identify a number of clauses addressing international peace, social peace, ecological peace and elements for effective implementation identified by surveyed practitioners.

The findings indicate that all three categories of peace are captured to varying degrees in the transboundary agreements examined for this study, with ecological peace appearing more frequently. This supports the assumption that TBCAs are designed primarily for biodiversity conservation and that peace is seen as a potential side-benefit of environmental cooperation rather than an explicit objective. This conclusion was confirmed by many survey participants who did not feel that peace or conflict resolution were relevant objectives for their TBCA. Instead, the practitioners highlighted the importance of relations between PA managers, governments, and communities in transboundary cooperation and peace and placed less emphasis on the value of peace and conflict resolution mechanisms directly embedded in the TBCA agreements.

It was also possible from the legal review to identify preferences for certain types of peace mechanisms under each of the three categories. For example, regional harmonization and good relations were emphasized under international peace, while habitat conservation and prevention of harm came up most frequently under ecological peace. When social peace was included, it tended to focus on benefits (and sometimes benefits-sharing) and participation. There was less emphasis on human rights and environmental education or awareness. The agreements were also

lacking in a few key areas, namely they did not address historical and on-going injustices or recognize rights of nature. The mechanisms that appear and do not appear in TBCA agreements can affect how they shape positive peace. Advancing this knowledge requires further inquiry into appropriate and effective legal formulations. Future research could evaluate or ‘test’ the peace and conflict impacts of specific legal mechanisms so that more precise legal articulations can be identified for TBCA agreements. This would include which mechanisms need to be incorporated (e.g., adoption of international human rights standards, protection of vulnerable groups, ecological education programs) and how they should be formulated (i.e., wordsmithing).

In the survey responses, nearly all of the TBCAs that had experienced violent conflict were part of a broader conflict and in only half of those cases did the practitioners feel that transboundary cooperation was helpful. Where cooperation was beneficial, operational integration, trust-building, and political support were identified as salient. Three-quarters of the survey respondents agreed that TBCA agreements can at least somewhat or definitely play a role in how transboundary cooperation contributes to peace, primarily by providing a mandate and institutional framework for action, as well as regular interaction, communication, and trust. Furthermore, when transboundary relations collapse at higher levels it is especially important to facilitate action by local stakeholders (e.g., PAAs or communities). Local communities are also identified as important in providing alternative peace and conflict resolution mechanisms when transboundary agreements do not exist. Many of the elements of success identified for TBCAs are associated with international and social peace, supporting the argument in this dissertation that the three categories of peace are intertwined. This finding confirms that there is potential to

improve transboundary conservation for international and social peace, at the very least for the sake of ecological peace.

7.2.2.5 Take-aways from Chapter 5

Chapter 5 continues with the case study of the GVL initiated in Chapter 3 as an example of an on-going process towards nomoscaping peace. It re-emphasizes the argument that formally recognizing peace and conflict resolution mechanisms and objectives in TBCA legal frameworks matters for peace in the landscape. The GVL started as an informal NGO-State collaboration between the DRC, Rwanda, and Uganda and over time has escalated in legal codification and government ownership. Each of the transboundary agreements were signed within particular contexts at specific times in the history of cooperation and are designed to achieve specific goals through cross-border collaboration. This reciprocally iterative process of the socio-economic-political-ecological context influencing lawmaking and then laws influencing the socio-economic-political-ecological of a landscape is described as nomoscaping (Blomley, Nicholas et al., 2001). The 2006 Revenue-Sharing MoU and 2008 Rubavu Declaration were inspired very specifically by conflicts in the region. Revenue-sharing allayed suspicions by Uganda that Rwanda was preventing a habituated tourism gorilla group from returning to Uganda by equitably sharing the monetary benefits. The Rubavu Declaration followed the violent murder of mountain gorillas in Virunga NP allegedly as retaliation against efforts to halt charcoal rackets inside the PA. These

processes of conflict-inspired peace-oriented lawmaking and implementation are examples of nomoscaping peace.

As seen in Chapter 5, the written laws address many conflicts in the landscape, but not all. In some cases, the generic multi-level inter-institutional structure of the GVTC provides a potentially effective peace and conflict resolution mechanism (e.g., neutralization of M23 around Mount Sabinyo in early 2017). Other conflicts may involve long-time historic and social injustices that require truth and reconciliation in order to achieve just and stable peace. In those situations and other conflicts with social dimensions, alternative or traditional/indigenous conflict resolution mechanisms exist and could be incorporated or potentially even scaled up to contribute to the process of nomoscaping peace in the GVL. Formally ‘legalizing’ peace and conflict resolution in TBCA agreements provides a clear mandate for TBCA actors, which can support them in engaging wider networks of partners and non-conventional interventions for peace (i.e., extending beyond the scope of traditional nature conservationists or security organs). The increasingly clear and enabling legal framework, formal transboundary institutions and on-going cross-border activities are key to nomoscaping peace in the GVL.

7.2.2.6 Take-aways from Chapter 6

Chapter 6 features two case studies on different borders of Uganda – the GVL and Kidepo Landscape, a sub-TBCA within the Landscapes for Peace. These case studies represent two out of the three TBCAs identified in the legal review in Chapter 3 that mention peace, conflict, and environmental peacebuilding explicitly in their legal frameworks. Chapter 6 addresses the question as to whether or not TBCAs are ‘working’ for peace and what their contribution can be *in conflict-afflicted borderlands*. It proposes that TBCAs can contribute to peace and conflict resolution in these violent environments, but that these efforts must be sustained through enduring support to local actors and that the legal modalities and institutional design may play a role in the sustainability of transboundary cooperation in times of insecurity. There is only one preliminary MoU for the Landscapes for Peace, signed by the environment ministers on behalf of their governments. This higher-level approach for a first MoU has not held in the face of conflict and insecurity. This adds to Schoon’s research on institutional resilience and path dependency in SADC and proposes an additional value to bottom-up institutional design – conflict resilience.

The findings in the two case studies allude to a conclusion that where violent conflicts plague TBCA borders, it may be more effective to operationalize local-level activities designed for conflict-resilience and sensitivity, and to sustain local presence and cooperation through resources, solidarity, and formal agreements than to initiate a high-level cooperative agreement with insufficient institutional capacity and resilience on-the-ground. TBCA agreements that codify

existing transboundary systems that are proven and conflict-tested may be more appropriate for conflict-afflicted TBCAs than those that invent and superimpose a transboundary collaboration from above. Furthermore, where violent conflicts impact TBCAs, there is an important role for community-based conflict resolution and where a credible transboundary institutional framework (community-based, inter-governmental, or otherwise) exists, environmental cooperation has been observed to spread to other regional endeavors (e.g., cooperation that has emerged between security organs in GVL). This does not necessarily mean that other actors must suddenly engage in environmental conservation and where security sector involvement might lead to ‘green militarization,’ precautions must be taken, but it could mean that conservationists need to connect with peace programs in the landscape as UWA has been doing in the Kidepo Valley. In order to facilitate that effort, peace and conflict resolution should be explicitly codified in the TBCA’s legal framework and mandates.

7.2.3 Connecting conclusions

The findings from each chapter of this dissertation are interesting in and of themselves, but when interwoven, they provide a much more coherent understanding of the role of TBCAs and law in peace and conflict resolution. Overall, this research finds that the duality in the literature about TBCAs contributing to both peace and conflict is true. Transboundary collaboration through TBCAs does not inherently produce conflict resolution and peace, especially when evaluating

negative and positive peace in three areas – international, social, and ecological peace. There is also a lot to be said about the historical and social injustice in the inherently violent design of PAs and TBCAs, but this need not preclude the transformative potential of TBCAs for peace and conflict resolution. The challenge lies in TBCA design and hence, the value of this socio-legal review of TBCA law.

Parks for Peace have been discussed amongst the environmental security and nature conservation literature with rare legal contribution. TBCAs have been created with formal and informal arrangements often culminating in some form of written statement or codification. This is the first study examining in detail the composition of 56 transboundary legal agreements for 32 TBCAs as they relate to peace and conflict resolution. These findings are discussed in the context of experiences shared by 88 surveyed TBCA practitioners and many others interviewed directly. Doing so bridges the gaps between the objectives and ideals of a TBCA as written and the practice as implemented. By providing some degree of empiricism to the peace and conflict relevant elements of TBCA agreements, the pathway to improving future TBCA agreements is illuminated, though much more can follow.

Thus far, TBCAs have been primarily designed to achieve biodiversity and nature conservation goals or ecological peace, with more (neo)liberal approaches to international peace and social peace. Social peace agendas typically fixate on regional tourism development, while issues of international peace can provoke securitization or militarization of conservation. The risk of ‘green militarization’ is not unrealistic, given that mentions categorized as ecological peace in Chapter 4

were heavily focused on habitat protection and prevention of harm; in other words, a defensive approach to direct violence or negative ecological peace. Neither of these solutions (securitization or commercialization) is conducive to integrated and positive international, social, and ecological peace. This is supported by the two case studies on the borders of Uganda, which provide an opportunity to superficially map the range of international, ecological, and social conflicts confronting the TBCAs, locate mechanisms within the legal agreements that address these issues, and understand how day-to-day practitioners can intervene to transform those conflicts. In this regard, the research demonstrates tensions between social and ecological peace (e.g., wildlife wars and coercive conservation) and the prevalence of benefits-based as opposed to human rights-based solutions offered in TBCA agreements (72 vs. 13 mentions).

The dissertation repeatedly proposes an integrated approach to international, social, and ecological peace, arguing that one cannot be achieved without the others. Therefore, it is important for TBCA legal frameworks to nomoscape integrated peaces. These findings are relevant to both peace and conflict studies and political ecology, which has been a harsh critic of TBCAs in practice. The socio-legal analysis of the GVL in Chapter 3 builds on the concept of mapping and criticism proposed by Roberto Unger to introduce an interdisciplinary framework developed on the theories and methodologies of CCR (peace and conflict studies), CLS, and political ecology. It can be used across TBCA landscapes, at site-level, or for one conflict at a time to analyze constellations of conflicts, conflict dynamics, and conflict actors. The framework can also be adapted to assess TBCAs for other values, such as those enshrined in the SDGs as described further below. Understanding how a TBCA nomoscapes peace can help to explain the *written law*, *living law*, and

law as it should be examined under the framework. The framework and case studies are intended to inspire future research applying the framework, as well as to inspire the advancement of TBCA laws and policy. Chapter 3 provides four suggestions as to how TBCA framework agreements can be evolved to better incorporate peace and conflict resolution. This serves as a contribution to the field of peace studies, CLS, and political ecology by providing a methodology for the evolution of TBCAs from spaces of violence or negative peace to positive peace.

It has never been determined whether or not TBCA agreements matter when it comes to transboundary collaboration and if so, how. The findings of this dissertation indicate that it is not necessary to have high-level codified agreements or explicit mention of peace and conflict resolution, but it can be very helpful, especially in conflict-afflicted land/sea-scapes. It may also be transformative in shaping how transboundary practitioners engage in peace and conflict resolution throughout the land/sea-scapes where they work. What is perhaps most important are transboundary institutional design and on-going transboundary activities, especially at the local level. However, in order to support both the transboundary institutional arrangements and activities, a clear and enabling framework is needed. Therefore, legal agreements do have a critical role in TBCAs and their ability to facilitate peace and conflict resolution. We should not underestimate the power of naming peace in this process and ensuring that operative mechanisms for international, social, and ecological peace are properly accommodated.

The two case studies provide evidence that legal modalities matter. This not only supports Schoon's argument on pathway dependencies, but it adds to his work by highlighting the

importance of a bottom-up approach to TBCAs in violent borderlands for institutional resilience (Schoon, 2013). This finding is important for practitioners or donors investing in the development of TBCAs as vehicles for peace in places of violent conflict. Accordingly, resources should be targeted to sustain local-level activities and the establishment of resilient, conflict-sensitive transboundary institutional systems, which can be formalized in legal agreements that add support and clear mandates for existing and much-needed efforts. The value of local actors resounds throughout the chapters, not only as supporters of TBCAs, but also as repositories of traditional or community-based peace processes. The case studies also illustrate how support to local actors in order to sustain conservation activities during times of conflict or insecurity may mean partnering outside of PAAs and traditional security actors (i.e., militaries) to engage with religious groups or community leaders and elders directly in alternative peace processes, or to enhance environmental awareness and care. These are important strategies that any TBCA can adopt, whether or not it is threatened by violent conflict.

In conclusion, TBCAs can contribute to peace if they are properly designed. This means that the legal agreements should be negotiated at an appropriate level reflecting feasible levels of cooperation. It also means that they should provide clear mandates supporting peace and conflict resolution through cross-border institutional frameworks and on-going activities. Most importantly, transboundary legal agreements must be conflict-sensitive for TBCAs seeking to transform violence and conflict, and conflict-sensitivity should integrate consideration for international, social, and ecological dimensions. They also need to be conflict-resilient. This includes resilience to armed or violent conflicts, as well as political and social conflicts. It can take

the form of direct support to local actors, environmental education, connections to external networks and safe havens, and sustainable resources for on-going activities.

7.3 Specific recommendations for TBCA legal design

Codified transboundary agreements are not necessary for effective transboundary conservation. *De facto* functional transboundary cooperation is more important than a *de jure* formal legal framework (i.e., transboundary agreements – binding or non-binding). However, formal legal agreements can be valuable in a number of ways. First of all, they provide a clear basis for collective action and indicate some level of political will towards cross-border cooperation, which may need to be drawn upon during times of conflict. For actors on-the-ground who are actively engaged in transboundary conservation, it can be helpful to receive formal recognition of their activities, organizations, and objectives. This can provide credibility in the joint undertaking, allowing donors to have greater confidence in supporting the work. Transboundary partners may even need higher-level inter-national agreement for certain activities (e.g., sharing radio signals during joint patrols). This is likely also true for peace and conflict transformation, which is not widely considered part of nature conservation or within the terms of reference of a typical PAA. Thus, it is especially important to explicitly address conflict, peace, and conflict transformation in TBCA agreements.

Secondly, the process of developing legal agreements is an exercise in nomoscaping that can work to shape desired outcomes; e.g., nomoscape peace across transboundary landscapes. The negotiations themselves provide a process of engagement between cross-border actors with vested interests in the outcomes and the on-going dialogue can help to build rapport and trust, voice interests and concerns, and identify areas of common ground and synergy. An opportunity to collaboratively resolve common challenges arises as parties develop the objectives and vision of cross-border conservation and identify specific activities for cooperation. It is a fundamental opportunity to shape the cosmology of a TBCA. In the legal review, it was not apparent that conflict mapping had been part of the TBCA's legal design as conflicts are rarely mentioned in the agreements. Without a specific mandate, parties to TBCA agreements may not feel compelled or sufficiently authorized/supported to undertake peace and conflict resolution initiatives. It may also be unclear how transboundary conservation should incorporate peace and conflict, let alone how TBCA agreements should be operationalized to integrate peace and conflict resolution.

Therefore, this dissertation offers the following suggestions towards TBCA legal design.

1. Formalize legal agreements that are negotiated at an appropriate level for sustained cooperation.
 - (i) Level of agreement(s) should reflect feasible levels of cooperation – if agreements are high-level, cooperation may remain political; whereas ground-level agreements may better support operational integration.
 - (ii) Provide clear mandates supporting peace and conflict resolution through multi-level institutional frameworks and on-going activities.
 - (iii) Binding instruments are preferable to non-binding instruments; however, it is more important for *de facto* cooperation to be empowered and maintained.
2. Codify mechanisms that have proven to be effective – agreements should support what works on-the-ground.

- (i) Recognize functional transboundary institutional and governance arrangements and strengthen their capacity to work across borders for conservation *and* peace/conflict resolution.
 - (ii) Incorporate alternative and/or traditional peace and conflict resolution practices that have legitimacy and efficacy.
 - (iii) Provide sufficient authority to undertake activities to build peace and resolve or transform conflicts.
3. Ensure that transboundary conservation is conflict-sensitive in terms of international, social, and ecological peace/conflict.
- (i) Undertake conflict mapping and socio-legal analysis (as demonstrated in Chapter 3) in order to determine existing landscape of conflicts (international, social, and ecological) and be sure to address and provide conflict resolution mechanisms for all identified conflicts and stages of conflict in the agreement(s).
 - (ii) Do no harm. Consider historical injustices, long-standing, or broader conflicts and any conflict triggers which may be affected by conservation activities and prevent/repair conflict impacts.
 - (iii) Safeguards. Develop mechanisms to prevent the (mis-)use of resources (natural, human, or capital) in conflict activities and ensure protocols are in place for all staff members and partners engaging in transboundary activities.
4. Ensure that transboundary conservation is conflict-resilient.
- (i) In times/places of violent conflict, maintain support to local-level operations.
 - (ii) May seek assistance from neutral 3rd parties (possibly in neutral 3rd territories) in facilitating on-going transboundary engagement (i.e., meetings, activities, information-sharing).
 - (iii) Include or engage with all relevant parties, not just traditional conservation actors. This may include security organs, peace disrupters, local communities, corporations or private enterprises operating in the landscape, etc. If the transboundary institutions are perceived as neutral conveners or mediators, they may have the ability to bring these stakeholders together or to engage with them separately without losing credibility with other actors, but these relationships and engagements must be carefully managed so as not to impact negatively on conflict dynamics.

Additionally, TBCA agreements should balance all three categories of peace to make amends for the current emphasis on ecological peace based on international peace, with little or even negative

contributions to social peace. A simple improvement to the social peace dimensions of TBCA agreements is to incorporate redress for historical injustices, international human rights standards, and a commitment to human rights-based approaches and mechanisms for more democratic participation. As conservation injustices continue to mount, some scholars and practitioners are looking to restorative justice as a process of redress for people, communities, and nature (Besthorn, 2013; Preston, 2011; Weitekamp & Parmentier, 2016). Where TBCA agreements have been providing agreement dispute resolution mechanisms, they could expand these clauses to include conflict resolution mechanisms for any conflicts that may arise or impact on transboundary collaboration, as well as restorative justice mechanisms for past conflicts and grievances.

TBCA agreements should have overarching/guiding principles that include for peace, conflict resolution, restorative justice, and protection of fundamental human rights and standards. The paucity of human rights references in the TBCA agreements is unfortunate, especially considering how many human rights are dependent upon protection of biodiversity and ecosystem services – needless to mention, explicit human rights to a healthy environment, environmental information, cultural practices relating to the environment, and sustainable development (Knox, 2018; UNHRC, 2017). Supporting human rights in conservation also serves to support conservation; in other words protection of human rights strengthens social peace and ecological peace. It also pays tribute to international norms and standards, which can help to build positive international peace.

A fundamental human right regarding the environment is participation in environmental decisionmaking and governance (E.g., United Nations, 1999). Both the survey and the case studies

indicated that diversifying stakeholder participation in conservation is important for all three categories of peace, yet the TBCA legal agreements reviewed did not display expansive inclusiveness. Meaningful and effective participation actually speaks directly to one of the potential key strengths of the GVL institutional arrangement and that is its multilateral, multi-level, inter-institutional governance framework. Incorporating multiple channels for participation (e.g., diplomatic, community-level) and bringing on non-conservation partners strengthens the adaptiveness and flexibility of transboundary cooperation. It could potentially ‘democratize’ transboundary environmental governance and broaden ownership of peace and conservation processes. Therefore, legal clauses addressing participation in TBCA agreements should consider the contribution of non-signatory parties and provide effective mechanisms for their inclusion. In practice, transboundary conservationists could take advantage of new technologies to inform, consult, and integrate broader stakeholder participation.

This research also demonstrates that legal modality is worth considering when designing TBCA legal frameworks for peace and conflict resolution. Higher-level agreements, such as treaties, may be useful for inter-governmental or larger regional collaborations, but could be less meaningful if national governments withdraw from cross-border processes or de-prioritize nature conservation. As TBCA agreements seem to provide greater value as an enabling force to catalyze already-existing cooperation (as opposed to top-down laws that result in mere paper parks), it may be useful to consider alternative legal modalities that codify functional cross-border systems. As cooperation may not be at a State-to-State level, these agreements may end up taking place between PAAs and conservation organizations, civil society organizations (CSO)/CBOs, or even

security partners, and donors. Therefore, the more appropriate legal modalities would include MoUs, joint statements, and declarations. Bylaws can also offer a more participatory legal process for developing protocols for cooperation or institutional arrangements. Even transboundary management plans provide guidance on cooperative activities and could be opened up for greater stakeholder input, including sections regarding the responsibilities of other actors.

It is important that for conflict-resilience, these legal modalities are adaptive for changing circumstances. They may not need to last in perpetuity, though it would be meaningful to have an overarching framework law that provides for the basic tenets of transboundary cooperation towards conservation, peace, and conflict resolution. It is worth mentioning that the objective is not necessarily to have one comprehensive TBCA law, but rather to engage consistently in the process of nomoscaping peace. The framework offered in Chapter 3 provides an evaluative methodology to assess whether the existing laws are converging towards *lex ferenda* or the *law as it should be*. All TBCA agreements can be periodically reviewed for whether they are supporting their intended objectives. As Chapter 3 suggests, the transformative potential may actually lie in how *lex ferenda* is defined – who gets to say what the law should be? If it is PAAs with wildlife protection mandates, then it is no surprise the agreements favor habitat protection and wildlife management. If it is local communities, peace officers, social entrepreneurs, and educators who decide, TBCA agreements may begin to look a bit different. Participatory processes in critical socio-legal mapping for peace as outlined in Chapter 3 could help to transform the structural violences or challenges of TBCA laws as they exist and adapt them, not only for changing circumstances but for all places, peoples, and peace.

These recommendations are fairly general and will need to be further developed and tailor-designed for each TBCA and its context. In a sense, these recommendations fill gaps in the legal design of TBCA agreements, which have been developed primarily for the protection of natural areas and wildlife, rather than peace and conflict resolution. Further work is required to determine appropriate legal formulations for effective peace and conflict resolution mechanisms, principles, and clauses in TBCA agreements. This may require TBCA practitioners to consider the recommendations provided here, to incorporate them into their legal frameworks as they see fit, and then to test the effectiveness of their impacts in terms of peace and conflict. This can be done through peace and conflict impact assessments, conflict mapping, and process tracking. The framework provided in Chapter 3 is useful in this endeavor.

7.4 Limitations of research and follow-up

Like all research pursuits this dissertation has its limitations and strengths. As argued in the previous section, the research contributes to better understandings of how TBCA legal agreements can support peace and conflict resolution through transboundary conservation. However, all of the methods and findings must be situated within their proper context and constraints. First of all, as doctoral research, it was very limited in funding and resources, so the fieldwork was constrained to one trip lasting approximately six months. It would have been preferable to take a series of trips

staggered throughout the years, allowing for follow-up, more developed relationships and networks, as well as time to complete visits to all four of the sub-TBCAs composing the Landscapes for Peace. Initially, some field research was also undertaken in a third case site, the Mount Elgon Transboundary Biosphere Reserve. Unfortunately, due to the funding and time constraints, it was not possible to complete this fieldwork and ultimately, it was left out of the final dissertation. A third case study would have provided richer comparisons and contrasts and information from which to contextualize the research questions, hypotheses, and conclusions.

Follow-up to this dissertation would complete the intended field research and could include other regional case studies, such as the Nyungwe-Kibira Landscape between Rwanda and Burundi, or it could examine TBCAs in other regions to provide regional comparison/contrast (e.g., Al Bakoorah/Naharyim/Gesher Peace Park between Israel and Jordan or the peace treaty-based Cordillera del Condor between Ecuador and Peru). As further described below, it would also be worthwhile to examine community-based TBCAs (e.g., TBICCAAs) to further test the conclusion found in Chapter 6 regarding the use of ‘bottom-up’ legal agreements and path dependent institutional resilience in places of conflict. These would be ‘bottom-up’ in the grassroots sense and not just ‘bottom-up’ in terms of local vs. national government institutions. It could also provide some insight into whether government-driven vs. community-driven TBCAs are more appropriate in terms of effectiveness and/or design for facilitating international, social and ecological peace.

This research only examined formal transboundary agreements for almost entirely State-to-State TBCAs, which is merely a sub-set of a complete TBCA legal framework (described in Chapters 3

and 4) forming merely a sub-set of all TBCAs. Future research could also look into how other areas of law are brought into TBCA governance in the areas of peace and conflict resolution and what mechanisms may be more effective. It could also incorporate analysis of TBCA legal frameworks that are not codified. This could emerge as part of the work around community-based TBCAs, which may not have as many written agreements.

There are many more questions that can be examined regarding legal modality. For example, I was unable to assess the efficacy or implementation of variant legal modalities (i.e., treaty, MoU, declaration, etc.). Treaties are technically the most binding form of multilateral agreement with MoUs or declarations forming soft-law or non-binding agreements. It is not apparent whether or not treaties can prove to be more enduring for TBCAs that experience violent conflict. Such an endeavor would require ground-truthing in multiple TBCAs and longer-term project funding with support from many local partners. Nevertheless, it would be meaningful to undertake this future research into legal modalities and the resilience of their implementation. Therefore, additional follow-up to this dissertation could look into these kinds of questions.

The research approach and methodologies used in this dissertation are based on an interdisciplinary approach to TBCAs, law, and peace, as well as previous field research and work in TBCAs. The framework elaborated in Chapter 3 is a reflection of these mixed methods. Although I have used this approach in the past and in this dissertation, it is not the only way to undertake such a study. The framework and research methods applied in the various chapters are worth further testing and evolution. They could also be adapted for different purposes. This dissertation

focused on peace and conflict resolution as outcomes, but the criticism and mapping framework provided can also be used to evaluate laws for other purposes (e.g., justice).

Application of the framework could also be enhanced by strengthening the contributions of other disciplines – for example, geography. Ideally, the application of this framework would reveal how particular geographies vary. In the case of the GVL, this could reveal how transboundary projects and funding have focused almost entirely in the Virunga Massif or mountain gorilla territory, largely orphaning the northern PAs that also face great insecurity and complex conflicts. In effect, it could map out where transboundary conservation is working or not working, for which issues, etc.

Both the legal review and survey were limited in regional scope. There were too few TBCA agreements from the Middle East in the legal review (two agreements for one TBCA) to speak comprehensively towards TBCA law in the region. Asia was also significantly underrepresented. More diverse representation in the legal survey may have required the survey to be translated into other languages; potentially the missing UN languages of Arabic, Chinese, and Russian to begin. It could be interesting to explore whether these regions are underrepresented because they tend to engage in informal cooperation that does not produce codified TBCA agreements, and how these informal arrangements compare in terms of institutional design and incorporation of peace and conflict resolution. These informal cooperations may be so localized that their participants are not members of TBCA networks, such as those targeted in the practitioner survey. Hence, the value of undertaking future research in these regions in partnership with a research network.

The survey was admittedly long and looped a series of repeated questions for up to 5 different TBCAs, which notably caused survey fatigue. This may partly explain why 297 people started the survey, but did not complete. A follow-up survey of TBCA practitioners could try to address the low completion rate by providing a shorter survey and more targeted questions. It could also backend the administrative sections of the survey (i.e., contact information, consent forms) so that participants have an opportunity to respond to the substantive questions at the outset. Although, it is difficult to determine whether the survey respondents who only completed the administrative section did so because of survey fatigue or because once having thoroughly understood what the survey was about, they did not feel that the topic was appropriate for their expertise, or interesting/valuable for their work.

Legal agreements were not found for all of the TBCAs identified in the 2007 Global List or other sources and it is unknown whether transboundary agreements exist but were not located or if they just do not exist. Even TBCAs for which agreements were located and reviewed in Chapter 4, can be followed-up to acquire any missing legal agreements. Further inquiry with direct communications to PAAs in each of those TBCAs could help to track down any missing legal agreements and build on the existing TBCA database of legal agreements, but this is a more complicated task than appears. Most of the TBCAs listed in the 2007 Global List are not identified by name, making it difficult to search for direct contacts. When I attempted to identify and communicate to contacts within each of the component PAs, I discovered that many of the PAs listed as part of a TBCA in the 2007 Global List are not actually part of the TBCA. Furthermore,

there are thousands of PAs identified in the 2007 Global List as part of a TBCA complex; contacting each one would be a time-consuming pursuit. PAAs also tend to be field people and may not have consistent access to electronic communications, which was the method of communication I was limited to (outside of the case study areas). There is still much work to be done towards compiling a complete list of TBCAs in the world, a contact list for all of those TBCAs, and a comprehensive database of TBCA legal agreements.

Additionally, this research has produced its own list of TBCAs that needs to be verified and refined. The TBCA survey revealed a list of 77 different TBCAs, which exceeds the original sample of 65 that was identified for the legal review. The previously unidentified TBCAs should be added to the sample to provide a more complete list (see Appendix V). Further research could also look into the gaps between these lists and the 2007 Global List of 227 TBCAs to produce an improved list of actual TBCAs. An update to the Global List of TBCAs should include the latest dataset from the World Database on Protected Areas (WDPA), which has been expanding its inclusion of ICCAs to identify transboundary dyads as Barquet et al. did in their research on TBCAs and MIDs. An updated list would also require investigation into whether there is actual cooperation between PAs to distinguish actual TBCAs from (non-cooperating) cross-border PA dyads. This geospatial analysis should support the production of an updated map of TBCAs around the world with more precise locations than the one provided in Figure 4-2.

As noted earlier, the framework for socio-legal analysis in TBCAs is an extensive process and it is probably better undertaken in the context of a more limited scenario – unless there is a larger

multidisciplinary team to support. For this reason, the framework analysis as applied to the GVL or Kidepo Landscape was relatively superficial. A more complete framework study would have required a full mapping of the political ecology of the landscapes, a more in-depth conflict analysis for each of the different conflicts in specific sites, and a participatory process towards outlining elements of what the *law should be* or *lex ferenda* in order to produce a less externally-imposed, single-minded criticism of the *written laws* and *living laws*. In future applications of this framework, it could be more feasible to focus the socio-legal review on a particular type of conflict (e.g., illegal fishing in the GVL) in order to seek solutions for those scenarios as they exist throughout the landscape. This process will likely reveal that this one conflict categorized under illicit resource extraction or ecological peace is actually interrelated to human-PA conflicts returning to historical and socio-economic injustices created when the PAs were first established (i.e., social peace) and the residence of inter-state militias who exploit or control the illegal fishing trade (i.e., international peace). Despite its shortcomings, this research produced a wealth of information, some interesting initial conclusions, and many questions to follow-up in future studies.

7.5 Signposts for future directions

There are many directions in which future research could go to better understand the legal transformations needed to appropriately designs laws, institutions, and transboundary governance so that TBCAs can become vehicles for peace. This research could be applied in

different types of land- or seascapes exhibiting different types of conflicts in order to determine its utility in a variety of circumstances or to identify improvements to its methodological approach. More effort can also be dedicated to advance the framework in Chapter 3 as a tool for active and participatory research, a process which can contribute to resolving conflicts as part of research engagement with TBCA stakeholders in identifying and mapping the legal roots and interventions to relevant conflicts. The more that is understood about ecological pathways to peace, the more the legal routes can also be identified and integrated. As the findings and limitations of this dissertation indicate, this research provides signposts for future research in a few specific directions – many have already been mentioned in section 7.3, so three more concrete ideas are elaborated below.

7.5.1 Developing a knowledge platform for TBCA legal agreements

The 56 TBCA agreements collected for the legal review in Chapter 4 represent the beginnings of the world's most comprehensive database of TBCA laws. By creating a legal database for TBCAs, it initiates a knowledge product that can be accessed by all who are conducting relevant research or interested in examining the legal framework of their TBCA or TBCAs all around the planet. Such a database allows for: (1) systematic categorization of TBCA legal modalities, mechanisms, and typologies, and (2) preliminary assessment of their efficacy towards international peace, social peace, and ecological peace or any other standard. The database will inevitably grow over time

and allow for more complex analyses that could involve inquiry into legal developments across time, providing a time lapse of TBCA laws, transboundary conservation, and conflict/peace scenarios on-the-ground (i.e., process tracking). Use of the database could also include a systematic analysis of TBCAs and peace, looking at datasets of TBCAs and indicators of peace (Table 7-1). This could help to produce a follow-up to Barquet et al.'s research on "Transboundary Conservation and Militarized Interstate Disputes" that is more focused on actual TBCAs with some degree of cooperation rather than border-adjacent PA-dyads.

Table 7-1 Peace indicators - existing or potential datasets

2) International peace
a) Recurrence of conflict – Armed Conflict Location & Event Data Project (ACLED – http://www.acleddata.com/) or Uppsala Conflict Data Program – Georeferenced Event Dataset (UCDP GED – http://pcr.uu.se/research/ucdp/datasets/)
b) Status of post-conflict peace – ACLED or GED, UN reports, news/media
c) Number of international disputes – ACLED or GED, UN, Correlates of War MID data (http://www.correlatesofwar.org/), United States Central Intelligence Agency (US CIA) World Factbook – International Disputes (https://www.cia.gov/library/publications/the-world-factbook/fields/2070.html)
d) Level/State of diplomacy between States – embassies, consulates, diplomatic relations
3) Social peace
a) Current number of rebel or secessionist movements – ACLED or GED, US CIA World Factbook, conflict reports
b) Number of violent conflicts between peoples – ACLED or GED, Ethnic Conflict Information Centre – Fields of Fire Atlas of Ethnic Conflict (http://www.notholt.net/fields_of_fire/), country-based data (if available), Georeferencing of Ethnic Groups (GREG – http://www.icr.ethz.ch/data/other/greg)
c) Human rights abuses – United Nations High Commission on Human Rights (UNHCHR), reports by human rights organizations (e.g. Amnesty International, Human Rights Watch), domestic human rights reports (if available)
d) Human-protected areas conflicts – country-based data (via protected areas authorities or NGOs); may be difficult to obtain info, or data may be more qualitative
4) Ecological peace
a) Human-wildlife conflicts – country-based data (via protected areas authorities or NGOs) wherever available
b) Prevalence of environmental change and degradation – Intergovernmental Panel on Climate Change (IPCC) reports, State of Environment reports (if available), UNEP country reports, Global Environmental Outlook (GEO),
c) Arrangements for environmental cooperation – country-based data, IUCN Transboundary Conservation Network, news/media
d) State of biocultural diversity – TerraLingua Index of Biocultural Diversity and Index of Linguistic Diversity (http://www.terralingua.org/work/mapping-bcd/ ; http://www.terralingua.org/linguisticdiversity/), Biodiversity Indicators Partnership (based on CBD Aichi Targets – http://www.bipindicators.net/indicators), Millennium Development Goal 7A-B (http://www.un.org/millenniumgoals/environ.shtml), PAME

The TBCA legal database was originally intended to form part of the online knowledge platform Legal Atlas, which would facilitate some of this cross-dataset research. It could also be linked to other legal databases, such as EcoLex, to foster legal learning and research which correlates these (primarily environmentally-oriented) issues with other broader international and social issues (e.g., human rights, sustainable development, international crime, etc.). The legal database would also be useful as an additional layer of information in Protected Planet, which hosts the WDPA. Future compilations of TBCA agreements should look to enhance the diversity of TBCA regions, governance types, and legal systems (i.e., legal pluralism). By capturing indigenous and traditional or customary TBCA laws and norms in databases it would provide an alternative body of knowledge to the current list of 56 TBCA agreements representing a dominant legal system. There are a number of TBICCAs that have been identified around the world and yet these do not exist in the 2007 Global List and rarely in formal legal agreements. Inclusion of these TBCAs in a legal database will provide a unique challenge to future TBCA, law, and peace researchers, but their contribution would be significant. It would facilitate research comparing State-based vs. community-based TBCAs.

7.5.2 Indigenous and community-based TBCAs

Aichi Target 11's ambitious goals for territorial coverage (land or sea) under protection or nature conservation have opened up a dialogue on greater recognition of land/sea-scapes protected by

Indigenous Peoples and Local Communities (i.e., ICCAs). Many governments are moving to officially recognize ICCAs within State territories in order to increase their coverage of areas under conservation. This could spawn an opportunity to recognize TBICCAs as ecological connectivity networks and an alternative to the more commonly recognized TBCAs established by national governments and PAAs. In relation to this dissertation, a focus on TBICCAs raises a number of questions. How do TBICCAs compare to more conventional State or NGO driven TBCAs in terms of peace and conflict transformation? Are TBICCAs better at managing social peace given the community or even indigenous origins? Are they capable of addressing international peace as well? What are their potential limitations? How do the legal frameworks of TBICCAs develop? Does this contribute to their resilience during times of conflict or insecurity?

Tangential to ICCAs are Sacred Natural Sites (SNS) or “areas of land or water having special spiritual significance to peoples and communities” (Oviedo & Jeanrenaud, 2007, p. 77). SNS have long existed as informal sites of nature protection and non-violence: potentially as an ancient predecessor to modern Parks for Peace, or at the very least as a modern-day alternative to conventional Parks for Peace (generally government-to-government initiatives). When it comes to SNS and peace, does sacredness matter? In other words, can natural sites protected by traditional stewards and honored by various cultures because of their “sacredness” (e.g., sacred groves) also protect peace? Does that remain true today in a post-colonial, modernized world? Is peace sacred and if so, what can we learn from SNS to better protect places of nature, people(s), and peace? Given a long history of indigenous cultural genocide, are we approaching the end of sacred? There are many stories today of SNS being attacked because of their sacredness or perhaps

demonstrating a diminishing reverence for sacred (e.g., Taliban blowing up the Bamiyan buddhas). These inquiries are not just ethical or hypothetical questions, they represent a more fundamental challenge to uncover the origins of human inspiration, the ones that first compelled us to care for nature and to protect it from our own whims. A sacred relation to nature also delves to the roots of positive ecological peace and perhaps a better relationship between peoples (social peace) through recognition that the social and the ecological are one.

7.5.3 Applying the framework to TBCAs and the Sustainable Development Goals

This research chose to examine TBCAs for whether they are ‘working’ in terms of peace, but future research could look at how and whether TBCAs are working for other human aspirations; for example, the SDGs. Protected areas are generally designed to preserve or protect species, habitats, and natural systems within defined territories, but since their inception have encountered the consistent social challenge of having to deal with the impacts of human activities. The 17 SDGs developed as part of the 2030 Agenda for Sustainable Development recognize that social, economic, and ecological challenges are intertwined and so must their solutions. Goals 13-16 directly address environment and peace, but in reality, all of the goals touch on these two issues in some way or another. Goal 16 to “promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels,” speaks directly to the research found in this dissertation (United Nations,

2015). Further development of this research could target Goal 16 and other related SDGs to specifically produce a 2030 Agenda for TBCAs, outlining how all of the SDGs could be achieved for TBCAs, and also how TBCAs can contribute to achievement of all the SDGs globally. It would build on the legal findings of this dissertation to provide a multi-prong approach to advancing TBCAs for a future of sustainable development and peace.

Furthermore, in an epoch of anthropogenically-induced ecological change, a more ambitious approach is needed, and PAs must consider how they can contribute towards net positive regeneration in terms of the socio-ecological (i.e., going beyond sustainability). Where PAs abut or transgress international boundaries, they have a unique potential to capitalize further on socio-ecological regeneration – including through harmonization of the social, political, and economic for regenerative conservation across divisive boundary lines. The 2030 Agenda for TBCAs could present a vision for regenerative conservation through TBCAs that integrates regenerative approaches to all three categories of peace (international, social, and ecological). The framework proposed in Chapter 3 could set these goals (regenerative development and peace) as its basis of criticism and be used to evaluate places all around the world for this purpose.

BIBLIOGRAPHY

- Abach, P. (nd). Understanding the Historical Background of Napore Ethnic Cluster Groups. Unpublished.
- Abach, P. (2017, April 19). Interview with Peter Abach, Local Councilman (LC3), Karenga 4/19/2017 [Audio].
- Abram, N. K., Meijaard, E., Wilson, K. A., Davis, J. T., Wells, J. A., Acrenaz, M., ... Mengersen, K. (2017). Oil palm-community conflict mapping in Indonesia: A case for better community liaison in planning for development initiatives. *Applied Geography*, 78, 33–44.
- Actman, J., & Bale, R. (2018, April 13). 8 Lion Cubs Killed in Suspected Poison Attack. *National Geographic*. Retrieved June 5, 2018, from <https://news.nationalgeographic.com/2018/04/wildlife-watch-lions-poisoned-uganda-cattle-retaliation/>
- Adams, J. S., & McShane, T. O. (1992). *The Myth of Wild Africa: Conservation Without Illusion*. Berkeley and Los Angeles, CA: University of California Press.
- Adams, W. M., & Mulligan, M. (2003). *Decolonizing Nature: Strategies for Conservation in a Postcolonial Era*. London, GBR: Earthscan.
- Adams, William M. (2004). *Against Extinction: The Story of Conservation*. London, UK: Earthscan.
- Alcalde, M., Ponce, C. F., & Curonisy, Y. (2005). Peace Parks in the Cordillera del Cóndor Mountain Range and Biodiversity Conservation Corridor. *Environmental Change and Security Program Report*, (11), 63–64.
- Alden, C., Thakur, M., & Arnold, M. (2011). *Militias and the Challenges of Post-Conflict Peace: Silencing the Guns*. London, UK: Zed Books Ltd.
- Aleper, D., & Moe, S. R. (2006). The African savannah elephant population in Kidepo Valley National Park, Uganda: changes in size and structure from 1967 to 2000. *African Journal of Ecology*, 44, 157–164.

- Ali, S. (Ed.). (2007). *Peace Parks: A Conservation and Conflict Resolution*. Boston, Massachusetts: MIT Press.
- Ali, S. H. (2011). The instrumental use of ecology in conflict resolution and security. *Procedia Social and Behavioral Sciences*, 14, 31–34.
- Ali, S. H. (2018). A Casualty of Peace? Lessons on De-Militarizing Conservation in the Cordillera del Condor Corridor. In *Collateral Values of Natural Capital*. Springer.
- Allan, P., & Keller, A. (Eds.). (2006). *What is a Just Peace?* Oxford, UK: Oxford University Press.
- Amat, R. (2017, July 13). Survey Response by Dr. Rahimatsah Amat [Online].
- Andersson, J. A., de Garine-Wichatitsky, M., Cumming, D. H. M., Dzingirai, V., & Giller, K. E. (Eds.). (2013). *Transfrontier Conservation Areas: People Living on the Edge*. Oxon, UK: Routledge.
- Anonymous. (2016a, December 7). Interview with UWA Legal Officers, Kampala 12/7/2016 [Audio].
- Anonymous. (2016b, December 7). Interview with WCS Uganda, Country Director, Kampala, Uganda 12/7/2016 [Audio].
- Anonymous. (2017a, January 15). Interview with UWA Community Conservation Warden, Bwindi Impenetrable NP on 15 Jan. 2017 [Audio].
- Anonymous. (2017b, January 16). Interview with Local Leader near Bwindi Impenetrable NP on 16 Jan 2017 [WMA Audio File].
- Anonymous. (2017c, February 16). Interview with Congolese conservationist, Goma 16 Feb 2017 [Audio].
- Anonymous. (2017d, February 24). Interview with Director of Rwanda Ministry of Foreign Affairs Africa Department, Kigali 2/24/2017 [Audio].
- Anonymous. (2017e, March 24). Interview with Uganda Security Officer, Goma 24 March 2017 [Notes].
- Anonymous. (2017f, April 11). Interview with UPDF Brigade Commander, kihiki April 11, 2017 [Audio].
- Anonymous. (2017g, April 15). Interview with UWA Chief Warden, 15 April 2017 [Audio].
- Anonymous. (2017h, April 18). Interview with AWF Programme Officer, Karenga 18 Apr 2017 [Audio].

- Anonymous. (2017i, April 18). Interview with UWA Community Conservation Warden, Kidepo Valley National Park 4/18/2017 [Audio].
- Anonymous. (2017j, April 19). Interview with UPDF Officer at Opotipot Outpost, Kidepo NP 4/19/2017 [Audio].
- Anonymous. (2017k, May). Interview with UWA Community Conservation Ranger, Kidepo Valley National Park [Audio].
- Anonymous. (2017l, June). E-mails from Kidepo Valley NP Community Conservation Warden.
- Anonymous. (2017m, July 18). Survey Response by Anonymous [Online].
- Anonymous. (2018, July 6). Messages with a Congolese conservationist, 6 July 2018.
- Austin, J. E., & Bruch, C. (Eds.). (2000). *The Environmental Consequences of War: Legal, Economic, and Scientific Perspectives*. Cambridge, UK: Cambridge University Press.
- Ayebare, S., Ponce-Reyes, R., Segan, D. B., Watson, J. E. M., Possingham, H. P., Seimon, A., & Plumptre, A. (2013). *Identifying climate-resilient corridors for conservation in the Albertine Rift* (Unpublished Report by WCS to MacArthur Foundation) (p. 59). Wildlife Conservation Society.
- Azar, E. (1990). The Analysis and Management of Protracted Social Conflict. In V. D. Volkan, D. A. Julius, & J. V. Montville (Eds.), *The Psychodynamics of International Relationships: Concepts and Theories* (Vol. 2, pp. 93–120). Lexington, KY: Lexington Books.
- Babaasa, D., Akampulira, E., & Bitariho, R. (2013). *Human-Wildlife Conflict Management: Experiences and Lessons Learned from the Greater Virunga Landscape* (p. 102). Kampala, Uganda: Institute for Tropical Forest Conservation.
- Baechler, G., & Spillman, K. R. (Eds.). (1996). *Environmental Degradation as a Cause of War* (Vol. II). Zurich: Verlag Rüegger AG.
- Baral, N. (2009). *Institutional Resilience of Community-based Conservation to the Maoist Insurgency in Nepal* (Doctoral Dissertation). Virginia Polytechnic Institute and State University, Blacksburg, Virginia.
- Barash, D. P., & Webel, C. P. (2014). *Peace and Conflict Studies* (3rd ed.). Los Angeles: SAGE Publications Ltd.

- Barnett, J. (2001). *The Meaning of Environmental Security: Ecological Politics and Policy in the New Security Era*. New York, USA: Zed Books Ltd.
- Barquet, K. (2015). Building a bioregion through transboundary conservation in Central America. *Norsk Geografisk Tidsskrift–Norwegian Journal of Geography*, 69(5), 265–276.
- Barquet, K., Lujala, P., & Rød, J. K. (2014). Transboundary Conservation and Militarized Interstate Disputes. *Political Geography*, 42, 1–11.
- Baskin, G., & al Qaq, Z. (Eds.). (1999). *Creating a Culture of Peace*. Jerusalem: Israel/Palestine Center for Research and Information.
- Bella, B. N. (2017, April 3). A Survey of the “War on Wildlife”: How Conflict Affects Conservation. Retrieved April 9, 2017, from <https://www.newsecuritybeat.org/2017/04/survey-war-wildlife-conf>.
- Berdal, M., & Malone, D. (2000). *Greed and Grievance: Economic Agendas in Civil Wars*. Boulder, CO: Lynne Rienner.
- Bertelle, R. (2000). *Planet earth: the latest weapon of war*. London, UK: Women's Press.
- Besthorn, F. H. (2013). Speaking Earth: Environmental Restoration and Restorative Justice. In K. S. van Wormer & L. Walker (Eds.), *Restorative Justice Today: Practical Applications* (pp. 233–244). Thousand Oaks, CA: SAGE Publications Ltd.
- Biebari, K. (1996). Economic Interdependence: A Path to Peace or a Source of Interstate Conflict? *Journal of Peace Research*, 33(1), 29–49.
- Blaikie, P., & Brookfield, H. (1987). *Land Degradation and Society*. New York: Methuen & Co. Ltd.
- Blomley, N. (2003). From “What?” to “So What?”: Law and Geography in Retrospect. In J. Holder & C. Harrison (Eds.), *Law and Geography* (Vol. 5, p. 624). Oxford, United Kingdom: Oxford University Press.
- Blomley, Nicholas, Delaney, D., & Ford, Richard T. (Eds.). (2001). *The Legal Geographies Reader: Law, Power and Space*. Oxford, United Kingdom: Blackwell Publishers Ltd.
- Blomley, T., Namara, A., McNeilage, A., Franks, P., Rainer, H., Donaldson, A., ... Infield, M. (2010). *Development and gorillas? Assessing fifteen years of integrated conservation and development in south-western Uganda*. London, UK: IIED.

- Bocchino, C. (2017). *SADC TFCAs Monitoring and Evaluation Framework: Workshop on the foundations of the Framework* (Workshop) (p. 13). Johannesburg, South Africa: SADC.
- Borrini-Feyerabend, G., Lassen, B., Stevens, S., Martin, G., Riascos de la Peña, J. C., Ráez-Luna, E. F., & Farvar, M. T. (2012). *Bio-cultural diversity conserved by indigenous peoples & local communities-examples & analysis* (p. 71). Tehran, Iran: Cenesta for the ICCA Consortium, IUCN, UNDP GEF SGP and GIZ on behalf of BMZ.
- Borrini-Feyerabend, G., Pimbert, M., Farvar, M. T., Kothari, A., & Renard, Y. (2007). *Sharing Power: A Global Guide to Collaborative Management of Natural Resources*. London, UK: Earthscan.
- Bottrill, M. C., Joseph, L. N., Carwardine, J., Bode, M., Cook, C., Game, E. T., ... Possingham, H. P. (2008). Is conservation triage just smart decision making? *Science & Society*, 23(12), 649–654.
- Boyd, D. R. (2011). *The Environmental Rights Revolution: A Global Study of Constitutions, Human Rights, and the Environment*. Vancouver, Canada: UBC Press.
- Bragagnolo, C., Pereira, M., Ng, K., & Calado, H. (2016). Understanding and mapping local conflicts related to protected areas in small islands: a case study of the Azores archipelago. *Island Studies Journal*, 11(1), 57–90.
- Brochmann, M., Rød, J. K., & Gleditsch, N. P. (2012). International Borders and Conflict Revisited. *Conflict Management and Peace Science*, 29(2), 170–194.
- Brock, L. (1991). Peace through Parks: The Environment on the Peace Research Agenda. *Journal of Peace Research*, 28(4), 407–423.
- Brockington, D. (2002). *Fortress Conservation: The Preservation of the Mkomazi Game Reserve, Tanzania*. Bloomington, IN: Indiana University Press.
- Brockington, D., Duffy, R., & Igoe, J. (2008). *Nature unbound: conservation, capitalism and the future of protected areas*. London ; Sterling, VA: Earthscan.
- Brosius, J. P., & Russell, D. (2003). Conservation from Above: An Anthropological Perspective on Transboundary Protected Areas and Ecoregional Planning. In U. Manage Goodale, M. J. Stern, C. Margolius, C. G. Lanfer, & M. Fladeland (Eds.), *Transboundary Protected Areas: The Viability of Regional Conservation Strategies* (Vol. 17, pp. 39–65). Binghamton, NY: The Haworth Press, Inc.

- Brown, L. (1997). *Redefining National Security*. Washington D.C.: Worldwatch Institute.
- Budowski, G. (2004). PEACE through parks. *Our Planet*, 14(4), 30–31.
- Büscher, B. (2010). Seeking “telos” in the “transfrontier”? Neoliberalism and the transcending of community conservation in Southern Africa. *Environment and Planning A*, 42(3), 644–660.
- Büscher, B. (2013). *Transforming the Frontier: Peace Parks and the Politics of Neoliberal Conservation in Southern Africa*. Durham, US: Duke University Press.
- Büscher, B., Fletcher, R., Brockington, D., Sandbrook, C., Adams, W. M., Campbell, L., ... Shanker, K. (2016). Half-Earth or Whole Earth? Radical ideas for conservation, and their implications. *Oryx*, 51(3), 1–4.
- Büscher, B., & Ramutsindela, M. (2015). Green Violence: Rhino Poaching and the War to Save Southern Africa’s Peace Parks. *African Affairs*, 1–22.
- Butler, C. (2009). Critical Legal Studies and the Politics of Space. *Social & Legal Studies*, 18(3), 313–332.
- Byamukama, J., & Ochen Ochen, I. (2016). *Sarambwe habitat Degradation and other Transboundary International Porous Border conflicts threatenin sustainable conservation and tourism development in Greater Virunga Landscape between Democratic Republic of Congo and Uganda* (GVTC-Board). Kigali, Rwanda: GVTC.
- Cafaro, P., Butler, T., Crist, E., Cryer, P., Dinerstein, E., Kopnina, H., ... Washington, H. (2017). If we want a whole Earth, Nature Needs Half: a response to Büscher et al. *Oryx*, 51(3), 400–400.
- Caldwell, M. (2017, April 18). Drought drives Kenyan pastoralists into Uganda [News]. Retrieved April 20, 2017, from <http://www.dw.com/en/drought-drives-kenyan-pastoralists-into-uganda/a-38462911>
- Carius, A. (2006). Environmental Peacebuilding: Conditions for Success. *Environmental Change and Security Program Report*, (12), 59–75.
- Carmody, P., & Taylor, D. (2016). Globalization, Land Grabbing, and the Present-Day Colonial State in Uganda: Ecolonization and Its Impacts. *Journal of Environment & Development*, 25(1), 100–126.
- CBD Secretariat. (nd). Peace and Biodiversity Dialogue Initiative. CBD Secretariat & UNEP. Retrieved November 19, 2017, from <https://www.cbd.int/pbdi/doc/aboutpbdi.pdf>

- CBD Secretariat. (2012). *Report of the Colloquium on the Role of ICCAs in Achieving the Aichi Targets* (p. 4). Hyderabad, India: CBD Secretariat. Retrieved August 13, 2017, from <https://www.cbd.int/doc/pa/icca-day-report-en.pdf>
- Centre d'Accompagnement des Autochtones Pygmées et Minoritaires Vulnérables, & United Organisation for Batwa Development in Uganda. Joint Declaration of Indigenous Organisations and Indigenous Support Organisations of the Central Albertine Rift Transboundary Biopshere Initiative (2008).
- Chakrabarty, D. (2000). *Provincializing Europe: Postcolonial Thought and Historical Difference*. Princeton, NJ: Princeton University Press.
- Chapin, M. (2004, December). A Challenge to Conservationists. *World Watch Magazine*, (17), 17–31.
- Chatty, D. (2002). Animal reintroduction projects in the Middle East: conservation without ahuman face. In D. Chatty & M. Colchester (Eds.), *Conservation and mobile indigenous peoples: displacement, forced settlement, and sustainable development* (pp. 227–243). New York, USA: Berghahn Books.
- Collier, P., & Hoeffler, A. (2001). *Greed and Grievance in Civil War*. Oxford, UK: Oxford University Press.
- Commission on Human Security. (2003). *Human Security Now*. Washington, D.C.: Commission on Human Security.
- Conca, K., & Dabelko, G. D. (Eds.). (2002). *Environmental Peacemaking*. Washington, D.C.: Woodrow Wilson Center Press.
- Constitution of the United Nations Educational, Scientific, and Cultural Organization, Pub. L. No. 4 U.N.T.S. 275 (1945).
- Correspondent. (2017, December 2). Sources reveal a rebel recruitment drive in Uganda to destabilise Rwanda [News]. Retrieved February 4, 2018, from <https://www.standardmedia.co.ke/article/2001261901/sources-reveal-a-rebel-recruitment-drive-in-uganda-to-destabilise-rwanda>
- Couto, S. (2016). The facerias agreements, transboundary governance in the Pyrenees.

- Cronon, W. (1996). *Uncommon Ground: Rethinking the Human Place in Nature*. New York, USA: W.W. Norton & Company, Inc.
- Crutzen, P. J. (2005). Human Impact On Climate Has Made This the “Anthropocene Age.” *New Perspectives Quarterly*, 22(2), 14–16.
- Dabelko, G. D. (2006, May). *From Threat to Opportunity: Exploiting Environmental Pathways to Peace*. Presented at the Environment, Peace and Dialogue Among Civilizations and Cultures.
- Darnell, J. E. (2008). *Are Peace Parks Effective Peacebuilding Tools?: Evaluating the Great Limpopo Transfrontier Park as a Regional Stabilizing Agent* (M.A. Thesis). American University, Washington, D.C.
- Davis, J. L., Green, J. D., & Reed, A. (2009). Interdependence with the environment: Commitment, interconnectedness, and environmental behavior. *Journal of Environmental Psychology*, 29, 173–180.
- De Costa, B. F. (1873). *Hiawatha: The Story of the Iroquois Sage In Prose and Verse*. New York, USA: Anson D.F. Randolph & Co.
- De Lucia, V. (2017). Beyond anthropocentrism and ecocentrism: a biopolitical reading of environmental law. *Journal of Human Rights and the Environment*, 8(2), 181–202.
- De Sousa Santos, B. (1977). The Law of the Oppressed: The Construction and Reproduction of Legality in Pasargada. *Law & Society Review*, 12(5), 1977–1978.
- De Sousa Santos, B. (2002). *Law, Globalization, and Emancipation* (Second). United Kingdom: Reed Elsevier.
- De Sousa Santos, B., & Rodríguez-Garavito, C. A. (Eds.). (2005). *Law and Globalization from Below: Towards a Cosmopolitan Legality*. Cambridge, UK: Cambridge University Press.
- de Soysa, I. (2002). Shrinking Pie, or Honey Pot? *Global Environmental Politics*, 2(4), 1–34.
- DeGeorges, P. A. (2009). Conservation and development in sub-Saharan Africa. *International Journal of Environmental Studies*, 66(5), 637–641.
- Delaney, D. (2010). *Nomospheric Investigations: The Spatial, the Legal and the Pragmatics of World-Making*. New York: Routledge.

- Delaney, J., & Sautner, S. (2016, March 2). Deep Concern for South Sudan's Natural Resources – an Emerging Illegal Exploitation and Trafficking Crisis [NGO]. Retrieved June 19, 2018, from <https://newsroom.wcs.org/News-Releases/articleType/ArticleView/articleId/8603/Deep-Concern-for-South-Sudans-Natural-Resources-an-Emerging-Illegal-Exploitation-and-Trafficking-Crisis.aspx>
- Democratic Republic of Congo, Republic of Rwanda, & Republic of Uganda. Greater Virunga Transboundary Collaboration Treaty on Wildlive Conservation and Tourism Development (GVTCT) (2015).
- Dezalay, Y., & Bryant G. Garth. (2002). *The Internationalization of Palace Wars: Lawyers, Economists and the Contest to Transform Latin American States.* (W. M. O'Barr & J. M. Conley, Eds.). Chicago: University of Chicago Press.
- Dickman, A. J. (2010). Complexities of conflict: the importance of considering social factors for effectively resolving human-wild life conflict. *Animal Conservation*, 13, 458–466.
- Dickman, A. J., & Hazzah, L. (2016). Money, Myths and Man-Eaters: Complexities of Human-Wildlife Conflict. In F. M. Angelici (Ed.), *Problematic Wildlife: A Cross-Disciplinary Approach* (pp. 339–356). Switzerland: Springer International Publishing.
- Dittrich Hallberg, J. (2012). PRIO Conflict Site 1989-2008: A Geo-Referenced Dataset on Armed Conflict. *Conflict Management and Peace Science*, 29(2), 219–232.
- Doki, C. (2014, June 17). South Sudan's Wildlife Become Casualties Of War and Are Killed to Feed Soldiers and Rebels Inter Press Service (Jun2014).pdf. *Inter Press Service*. Retrieved November 15, 2017, from <http://www.ipsnews.net/2014/06/south-sudans-wildlife-become-casualties-war-killed-feed-soldiers-rebels/>
- Dowie, M. (2009). *Conservation refugees: the hundred-year conflict between global conservation and native peoples.* Cambridge, Mass: MIT Press.
- Dranginis, H. (2015). *Grand Theft Global: Prosecuting the War Crime of Natural Resource Pillage in the Democratic Republic of the Congo.* Washington, D.C.: Enough Project. Retrieved June 19, 2018, from <http://www.satsentinel.org/sites/default/files/reports/GrandTheftGlobal-PillageReport-Dranginis-Enough-Jan2015.pdf>

- Dranginis, H. (2016). *The Mafia in the Park: A charcoal syndicate is threatening Virunga, Africa's oldest national park* (p. 45). Washington, D.C.: Enough Project. Retrieved June 19, 2018, from
https://enoughproject.org/files/report_MafiaInThePark_Dranginis_Enough_June2016.pdf
- Du Bois Gervasi, V. A. P. J., & Sorrosa Encalada, V. R. (1981, March 5). Declaración de cese de fuego en la zona de la Cordillera del Cóndor. Diplomatic/Military Notes.
- Dudley, N. (Ed.). (2008). *Guidelines for Applying Protected Area Management Categories*. Gland, Switzerland: IUCN.
- Duffy, R. (2001). Peace parks: The paradox of globalisation. *Geopolitics*, 6(2), 1–26.
- Duffy, R. (2005). The Politics of Global Environmental Governance: The Powers and Limitations of Transfrontier Conservation Areas in Central America. *Review of International Studies*, 31(2), 307–323.
- Duffy, R. (2014). Waging a war to save biodiversity: the rise of militarized conservation. *International Affairs*, 90(4), 819–834.
- Duffy, R. (2017, July 20). We Need to Talk about the Militarisation of Conservation. Retrieved August 2, 2017, from <https://www.greeneuropeanjournal.eu/we-need-to-talk-about-militarisation-of-conservation/>
- Duncan, D. (2009). *The National Parks: America's Best Idea* (1st ed.). New York, USA: Alfred A. Knopf.
- Dupuy, K., Gates, S., Mokleiv Nygård, H., Rudolfsen, I., Aas Rustad, S., Strand, H., & Urdal, H. (2017). *Trends in Armed Conflict, 1946-2016* (Report Trends) (p. 4). Oslo, Norway: Peace Research Institute Oslo.
- Dyer, N., Omondi, S., & Wantsusi, M. (2008). *Securing Pastoralism in East and West Africa: Protecting and Promoting Livestock Mobility* (Karamojong Cluster Desk Review). Uganda: SOS Sahel UK.
- Eagles, P. F. J., McCool, S. F., Haynes, C. D., & Phillips, A. (2002). *Sustainable Tourism in Protected Areas: Guidelines for Planning and Management*. Gland, Switzerland: IUCN.
- Earth Charter Commission. The Earth Charter (2000).
- Ellis, C. (2017, August 1). Survey Response by Dr. Christina Ellis [Online].

- Engle Merry, S. (2009). *Gender Violence: A Cultural Perspective*. Chichester, UK: Wiley-Blackwell.
- Environmental Investigation Agency. (2014). *In Cold Blood: Combating organised wildlife crime* (EIA) (p. 24). London, UK: EIA. Retrieved January 21, 2018, from <https://eia-international.org/wp-content/uploads/EIA-In-Cold-Blood-FINAL.pdf>
- EUROPARC Federation. (2017). Discover our Transboundary Parks. Retrieved September 11, 2017, from <http://www.europarc.org/nature/transboundary-parks/discover-our-transboundary-areas/>
- European Green Belt Association. (2017). Fact Sheet: European Green Belt - from Iron Curtain to Life Line. European Green Belt Association. Retrieved September 11, 2017, from http://www.europeangreenbelt.org/fileadmin/content/downloads/Fact-sheet_EGB_initiative_20160913.pdf
- European Union. Convention on the Conservation of European Wildlife and Natural Habitats, Pub. L. No. ETS No. 104 (1979). Retrieved October 23, 2017, from <https://www.coe.int/en/web/conventions/full-list/-/conventions/treaty/104>
- European Union. Protocol Concerning Specially Protected Areas and Biological Diversity in the Mediterranean, Pub. L. No. Official Journal of the European Communities L 322/3 (1999).
- European Union. Charter of the Fundamental Rights of the EU, Pub. L. No. 2012/C 326/02 (2012).
- European Union. (2017, April 8). EU Treaties. Retrieved August 3, 2017, from https://europa.eu/european-union/law/treaties_en
- Fekadu Mulugeta, M. (2017). Small arms and conflict among East African pastoralists: the Karamoja (in)security complex. *Africa*, 87(4), 739–757.
- Fimbel, C., & Fimbel, R. (1997). Conservation and Civil Strife: Two Perspectives from Central Africa. *International Conservation News*, 11(2), 308–310.
- Fixdal, M. (2012). *Just Peace: How Wars Should End*. New York, USA: Palgrave Macmillan.
- FPP, UOBDU, & IWGIA. (2009). *Alternative Report to the Second Periodic Report of Uganda to the African Commission on Human and Peoples' Rights* (Periodic Report No. 2nd) (p. 23). African Commission on Human and Peoples' Rights.
- Francis, P. (2015, May 24). Encyclical Letter Laudato Si' of the Holy Father Francis on Care for our Common Home. Encyclical Letter. Retrieved June 6, 2018, from

- http://w2.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20150524_enciclica-laudato-si.html
- Franks, P., & Small, R. (2016). *Social Assessment for Protected Areas (SAPA) Methodology Manual for SAPA Facilitators*. London, United Kingdom: IIED. Retrieved March 23, 2016, from <http://pubs.iied.org/pdfs/14659IIED.pdf?>
- Galtung, J. (1969). Violence, Peace, and Peace Research. *Journal of Peace Research*, 6(3), 167–191.
- Galtung, J. (1990). Cultural Violence. *Journal of Peace Research*, 27(3), 291–305.
- Galtung, J. (1996). *Peace by Peaceful Means: Peace and Conflict, Development and Civilization*. Oslo: International Peace Research Institute.
- Gaynor, K. M., Fiorella, K. J., Gregory, G. H., Kurz, D. J., Seto, K. L., Withey, L. S., & Brashares, J. S. (2016). War and wildlife: linking armed conflict to conservation. *Frontiers in Ecology and the Environment*, 14(10), 533–542.
- Gellers, J. C., & Jeffords, C. (2018). Toward Environmental Democracy? Procedural Environmental Rights and Environmental Justice. *Global Environmental Politics*, 18(1), 99–121.
- Gelpi, C. F., & Grieco, J. M. (2008). Democracy, Interdependence, and the Sources of the Liberal Peace. *Journal of Peace Research*, 45(1), 17–36.
- Gleditsch, N. P. (1998). Armed Conflict and the Environment: A Critique of the Literature. *Journal of Peace Research*, 35(3), 381–400.
- Gleditsch, N. P., Wallensteen, P., Eriksson, M., Sollenberg, M., & Strand, H. (2002). Armed Conflict 1946–2001: A New Dataset. *Journal of Peace Research*, 39(5), 615–637.
- Government of the State of Israel, & Government of the Hashemite Kingdom of Jordan. Treaty of Peace between the State of Israel and the Hashemite Kingdom of Jordan (1994).
- Governments of Southern Sudan and the Republic of Uganda. Memorandum of Understanding Between the Government of Southern Sudan and the Government of Uganda On the Management of Transboundary Conservation Landscapes for Peace (2007).
- Grandia, L. (2007). Between Bolivar and Bureaucracy: The Mesoamerican Biological Corridor. *Conservation and Society*, 5(4), 478–503.
- Gray, M., & Rutagarama, E. (Eds.). (2011). *20 Years of IGCP: Lessons Learned in Mountain Gorilla Conservation*. Kigali, Rwanda: International Gorilla Conservation Programme.

- Griffiths, I. (1986). The Scramble for Africa: Inherited Political Boundaries. *The Geographic Journal*, 152, 204–216.
- GVTC. (2014, March). Transboundary Collaboration in the Greater Virunga Landscape Protected Area Network: Transboundary Strategic Plan 2013-2018. GVTC.
- GVTC. (2017a). Concept Note on Harmonization of Wildlife Crime Related Policies and Laws in GVL Stakeholders Meeting. GVTC.
- GVTC. (2017b). *Greater Virunga Landscape: Annual Conservation Status Report 2015*. Kigali, Rwanda: GVTC.
- GVTC. (2017c). *Round Table on Dialogue between State Partners of DRC and Uganda on Wildlife Conservation and Development in the Greater Virunga Landscape (Security Group)*. Goma, DRC: GVTC.
- GVTC. (2017d, January). Concept on GVTC Landscape/Law Enforcement Regional Committees meeting: January 2017. GVTC.
- GVTC. (2017e, August 11). Validation Workshop of Water4Virunga Under Elaboration Project. Retrieved February 1, 2018, from <http://greatervirunga.org/spip.php?article253>
- GVTC, & Government of the Republic of Rwanda. Headquarters Agreement Between the Government of the Republic of Rwanda and the Greater Virunga Transboundary Collaboration (2013).
- GVTC, ICGLR, & CEPGL. Memorandum of Understanding between International Conference on the Great Lakes Region (ICGLR) and the Economic Community of Great Lake Countries (CEPGL) and Greater Virunga Transboundary Collaboration (GVTC) (2014).
- GVTC Secretariat. (2018a, April 5). First Council of Ministers Meeting of GVTC [NGO]. Retrieved July 6, 2018, from <http://greatervirunga.org/media-center/article/first-council-meeting-of-gvtc>
- GVTC Secretariat. (2018b, May 22). The Tripartite Round Table Dialogue between GVTC Partners States of DRC, Rwanda and Uganda [NGO]. Retrieved July 6, 2018, from <http://greatervirunga.org/media-center/article/the-tripartite-round-table>

- GVTC Secretariat. (2018c, June 28). Extraordinary of the Council of Ministers' Meeting of GVTC [NGO]. Retrieved July 6, 2018, from <http://greatervirunga.org/media-center/article/extraordinary-of-the-council>
- GVTC, & UWA. Memorandum of Understanding Between the Greater Virunga Transboundary Executive Secretariat (GVTES) and Uganda Wildlife Authority (2011).
- GVTC, & UWA. Memorandum of Understanding between the Greater Virunga Transboundary Collaboration Secretariat (GVTCS) and Uganda Wildlife Authority (UWA) (2012).
- GVTC, & UWA. Memorandum of Understanding for the Promotion of Bee Keeping between the Greater Virunga Trans-Boundary Collaboration Executive Secretariat and Uganda Wildlife Authority (UWA) (2016).
- Hanks, J. (2017, July 17). Interview with John Hanks, first CEO of Peace Parks Foundation [Skype].
- Hanks, J., & Myburgh, W. (2015). The evolution and progression of Transfrontier Conservation Areas in the Southern African Development Community. In R. Van der Duim, M. Lamers, & J. van Wijk (Eds.), *Institutional Arrangements for Conservation, Development and Tourism in Eastern and Southern Africa* (pp. 157–179). Netherlands: Springer.
- Hanson, T., Brooks, T. M., Da Fonseca, G. A. B., Hoffmann, M., Lamoreux, J. F., Machlis, G., ... Pilgrim, J. D. (2009). Warfare in Biodiversity Hotspots. *Conservation Biology*, 23(3), 578–587.
- Hanyurwimfura, J. D. (2017, February 14). Interview with Village Leader, Kimitoni Village, 14 Feb 2017 [Audio].
- Harbom, L., & Wallensteen, P. (2009). Armed Conflicts, 1946-2008. *Journal of Peace Research*, 46(4), 577–587.
- Harmon, D. (1987). Cultural Diversity, Human Subsistence, and the National Park Ideal. *Environmental Ethics*, 9, 147–158.
- Hart, T., & Mwinyihali, R. (2001). *Armed Conflict and Biodiversity in Sub-Saharan Africa: The Case of the Democratic Republic of Congo (DRC)* (Biodiversity Support Program). Washington, D.C.: World Wildlife Fund, Inc.
- Hart-Davis, D. (1994, August 19). Let us never go the way of the Ik. *Independent*. Retrieved May 8, 2017, from <http://www.independent.co.uk/voices/country-matters-let-us-never-go-the-way-of-the-ik-1384655.html>

- Hay, D. (1995). Time, Inequality, and Law's Violence. In A. Sarat & T. R. Kearns (Eds.), *Law's Violence*. Ann Arbor, MI: University of Michigan Press.
- Hege, S., Alusalal, N., de Koning, R., Plamadiala, M., Serralta, E., & Spittaels, S. (2012). *Letter dated 12 October 2012 from the Group of Experts on the Democratic Republic of the Congo addressed to the Chairman of the Security Council Committee established pursuant to resolution 1533 (2004) concerning the Democratic Republic of the Congo* (p. 44). New York, USA: Group of Experts on the Democratic Republic of the Congo (DRC).
- Heynen, N., McCarthy, J., Prudham, S., & Robbins, P. (Eds.). (2007). *Neoliberal Environments: False Promises and Unnatural Consequences*. London, UK: Routledge.
- Hochleithner, S. (2017). Beyond Contesting Limits: Land, Access, and Resistance at the Virunga National Park. *Conservation and Society*, 15(1), 100–110.
- Hoffman, K. (2015). Myths Set in Motion: The Moral Economy of Mai-Mai Governance. In A. Arjona, N. Kasfir, & Z. Mampilly (Eds.), *Rebel Governance in Civil War* (pp. 158–179). Cambridge, UK: Cambridge University Press.
- Hoffman, K., Vlassenroot, K., & Marchais, G. (2016). Taxation, Stateness and Armed Groups: Public Authority and Resource Extraction in Eastern Congo. *Development and Change*, 47(6), 1434–1456.
- Holland, B. (2015). Recognition, participation, and power in the global struggle for environmental justice: the emerging politics of environmental rights and opportunities. *Politics, Groups, and Identities*, 3(4), 692–696.
- Homer-Dixon, T. (1991). On the Threshold: Environmental Changes as Causes of Acute Conflict. *International Security*, 16(2), 76–116.
- Homer-Dixon, T. (1999). *Environment, Scarcity, and Violence*. Princeton, NJ: Princeton University Press.
- Howden, D. (2009, October 17). Gorilla warfare: The battle to save one of Africa's rarest animals. *The Independent*. Retrieved June 19, 2018, from <https://www.independent.co.uk/environment/nature/gorilla-warfare-the-battle-to-save-one-of-africas-rarest-animals-1803193.html>

- Hsiao, E. C. (2010). *Peace Parks for Mountain Forests: The Law and Policy of Transforming Conflict to Stewardship*. Pace University School of Law. Retrieved March 8, 2016, from <http://digitalcommons.pace.edu/lawdissertations/7/>
- Hsiao, E. C. (2012). Whanganui River Agreement: Indigenous Rights and Rights of Nature. *Environmental Policy and Law*, 42(6), 371–375.
- Hsiao, E. C. (2015). Water for Peace and Resilience in the Central Albertine Rift. *South African Journal of Environmental Law and Policy*, 20, 65–87.
- Hsiao, E. C. (2017). Developing a Legal Framework for Conservation and Peace in Times of Conflict: A Case Study of the Greater Virunga Transboundary Collaboration. *IUCN AEL E-Journal*.
- Hsiao, E. C., & Wilson, C. (2012). *Transcending Boundaries: Perspectives from the Central Albertine Rift*. Retrieved June 11, 2017, from <https://vimeo.com/62257328>
- Ide, T. (2018). The Impact of Environmental Cooperation on Peacemaking: Definitions, Mechanisms, and Empirical Evidence. *International Studies Review*, 0, 1–20.
- Infield, M., Entwistle, A., Anthem, H., Mugisha, A., & Phillips, K. (2017). Reflections on cultural values approaches to conservation: lessons from 20 years of implementation. *Oryx*, 52(2), 220–230.
- Institute for Economics and Peace. (2016a). *Positive Peace Report 2016* (Positive Peace Report No. IEP Report 42) (p. 90). Sydney, Australia: Institute for Economics and Peace.
- Institute for Economics and Peace. (2016b). *Positive Peace: The lens to achieve the Sustaining Peace Agenda* (IEP Brief) (p. 11). Sydney, Australia: Institute for Economics and Peace.
- Institute for Economics and Peace. (2017). *Global Peace Index 2017* (Global Peace Index) (p. 136). Sydney, Australia: Institute for Economics and Peace.
- International Committee of the Red Cross (ICRC). Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I), Pub. L. No. 1125 UNTS 3 (1977).
- International Committee of the Red Cross (ICRC). Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of Non-International Armed Conflicts (Protocol II), Pub. L. No. 1125 UNTS 609 (1977).

- International Committee of the Red Cross (ICRC). (1996). *Guidelines for Military Manuals and Instructions on the Protection of the Environment in Times of Armed Conflict* (Guidelines No. 311). Geneva, Switzerland: ICRC. Retrieved October 23, 2017, from <https://www.icrc.org/eng/resources/documents/article/other/57jn38.htm>
- INTERPOL-UN Environment. (2016). *Strategic Report: Environment, Peace and Security - A Convergence of Threats* (Strategic Report).
- Issitt, M. L. (2006). *Hiawatha*. Great Neck, NY: Great Neck Publishing.
- IUCN. Convention relative to the Preservation of Fauna and Flora in their Natural State, Pub. L. No. TRE-000069 (1933).
- IUCN. Benelux Convention on Nature Conservation and Landscape Protection, Pub. L. No. TRE-000757 (1982). Retrieved October 23, 2017, from <https://www.ecolex.org/details/treaty/benelux-convention-on-nature-conservation-and-landscape-protection-tre-000757/>
- IUCN. (2012, May 7). Progress Report of the Whakatane Mechanism [NGO]. Retrieved September 26, 2018, from <https://www.iucn.org/content/progress-report-whakatane-mechanism>
- Jepson, P., Whittaker, R. J., & Lourie, S. A. (2011). The Shaping of the Global Protected Area Estate. In R. J. Ladle & R. J. Whittaker (Eds.), *Conservation Biogeography*. West Sussex, UK: Blackwell Publishing Ltd.
- Jodoin, S. (2014). Can Rights-Based Approaches Enhance Levels of Legitimacy and Cooperation in Conservation? A Relational Account. *Human Rights Review*, 15(3), 283–303.
- Johnston, B. (1994). *Who Pays the Price? The Sociocultural Context of Environmental Crisis*. Washington, D.C.: Island Press.
- Johnston, B. (1997). *Life and Death Matters: Human Rights and the Environment at the End of the Millennium*. California: Altamira.
- Jonas, H. D., Barbuto, V., Jonas, H. C., & Kothari, A. (2014). New Steps of Change: Looking Beyond Protected Areas to Consider Other Effective Area-Based Conservation Measures. *PARKS*, 20(2), 111–128.
- Kahl, C. H. (2006). *States, Security, and Civil Strife in the Developing World*. Princeton, NJ: Princeton University Press.

- Kalpers, J. (2001). *Volcanoes under Siege: Impact of a Decade of Armed Conflict in the Virungas* (BSP Case Studies). Washington, D.C.: Biodiversity Support Program (BSP).
- Kameri-Mbote, P. (2007). *Environmental Conflict and Cooperation in the African Great Lakes Region: A Case Study of the Virungas* (Report of the Regional Consultation 22-23 August 2007, Nairobi, Kenya) (p. 44). Nairobi: Environment and Conflict Prevention Initiative of the UNEP's Division of Early Warning and Assessment.
- Kamoga, J. (2017, June 26). South Sudan Rebels Recruiting Fighters in Ugandan Refugee Camps [News]. Retrieved June 28, 2017, from <http://www.observer.ug/news/headlines/53554-south-sudan-rebels-recruiting-fighters-in-ugandan-refugee-camps.html>
- Kanyamibwa, S. (1998). Impact of war on conservation: Rwandan environment and wildlife in agony. *Biodiversity & Conservation*, 7(11), 1399–1406.
- Kaplan, R. D. (1994, February). The Coming Anarchy. *The Atlantic Monthly*. Retrieved April 27, 2017, from <https://www.theatlantic.com/ideastour/archive/kaplan.html>
- Kasereka, P. (2017, April 12). Interview with ICCN Conservateur Adjoint de PN Virunga, Ishasha [Audio].
- Kavira Luneghe, M. (2017, September 6). Armed Groups at DRC's Lake Edward Devastate Fish Stocks, Jobs and Farms [Media]. Retrieved May 20, 2018, from <https://globalpressjournal.com/africa/democratic-republic-of-congo/armed-groups-drcs-lake-edward-devastate-fish-stocks-jobs-farms/>
- Kidd, C. (2011). Interview with Chris Kidd, Forest Peoples Program Human Rights Officer, Kisoro, Uganda [Audio].
- Kim, K. C. (1997). Preserving biodiversity in Korea's demilitarized zone. *Science*, 278(5336), 242–243.
- King, B. (2010). Conservation Geographies in Sub-Saharan Africa: The Politics of National Parks, Community Conservation and Peace Parks. *Geography Compass*, 4(1), 1–14.
- Kityo, R., Plumptre, A. J., Kerbis Peterhans, J., Pilgrim, J. D., & Moyer, D. (2003). Section 2: Mammals. In *The Biodiversity of the Albertine Rift*. Kampala, Uganda: Wildlife Conservation Society.

- Kleinhans, M.-M., & Macdonald, R. A. (1997). What is a Critical Legal Pluralism? *Canadian Journal of Law & Society*, 12(2), 25–46.
- Knighton, B. (2006). Belief in guns and warlords: freeing Karamojong identity from Africanist theory. *African Identities*, 4(2), 269–286.
- Knox, J. (2018). *Framework Principles on Human Rights and the Environment* (UN Special Rapporteur on Human Rights and the Environment). Geneva, Switzerland: UNHRC.
- Koos, C., & Pierskalla, J. (2016). The Effects of Oil Production and Ethnic Representation on Violent Conflict in Nigeria: A Mixed-Methods Approach. *Terrorism and Political Violence*, 28, 888–911.
- Kule Bitswande, J. (2017, March 3). Kasese - a Tragic Conflict Rooted in Land, One Boy's Dream and a Family's Hope. *The Observer*. Retrieved April 30, 2017, from <http://allafrica.com/stories/201703030450.html>
- Kyomuhendo Byaruhanga, G. (2017, March). *Opening Remarks at the Official Launch of the NICHE Project*. Presented at the GVTC Launch of NICHE Project, Musanze, Rwanda. Retrieved June 19, 2018, from <http://greatervirunga.org/media-center/article/kick-off-of-niche-project-by>
- LAG of Albania, & LAG of Montenegro. Memorandum of Understanding between The Local Action Group (LAG) of Albania and The Local Action Group (LAG) of Montenegro concerning cooperation in environmental protection, tourism, recreation and sustainable development in the territories of the two communities either side of the international border between Albania and Montenegro in the Bjeshkët e Namuna/Prokletije Mountains (nd).
- Lagrone, C., & Busby, J. (2015, June 10). Is Wildlife Trafficking a National Security Threat? [Blog]. Retrieved January 21, 2018, from <https://www.newsecuritybeat.org/2015/06/wildlife-trafficking-national-security-threat/>
- Lal, D., & Myint, H. (1996). *The Political Economy of Poverty, Equity, and Growth*. Oxford, UK: Clarendon Press.
- Le Billon, P. (1999). *Power is consuming the forest: The political ecology of conflict and reconstruction in Cambodia* (PhD Dissertation). University of Oxford, Oxford, UK. Retrieved

July 2, 2018, from https://ora.ox.ac.uk/objects/uuid:9dd5daa2-704c-4909-850a-d4d64294cce3/download_file?file_format=pdf&safe_filename=602330160.pdf&type_of_work=Thesis

Le Billon, P. (2012). *Wars of Plunder: Conflicts, Profits and the Politics of Resources*. United Kingdom: Hurst & Co., Ltd.

Leebaw, B. (2014). Scorched Earth: Environmental War Crimes and International Justice. *Perspectives on Politics*, 12(4), 770–788.

Lefebvre, H. (1991). *The Production of Space*. (D. Nicholson-Smith, Trans.) (English translation). Oxford, UK: Basil Blackwell Ltd.

Leff, J. (2009). Pastoralists at War: Violence and Security in the Kenya-Sudan-Uganda Border Region. *International Journal of Conflict and Violence*, 3(2), 188–203.

Lejano, R. (2007). Peace Games: Theorizing about Transboundary Conservation. In *Peace Parks: Conservation and Conflict Resolution* (pp. 41–54). Cambridge, Mass: The MIT Press.

Lele, S., Wilshusen, P., Brockington, D., Seidler, R., & Bawa, K. (2010). Beyond exclusion: alternative approaches to biodiversity conservation in the developing tropics. *Current Opinion in Environmental Sustainability*, 2(1–2), 94–100.

Leopold, A. (1989). The Land Ethic. In *A Sand County Almanac and Sketches Here and There* (Special Commemorative Edition, pp. 201–226). New York, USA: Oxford University Press.

Liniger, H., Weingartner, R., & Grosjean, M. (1998). *Mountains of the World: Water Towers for the 21st Century*. CDE.

Lobeerei, F. R. (2017, April 19). Interview with Father Raphael Lobeerei, Kidepo Valley NP 4/19/2017 [Audio].

Local Authorities of Municipalities/Districts of Shkodra, Bajram Curri, Plava, Rozaje, Peja and Decani. Letter of Good Intent for Cross-Border Local Authorities of Albania, Montenegro and Kosovo (2006).

Locke, H. (2013). Nature Needs Half: A Necessary and Hopeful New Agenda for Protected Areas. *PARKS*, 19(1), 9–18.

Lockwood, M., Worboys, G. L., & Kothari, A. (Eds.). (2006). *Managing Protected Areas: A Global Guide*. London, UK: Earthscan.

- Lombard, L. (2015). Threat economies and armed conservation in northeastern Central African Republic. *Geoforum*, 69, 218–226.
- Lubbe, W. D. (2008). Straddling Borders and Legal Regimes: The Case for Cooperative Transfrontier Biodiversity Conservation in the Southern African Development Community. *Yearbook of International Environmental Law*, 18(11), 126–152.
- Lund, M. S. (2011, 2012). Curve of Conflict [Non-Profit Organization]. Retrieved May 24, 2018, from <https://www.usip.org/public-education/students/curve-conflict>
- Lutaichirwa Mulwahale, S. E. F., Sekandi, H. S., & Muamba Tshibasu, G. Round Table on Dialogue between State Partners of DRC and Uganda on Wildlife Conservation and Development in the Greater Virunga Landscape (Communiqué) (2017).
- Lysenko, I., Besançon, C., & Savy, C. (2007). *2007 UNEP-WCMC Global List of Transboundary Protected Areas* (p. 78). Cambridge, UK: UNEP-WCMC.
- Madden, F. (2004). Creating coexistence between humans and wildlife: global perspectives on local efforts to address human–wildlife conflict. *Human Dimensions of Wildlife*, 9(4), 247–257.
- Mang, P., & Haggard, B. (2016). *Regenerative Development and Design: A Framework for Evolving Sustainability*. Hoboken, NJ: John Wiley & Sons, Inc.
- Marijnen, E. (2017). The “green militarisation” of development aid: the European Commission and the Virunga National Park, DR Congo. *Third World Quarterly*, 38(7), 1566–1582.
- Marijnen, E., & Verweijen, J. (2016). Selling green militarization: The discursive (re)production of militarized conservation in the Virunga National Park, Democratic Republic of the Congo. *Geoforum*, 75, 274–285.
- Martin, A., Rutagarama, E., Cascão, A., Gray, M., & Chhotray, V. (2011). Understanding the co-existence of conflict and cooperation: Transboundary ecosystem management in the Virunga Massif. *Journal of Peace Research*, 48(5), 621–635.
- Mascia, M. B., Pailler, S., Krishnasamy, R., Roshchanka, V., Burns, D., Mlotha, M. J., ... Peng, N. (2013). Protected area downgrading, downsizing, and degazettement (PADDD) in Africa, Asia, and Latin America and the Caribbean, 1900–2010. *Biological Conservation*, 169, 355–361.

- Mascia, M. B., Pailler, S., Krishivasan, R., Roshchanka, V., Burns, D., Mlotha, M. J., ... Peng, N. (n.d.). Protected area downgrading, downsizing, and degazettement (PADDD) in Africa, Asia, and Latin America and the Caribbean, 1900–2010.
- Massé, F., & Lunstrum, E. (2015). Accumulation by securitization: Commercial poaching, neoliberal conservation, and the creation of new wildlife frontiers. *Geoforum*, 69, 227–237.
- Massey, D. (1994). *Place, Space and Gender*. University of Minnesota Press.
- Mateke, H. D. P., Lutaichirwa Mulwahale, S. E. F., & Muamba Tshibasu, G. (2017). *Report on the Cross Border Bilateral Meeting between Ugandan South Western Border Districts of Kisoro, Kanungu, Rukungiri, Rubirizi, Kasese, Bundibugyo and Ntoroko and the North Kivu Province of the Democratic Republic of the Congo (Cross Border Rapport)* (p. 11). Mbarara, Uganda: GVTC.
- Matovu, M. (2012). Land Injustice for the Basongora [Non-Profit Organization]. Retrieved April 30, 2017, from <http://www.minorityvoices.org/news.php/en/1140/uganda-land-injustice-for-the-basongora>
- Matthew, R. A., Brown, O., & Jensen, D. (2009). *From conflict to peacebuilding: The role of natural resources and the environment*. Nairobi, Kenya: United Nations Environment Programme.
- Mbaria, J., & Ogada, M. (2017). *The Big Conservation Lie: The Untold Story of Wildlife Conservation in Kenya*. Auburn, WA: Lens&Pens Publishing LLC.
- McCallum, J. W., Vasiljević, M., & Cuthill, I. (2015). Assessing the benefits of Transboundary Protected Areas: A questionnaire survey in the Americas and the Caribbean. *Journal of Environmental Management*, 149, 245–252.
- McNeely, J., & Scriabine, R. (1983). Parks for People. *Ambio*, 12(1), 51–53.
- Meder, A., & Sikubwabo Kiyengo, C. (Eds.). (2015). Sarambwe Reserve: Current Developments and Threats. *Gorilla Journal*, (51), 9–12.
- Ministers and High Level Representatives of the Governments of the Democratic Republic of the Congo, the Republic of Rwanda and the Republic of Uganda. Rubavu Ministerial Declaration for the Greater Virunga Transboundary Collaboration (2008).
- Ministry of Environment, Nature Conservation, Water and Forests, DRC, Ministry of Commerce, Industries, Investments Promotion, Tourism and Cooperative, the Republic of Rwanda, &

- Ministry of Tourism, Trade and Industry, the Republic of Uganda. Tripartite Declaration On the Transboundary Natural Resources Management of the Transfrontier Protected Area Network of the Central Albertine Rift (2005).
- Minority Rights Group. (n.d.). Uganda - Basongora [Non-Profit Organization]. Retrieved April 30, 2017, from <http://minorityrights.org/minorities/basongora/>
- Mische, P. (1989). Ecological Security and the Need to Reconceptualize Sovereignty. *Alternatives Journal*, 14(4), 389–427.
- Mittermeier, R. A., Kormos, C. F., Mittermeier, C. G., Robles Gil, P., Sandwith, T., & Besançon, C. (2005). *Transboundary Conservation: A New Vision for Protected Areas*. Mexico: CEMEX-Agrupación Sierra Madre-Conservation International.
- Mkutu, K. (2008). Disarmament in Karamoja, Northern Uganda: Is This a Solution for Localised Violent Inter and Intra-Communal Conflict? *The Round Table*, 97(394), 99–120.
- Muaz Ben Jabal Municipality, Beit She'an Valley Regional Council, & Jordan Valley Regional Council. Memorandum of Understanding To Create the Al Bakoorah/Naharyim/Gesher Peace Park (2007).
- Mugumya Nyindo, X., Muhweezi, A., & Kiconco, S. (2011). *REDD Readiness Preparation Proposal For Uganda* (REDD Readiness Preparation Proposal) (p. 199). Kampala, Uganda: World Bank. Retrieved February 2, 2018, from http://www.forestcarbonpartnership.org/sites/forestcarbonpartnership.org/files/Documents/PDF/Jun2011/Uganda%20Revised%20RPP%20May%2031,%20%202011_0.pdf
- Muhumuza, M. (2012). *Current status, ownership and management of sacred sites in Rwenzori Mountains National Park*. Kampala, Uganda: FFI-UWA.
- Murphy, T. (2017, June). The Radically International History of America's Best Idea. *Foreign Policy*, 66–71.
- Musinguzi, B. (2016, April 14). Uganda's Minority Tribes Fight for their Rights. *The East African*.
- Myers, N. (1988). Threatened biotas: "hotspots" in tropical forests. *Environmentalist*, 8(3), 187–208.
- Myers, N., Mittermeier, R. A., Mittermeier, C. G., Da Fonseca, G. A. B., & Kent, J. (2000). Biodiversity hotspots for conservation priorities. *Nature*, 403(6772), 853–858.

- Nampindo, S., Picton Phillipps, G., & Plumptre, A. J. (2005). *The Impact of Conflict in Northern Uganda on the Environment and Natural Resource Management*. Kampala, Uganda: WCS, USAID.
- Natalya Clark, J. (2013). The “Ambivalence of the Sacred”: Christianity, Genocide, and Reconciliation in Rwanda. In K. Omeje & T. Redeker Hepner (Eds.), *Conflict and Peacebuilding in the African Great Lakes Region* (pp. 217–234). Bloomington, IN: Indiana University Press.
- National Environment Management Authority. (2010). *Environmental Sensitivity Atlas for the Albertine Graben* (No. 2). Kampala, Uganda: NEMA.
- Naughton-Treves, L., Buck Holland, M., & Brandon, K. (2005). The Role of Protected Areas in Conserving Biodiversity and Sustaining Local Livelihoods. *Annual Review of Environmental Resources*, 30, 219–252.
- NCIP. (2018). About Us. Retrieved February 5, 2018, from
<https://www.nciprojects.org/about/about-us>
- Ndayisaba, O., & Kwizera, J. (2017, February 13). Interview with Volcanoes NP Community Conservation Wardens on 13 Feb 2017 [WMA Audio File].
- Nellemann, C., Henriksen, R., Kreilhuber, A., Stewart, D., Kotsovou, M., Raxter, P., ... Barrat, S. (2016). *The Rise of Environmental Crime - A Growing Threat to Natural Resources Peace, Development and Security* (UNEP & INTERPOL Rapid Response Assessment). Nairobi, Kenya: United Nations Environment Programme and RHPTO Rapid Response-Norwegian Center for Global Analyses.
- Neumann, R. P. (2004). Moral and discursive geographies in the war for biodiversity in Africa. *Political Geography*, 23(7), 813–837.
- Neumann, R. P. (2005). *Making Political Ecology*. New York: Oxford University Press.
- Nicolaisen, F., Heggli Sagmo, T., & Rolandsen, Ø. (2015, April). South Sudan-Uganda Relations: The Cost of Peace [NGO]. Retrieved February 4, 2018, from
<http://www.accord.org.za/conflict-trends/south-sudan-uganda-relations/>
- Nshimirimana, D. (2017, February 16). Interview with FARDC Liaison to Virunga National Park in Rumangabo, Goma 2/16/2017 [Audio].

- Nyeramihigo, K. (2017, April 13). Interview with Local Leader near Ishasha Sector, Queen Elizabeth NP, 13 Apr 2017 [Audio].
- Office Rwandais de Tourisme et des Parcs Nationaux, Uganda Wildlife Authority, & Institut Congolais pour la Conservation de la Nature. Trilateral Memorandum of Understanding between the Office Rwandais de Tourisme et des Parcs Nationaux the Uganda Wildlife Authority and the Institut Congolais pour la Conservation de la Nature on the Collaborative Conservation of the Central Albertine Rift Transfrontier Protected Area Network (2004).
- Okiring, M. (2017, April 18). Interview with UWA Law Enforcement Warden, 18 April 2017 [Notes].
- Okiror, B. (2008, November 15). Ugandan tribes face extinction. *New Vision*. Retrieved May 8, 2017, from https://www.newvision.co.ug/new_vision/news/1176983/ugandan-tribes-extinction
- Okongo, S. M. (2017, April 19). Interview with UPDF Officer, Opotipot Outpost, Kidepo Valley NP, 19 April 2017 [Audio].
- Okot Omoya, E., Mudumba, T., Buckland, S. T., Mulondo, P., & Plumptre, A. J. (2013). Estimating population sizes of lions *Panthera leo* and spotted hyaenas *Crocuta crocuta* in Uganda's savannah parks, using lure count methods. *Oryx*, 48(3), 394–401.
- Oldekop, J. A., Holmes, G., Harris, W. E., & Evans, K. L. (2015). A global assessment of the social and conservation outcomes of protected areas. *Conservation Biology*, 30(1), 133–141.
- Olson, D. M., Dinerstein, E., Wikramanayake, E. D., Burgess, N. D., Powell, G. V. N., Underwood, E. C., ... Kassem, K. R. (2001). Terrestrial Ecoregions of the World: A New Map of Life on Earth. *BioScience*, 51(11), 933–938.
- Omeje, K., & Redeker Hepner, T. (Eds.). (2013). *Conflict and Peacebuilding in the African Great Lakes Region*. Bloomington, IN: Indiana University Press.
- Oneal, J. R., Oneal, F. H., Maoz, Z., & Russett, B. (1996). The Liberal Peace: Interdependence, Democracy, and International Conflict, 1950-85. *Journal of Peace Research*, 33(1), 11–28.
- Opiyo, L. M. (2011). *Pastoralists' Livelihoods in the Kidepo Valley Area of Northern Uganda: A Desk Review of the Prevailing Livelihood Strategies Development Environment and State of*

- Resource Management in the Kidepo Valley Area and its Environment.* Uganda: Veterinaires Sans Frontieres Belgium, AU Interafrican Bureau for Animal Resources.
- Oryema, M. (2017, April). Communications with UWA Community Conservation Ranger, Kidepo Valley NP, 18-20 Apr 2017.
- Østerud, Ø. (2008). Towards a more peaceful world? A critical view. *Conflict, Security & Development*, 8(2), 223–240.
- Otarashvili, E. (2008, September 20). Russian Invasion of Georgia: Facts & Figures.
- Oviedo, G., & Jeanrenaud, S. (2007). Protecting sacred natural sites of indigenous and traditional peoples. In J. M. Mallarach & T. Papayannis (Eds.), *Protected Areas and Spirituality* (pp. 77–100). Gland, Switzerland: IUCN & Publicaciones de l'Abadia de Montserrat.
- Özerdem, A., & Bowd, R. (Eds.). (2016). *Participatory Research Methodologies: Development and Post-Disaster/Conflict Reconstruction* (2nd ed.). Oxon, UK: Routledge.
- Pachauri, R. K., & Meyer, L. (2014). *Climate Change 2014: Synthesis Report* (Synthesis Report No. 5th) (p. 151). Geneva, Switzerland: IPCC. Retrieved February 8, 2018, from http://ipcc.ch/pdf/assessment-report/ar5/syr/SYR_AR5_FINAL_full_wcover.pdf
- Paulson, S., Gezon, L. L., & Watts, M. (2005). Politics, Ecologies, Genealogies. In S. Paulson & L. L. Gezon (Eds.), *Political Ecology Across Spaces, Scales, and Social Groups* (pp. 17–40). New Brunswick: Rutgers University Press.
- Peluso, N. L. (1993). Coercing Conservation: The Politics of State Resource Control. In R. D. Lipschutz & K. Conca (Eds.), *The State and Social Power in Global Environmental Politics* (pp. 46–70). New York: Columbia University Press.
- Peluso, N. L., & Watts, M. (2001). *Violent Environments*. New York, USA: Cornell Press.
- Pinker, S. (2011). *The better angels of our nature: why violence has declined*. New York, USA: Penguin Books.
- Plumptre, A., Behangana, M., Davenport, T., Kahindo, C., Kityo, R., Ndomba, E., ... Eilu, G. (2003). *The Biodiversity of the Albertine Rift* (Technical Report No. 3) (p. 114). Wildlife Conservation Society.
- Plumptre, A. J. (2003). Lessons Learned from On-the-Ground Conservation in Rwanda and the Democratic Republic of the Congo. *Journal of Sustainable Forestry*, 16(3–4), 69–88.

- Plumptre, A. J. (2010, 2011). Communications with Former WCS Albertine Rift Programme Director, 2010-2011 [Notes].
- Plumptre, A. J. (2016, May 25). E-mail from Andy Plumptre, WCS Albertine Rift Programme.
- Plumptre, A. J., Kujirakwinja, D., & Kobusingye, S. (2003). *Transboundary Collaboration between Virunga Park, Democratic Republic of Congo and Queen Elizabeth, Rwenzori and Semuliki Parks, Uganda: Report of Transboundary Meeting 20-21st June 2003* (Report of Transboundary Meeting). Mweya, Uganda: UWA, ICCN, WCS.
- Plumptre, A. J., Masozera, M., & Vedder, A. (2001). *The Impact of Civil War on the Conservation of Protected Areas in Rwanda* (Biodiversity Support Program). Washington, D.C.: World Wildlife Fund, Inc.
- Plumptre, A., Kayitare, A., Rainer, H., Gray, M., Munanura, I., Barakabuye, N., ... Namara, A. (2004). *The Socio-Economic Status of People Living Near Protected Areas in the Central Albertine Rift* (Albertine Rift Technical Reports No. 4) (p. 132). Uganda: WCS, IGCP, CARE Uganda.
- Plumptre, A., Kujirakwinja, D., Owiunji, I., Rwetsiba, A., Wanyama, F., & Mwima, P. (2007). *Strengthening Elephant Conservation in the Greater Virunga Landscape* (USFWS Project Report No. 98210-6-G035) (p. 31). Kampala, Uganda: WCS, ICCN, UWA.
- Preston, B. J. (2011). The Use of Restorative Justice for Environmental Crime. Presented at the EPA Victoria Seminar on Restorative Environmental Justice, Melbourne, Australia.
Retrieved July 6, 2018, from
http://www.lec.justice.nsw.gov.au/Documents/preston_use%20of%20restorative%20justice%20for%20environmental%20crime.pdf
- Price, S. V. (Ed.). (2003). *War and Tropical Forests: Conservation in Areas of Armed Conflict* (Vol. 16). Binghamton, NY: Food Products Press.
- Prunier, G. (2011). *From Genocide to Continental War: The "Congolese" Conflict and the Crisis of Contemporary Africa* (2nd ed.). London, United Kingdom: Hurst & Co., Ltd.
- Ramsbotham, O. (2005). The Analysis of Protracted Social Conflict: A Tribute to Edward Azar. *Review of International Studies*, 31(1), 109–126.

- Ramsbotham, O., Woodhouse, T., & Miall, H. (2011). *Contemporary Conflict Resolution: The Prevention, Management and Transformation of Deadly Conflicts* (3rd ed.). United Kingdom: Polity Press.
- Ramutsindela, M. (2007). *Transfrontier Conservation in Africa: At the Confluence of Capital, Politics and Nature*. Oxfordshire, UK: CABI.
- Ramutsindela, M. (2016). Greening Africa's borderlands: The symbiotic politics of land and borders in peace parks. *Political Geography*, 56, 106–113.
- Redford, K. H., & Fearn, E. (2007). *Protected areas and human displacement: a conservation perspective*. Bronx, NY: Wildlife Conservation Society. Retrieved March 5, 2016, from <http://www2.fiu.edu/~brayd/wcswp29.pdf>
- Refisch, J., & Jenson, J. (2016). Transboundary collaboration in the Greater Virunga Landscape: From gorilla conservation to conflict-sensitive transboundary landscape management. In C. Bruch, C. Muffett, & S. S. Nichols (Eds.), *Governance, Natural Resources, and Post Conflict Peacebuilding* (1st ed., Vol. 6, pp. 825–841). United Kingdom: Routledge.
- Reid, R. (2007). *War in Pre-Colonial Eastern Africa*. London, UK: The British Institute in Eastern Africa.
- Republic of Albania, M. for E., Forests and Water Administration, Republic of MacedoniavRepublic of MacedoniaRepublic of Macedonia, M. for E. and P. P., Mayor, M. of P., Mayor, M. of O., Mayor, M. of R., Mayor, M. of S., ... Head of Prespa NP. Declaration of Commitment on the Creation of a Biosphere Reserve (Area/Park) OHRID - PRESPA (2012).
- Reuss, A., & Titeca, K. (2016, November 29). There is new violence in Western Uganda. Here's why. *The Washington Post*. Retrieved April 30, 2017, from <https://www.washingtonpost.com/news/monkey-cage/wp/2016/11/29/what-is-happening-in-uganda/>
- Roberts, A. (2006). *Uganda's Great Rift Valley*. Kampala, Uganda: New Vision.
- Robinson, J., & Cole, R. J. (2015). Theoretical underpinnings of regenerative sustainability. *Building Research & Information*, 43(2), 133–143.

- Rocheleau, D. E. (2008). Political ecology in the key of policy: From chains of explanation to webs of relation. *Geoforum*, 39, 716–727.
- Rogers, P. (2014). *Theory of Change* (Impact Evaluation No. 2) (p. 13+i). Florence, Italy: UNICEF. Retrieved April 2, 2018, from
http://www.devinfolive.info/impact_evaluation/ie/img/downloads/Theory_of_Change_E_NG.pdf
- Rugadya, M. A., & Kamusiime, H. (2013). Tenure in Mystery: The Status of Land Under Wildlife, Forestry and Mining Concessions in Karmoja Region, Uganda. *Nomadic Peoples*, 17(1), 33–65.
- Rujumba, M. (2017, January 16). Interview with Law Enforcement Warden, Bwindi Impenetrable NP, Buhoma [Audio].
- Rustad, S. A., Lujala, P., & Le Billon, P. (2012). Building or spoiling peace? Lessons from the management of high-value natural resources. In P. Lujala & S. A. Rustad (Eds.), *High-Value Natural Resources and Post-Conflict Peacebuilding* (pp. 571–622). New York, USA: Earthscan.
- Ruzigandekwe, F. (2017, March 13). Interview with Fidele Ruzigandekwe, Deputy Director of Programs of Greater Virunga Transboundary Collaboration Executive Secretariat.
- Ruzigandekwe, F. (2018). Communications with Fidele Ruzigandekwe, Deputy Director of Programs of GVTC.
- Sachs, J., & Warner, A. (1995). *Natural Resource Abundance and Economic Growth*. Massachusetts: National Bureau of Economic Research.
- SADC. Protocol on Wildlife Conservation and Law Enforcement (1999). Retrieved November 19, 2017, from https://www.sadc.int/files/4813/7042/6186/Wildlife_Conversation.pdf
- SADC Secretariat. (2013). *SADC Programme for Transfrontier Conservation Areas* (p. 34). Gaborone: SADC Secretariat. Retrieved January 13, 2018, from
https://www.sadc.int/index.php/download_file/view/2999/290/
- Sadoff, C., Greiber, T., Smith, M., & Bergkamp, G. (Eds.). (2008). *Share: Managing Water Across Boundaries*. Gland, Switzerland: IUCN. Retrieved August 6, 2017, from
<https://www.iucn.org/content/share-managing-waters-across-boundaries-0>

- Sandole, D. J. D. (1998). A Comprehensive Mapping of Conflict and Conflict Resolution: A Three Pillar Approach. *Peace and Conflict Studies*, 5(2).
- Sandwith, T., & Besançon, C. (2010). Making Peace: Protected Areas Contributing to Conflict Resolution. In S. Stolton & N. Dudley (Eds.), *Arguments for Protected Areas: Multiple Benefits for Conservation and Use*. London & Washington, DC: Earthscan.
- Sandwith, T., Shine, C., Hamilton, L., & Sheppard, D. (2001). *Transboundary Protected Areas for Peace and Co-operation*. Gland, Switzerland & Cambridge, UK: International Union for the Conservation of Nature. Retrieved March 5, 2016, from https://cmsdata.iucn.org/downloads/pag_007.pdf
- Sarat, A., Constable, M., Engel, D., Hans, V., & Lawrence, S. (Eds.). (1998). *Crossing Boundaries: Traditions and Transformations in Law and Society Research*. Evanston, IL: Northwestern University Press.
- Sarat, A., & Kearns, T. R. (Eds.). (1995). *Law's Violence*. Ann Arbor, MI: University of Michigan Press.
- Saraydarian, T. (1984). *Hiawatha and the Great Peace*. Sedona, Arizona: Aquarian Educational Group.
- Sarkees, M. R., & Wayman, F. (2010). *Resort to War: 1816-2007*. Washington, D.C.: CQ Press.
- Scheingold, S. A. (2004). *The Politics of Rights: Lawyers, Public Policy, and Political Change*. Ann Arbor, MI: University of Michigan Press.
- Schoon, M. (2013). Governance in Transboundary Conservation: How Institutional Structure and Path Dependence Matter. *Conservation and Society*, 11(3), 420–428.
- Schreckenberg, K., Franks, P., Martin, A., & Lang, B. (2016). Unpacking Equity for Protected Area Conservation. *PARKS*, 22(2), 11–26.
- Seacor, J. E. (1994). Environmental Terrorism: Lessons from the Oil Fires of Kuwait. *American University Journal of International Law and Policy*, 10, 481–523.
- Seimon, A., & Plumtre, A. (2012). Albertine Rift, Africa. In J. A. Hilty, C. C. Chester, & M. S. Cross (Eds.), *Climate and Conservation: Landscape and Seascapes Science, Planning and Action* (pp. 33–44). Washington, D.C.: Island Press.

- Shoreman-Ouimet, E., & Kopnina, H. (2015). Reconciling ecological and social justice to promote biodiversity conservation. *Biological Conservation*, 184, 320–326.
- Sims, S. (2018, June 23). A National Park in Africa Closes Amid Violence. *The New York Times*, p. TR2.
- Singh, J., & van Houtum, H. (2002). Post-colonial nature conservation in Southern Africa: same emperors, new clothes? *GeoJournal*, 58(4), 253–263.
- Sjöstedt, B. (2017). Environmental Governance and Peacebuilding as a Joint Enterprise. In *Protecting Nature in Conflicts & Building Peace: Success Stories in Conflicts & their Aftermath* (p. 12). Cebu, Philippines: Unpublished.
- Slaughter, A.-M., & Ratner, S. R. (1999). The Method is the Message. *The American Journal of International Law*, 93(2), 410–423.
- Smith, D., & Vivekananda, J. (2007). *A climate of conflict: The links between climate change, peace and war*. London, United Kingdom: International Alert. Retrieved March 8, 2016, from ftp://ftp.cs.ru.nl/pub/toinesmits/PDF_files_supporting_literature_24%2625-11-2009/2007SmithA%20climate%20of%20conflict.%20The.pdf
- Sparrow, C. W., Brown, E. L., Lane Jr., C. P., Bob, C. D., & Frank, L. International Treaty to Protect the Salish Sea (2014).
- Spierenburg, M., & Wels, H. (2006). Mapping and Fencing in Transfrontier Conservation in Southern Africa. *Space and Culture*, 9(3), 294–312.
- Stites, E., & Akabwai, D. (2010). “We Are Now Reduced to Women”: Impacts of Forced Disarmament in Karamoja, Uganda. *Nomadic Peoples*, 14(2), 24–43.
- Stockholm International Peace Research Institute. (2016). *SIPRI Yearbook 2016: Armaments, Disarmament and International Security Summary* (SIPRI Yearbook). Oxford, UK: Oxford University Press.
- Stolton, S., Dudley, N., Avcioglu Çokçaliskan, B., Hunter, D., Ivanić, K.-Z., Kanga, E., ... Waithaka, J. (2015). Values and benefits of protected areas. In G. L. Worboys, M. Lockwood, A. Kothari, S. Feary, & I. Pulsford (Eds.), *Protected Area Governance and Management* (pp. 145–168). Canberra, Australia: ANU Press.

- Sundal, M. B. (2010). Nowhere to Go: Karimojong Displacement and Forced Resettlement. *Nomadic Peoples*, 14(2), 72–86.
- Survival International. (2017a). *How will we survive?* Retrieved November 7, 2017, from <https://assets.survivalinternational.org/documents/1683/how-will-we-survive.pdf>
- Survival International. (2017b). *How will we survive?: The destruction of Congo Basin tribes in the name of conservation*. Cameroon: Survival International.
- Symes, W. S., Rao, M., Mascia, M. B., & Carrasco, L. R. (2016). Why do we lose protected areas? Factors influencing protected area downgrading, downsizing and degazettement in the tropics and subtropics. *Global Change Biology*, 22, 656–665.
- Tapela, B., Büscher, B., Maluleke, L., Twine, W., & Steenkamp, C. (2009). *GUIDELINES for negotiating social research in communities living adjacent to transboundary protected areas: Kruger National Park* (Guidelines). Johannesburg, South Africa: University of Johannesburg.
- Tashobya, A. (2018, January 10). Conservation body donates land to Volcanoes Park to expand habitat for gorillas [News]. Retrieved February 5, 2018, from <http://www.newtimes.co.rw/section/read/227321>
- Taylor, D., Robertshaw, P., & Marchant, R. A. (2000). Environmental change and politcaleconomic upheaval in precolonial western Uganda. *The Holocene*, 10(4), 527–536.
- The Governments of Denmark, Finland, Norway and Sweden. Convention on the Protection of the Environment between Denmark, Finland, Norway and Sweden, Pub. L. No. 1092 UNTS 279 (1974). Retrieved October 23, 2017, from <http://sedac.ciesin.org/entri/texts/acrc/Nordic.txt.html>
- Tuhiwai Smith, L. (2012). *Decolonizing Methodologies: Research and Indigenous Peoples* (2nd ed.). London & New York: Zed Books Ltd.
- Turnbull, C. (1987). *The Mountain People* (1987th ed.). New York, USA: Simon & Schuster.
- Tushnet, M. (1991). Critical Legal Studies: A Political History. *The Yale Law Journal*, 100(5), 1515–1544.
- Tyson Okello, S. (2017, January 14). Interview with Law Enforcement Officer, Bwindi-Mgahinga Conservation Area, Buhoma [Audio].

- Uganda Wildlife Authority, Office Rwandais de Tourisme et des Parcs Nationaux, & Institut Congolais pour la Conservation de la Nature. Trilateral Memorandum of Understanding between the Uganda Wildlife Authority “UWA”, the Office Rwandais de Tourisme et des Parcs Nationaux “ORTPN” and the Institut Congolais pour la Conservation de la Nature “ICCN” on the Collaborative Monitoring of and Sharing Revenues from Transfrontier Tourism Gorilla Groups (2006).
- Ullman, R. H. (1983). Redefining Security. *International Security*, 8(1), 129–153.
- UN News Service. (2017, August 17). South Sudan Refugees in Uganda Exceed One Million: UN renews appeal for help [UN]. Retrieved August 17, 2017, from <http://www.un.org/apps/news/story.asp?NewsID=57374>
- UNCED. Rio Declaration on Environment and Development, Pub. L. No. UN Doc A/CONF.151/26; 31 ILM 874 (1992).
- UNDP. (2010). Launching Protected Area Network Management and Building Capacity in Post-conflict Southern Sudan. UNDP.
- UNECE. Convention on Environmental Impact Assessment in a Transboundary Context, Pub. L. No. 30 ILM 800 (1997).
- UNEP. (2012). *Global Environment Outlook 5: Summary for Policy Makers* (Global Environment Outlook) (p. 20). Nairobi, Kenya: UNEP.
- UNEP-WCMC & IUCN. (2016). *Protected Planet Report 2016: How protected areas contribute to achieving global targets for biodiversity* (Protected Planet Report). Cambridge, UK & Gland, Switzerland. Retrieved February 8, 2018, from <https://protectedplanet.net/c/protected-planet-report-2016>
- UNESCO. Convention Concerning the Protection of the World’s Cultural and Natural Heritage, Pub. L. No. 11 I.L.M. 1358; 1037 U.N.T.S. 151 (1975).
- UNESCO. (2014). Constitution of the United Nations Educational, Scientific and Cultural Organization. In *Basic Texts* (2014th ed., pp. 5–18). Paris, France: UNESCO. Retrieved October 20, 2017, from <http://unesdoc.unesco.org/images/0022/002269/226924e.pdf#page=6>
- UNGA. Universal Declaration of Human Rights, Pub. L. No. UNGA Resolution 217 A(III) (1948).

- UNGA. Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques, Pub. L. No. UNGA RES 31/72 (1976). Retrieved October 23, 2017, from <http://www.un-documents.net/enmod.htm>
- UNGA. World Charter for Nature, Pub. L. No. UNGA RES 37/7; 22 ILM 455 (1983).
- UNGA. Rome Statute of the International Criminal Court, Pub. L. No. A/CONF.183/9, ISBN No. 92-9227-227-6 (1998).
- UNGA. A Declaration on a Culture of Peace, Pub. L. No. A/RES/53/243 A, 4 (1999).
- UNGA. United Nations Declaration on the Rights of Indigenous Peoples, Pub. L. No. A/RES/61/295 (2007). Retrieved October 23, 2017, from <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N06/512/07/PDF/N0651207.pdf?OpenElement>
- Unger, R. (1996). *What Should Legal Analysis Become?* London, United Kingdom: Verso.
- Unger, R. M. (1983). The Critical Legal Studies Movement. *Harvard Law Review*, 96(3), 561–675.
- UNHRC. (2016). *Report of the Special Rapporteur of the Human Rights Council on the rights of indigenous peoples, Victoria Tauli-Corpuz* (Note by the Secretary-General No. A/71/229). New York, USA: UNHRC. Retrieved October 23, 2017, from <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N16/241/09/PDF/N1624109.pdf?OpenElement>
- UNHRC. (2017). *Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment* (No. A/HRC/34/49) (p. 22). New York, USA: UNHRC.
- United Nations. Charter of the United Nations and Statute of the International Court of Justice, Pub. L. No. USTS 993, 105 (1945).
- United Nations. Vienna Convention on the Law of Treaties, § Treaty Series (1969).
- United Nations. Convention on Wetlands of International Importance Especially as Waterfowl Habitat, Pub. L. No. 11 ILM 963 (1971).
- United Nations. Convention to Regulate International Trade in Endangered Species of Flora and Fauna, Pub. L. No. 12 I.L.M. 1085 (1973).
- United Nations. Convention on the Conservation of Migratory Species of Wild, Pub. L. No. 1651 UNTS 333; 19 ILM 15 (1979).

United Nations. United Nations Convention on the Law of the Sea, Pub. L. No. 1833 UNTS 3; 21 ILM 1261 (1982).

United Nations. Convention on Biological Diversity, Pub. L. No. 1760 UNTS 79 (1992).

United Nations. Convention on Access to Information, Public Participation in Decisionmaking and Access to Justice in Environmental Matters, Pub. L. No. 2161 UNTS 447; 38 ILM 517 (1999).

United Nations. (2015). *Transforming Our World: The 2030 Agenda for Sustainable Development* (UNGA No. A/RES/70/1). New York, USA: United Nations.

University of British Columbia. (n.d.). Why Regenerative Design? [UBC]. Retrieved March 30, 2018, from <http://cirs.ubc.ca/building/building-overview/regenerative-design/>

UNODC. (2016). *World Wildlife Crime Report: Trafficking in protected species* (World Wildlife Crime No. E.16.XI.9) (p. 101). Vienna: UNODC. Retrieved January 21, 2018, from http://www.unodc.org/documents/data-and-analysis/wildlife/World_Wildlife_Crime_Report_2016_final.pdf

UNSC. (2012). *Condemning Atrocities by Lord's Resistance Army, Security Council Presidential* (Department of Public Information, News and Media Division). New York, USA: United Nations. Retrieved January 18, 2013, from www.un.org/News/Press/docs//2012/sc10865.doc.htm

UNSC. Resolution 2293 (2016) - The Situation Concerning the Democratic Republic of the Congo, Pub. L. No. SEC/RES/2293 (2016), 10 (2016). Retrieved June 18, 2017, from <http://unscr.com/en/resolutions/doc/2293>

UNSC. (2017). *Report of the Secretary-General on the implementation of the Peace, Security and Cooperation Framework for the Democratic Republic of the Congo and the Region* (Report of the Secretary-General No. S/2017/208) (p. 18). New York, USA: United Nations. Retrieved February 4, 2018, from http://www.un.org/ga/search/view_doc.asp?symbol=S/2017/208

UPDF Colonel. (2017, March 24). Interview with UPDF Colonel seconded to ICGLR EJVM, 24 March 2017 [Notes].

- Uppsala Conflict Data Program. (2017, April 25). UCDP Definition of Armed Conflict. Retrieved July 19, 2017, from
http://www.pcr.uu.se/research/ucdp/definitions/definition_of_armed_conflict/
- USAID. (2003). *Sudan Conflict Vulnerability Analysis*. USAID.
- UWA. (2018). Kidepo Valley National Park: Park at a Glance. Retrieved February 3, 2018, from
<http://ugandawildlife.org/explore-our-parks/parks-by-name-a-z/kidepo-valley-national-park>
- Uwingeli, P. (2017, February 20). Interview with Chief Park Warden, Volcanoes National Park, Kinigi, Rwanda [Audio].
- van Creveld, M. L. (1991). *The transformation of war*. New York: Free Press.
- van de Giessen, E. (2008). *Charcoal in the Mist: An overview of environmental security issues and initiatives in the Central Albertine Rift*. The Hague, The Netherlands: Institute for Environmental Security (IES).
- van der Linde, H., Zbiccz, D. C., & Stevens, J. (2001). *Beyond Boundaries: A Bibliography on Transboundary Natural Resource Management in Sub-Saharan Africa* (Biodiversity Support Program). Washington, D.C.: Biodiversity Support Program (BSP).
- Vasilijević, M., Zunckel, K., McKinney, M., Erg, B., Schoon, M., & Rosen Michel, T. (2015). *Transboundary Conservation: A Systematic and Integrated Approach*. (A. Phillips, Ed.). Gland, Switzerland: International Union for the Conservation of Nature. Retrieved March 5, 2016, from <https://portals.iucn.org/library/efiles/documents/PAG-023.pdf>
- Verweijen, J., & Marijnen, E. (2016). The counterinsurgency/conservation nexus: guerrilla livelihoods and the dynamics of conflict and violence in the Virunga National Park, Democratic Republic of the Congo. *The Journal of Peasant Studies*, 1–21.
- Vining, J., Merrick, M. S., & Price, E. A. (2008). The Distinction between Humans and Nature: Human Perceptions of Connectedness to Nature and Elements of the Natural and Unnatural. *Human Ecology Review*, 15(1), 1–11.
- Volcanoes National Park Administration. (2017, May 8). Rwanda has Double Gorilla Permits fees! Retrieved June 21, 2017, from

<http://www.volcanoesnationalparkrwanda.com/rwanda/rwanda-has-double-gorilla-permits-fees.html>

Waisová, Š. (2015). Environmental Cooperation as Instrument of Conflict Transformation in Conflict-Prone Areas: Where does it Start, How Deep it can be and What Effects it can Have. *Politické Vedy*, 2, 105–126.

Water for Growth Rwanda. (2017). *Volcanoes area flood management* (IWRM Programme Rwanda No. TR26) (p. 155). Kigali, Rwanda: Water for Growth Rwanda.

Wehr, P. (1979). *Conflict Regulation*. Boulder, CO: Westview Press.

Wehr, P. (2006, September). Conflict Mapping [Non-Profit Organization]. Retrieved April 29, 2017, from <http://www.beyondintractability.org/essay/conflict-mapping>

Weisman, T. (2012). Restorative Environmental Justice as a Way of Life: Learning from Ubuntu. *Dialogue and Universalism*E, 3(1), 92–109.

Weitekamp, E. G. M., & Parmentier, S. (2016). Restorative justice as healing justice: looking back to the future of the concept. *Restorative Justice*, 4(2), 141–147.

West, P., Igoe, J., & Brockington, D. (2006). Parks and Peoples: The Social Impact of Protected Areas. *Annual Review of Anthropology*, 35, 251–277.

Westing, A. H. (1986). Global Resources and International Conflict: An Overview. In *Global Resources and Environmental Conflict: Environmental Factors in Strategic Policy and Action* (p. 280). New York, USA: Oxford University Press. Retrieved April 27, 2017, from <https://www.sipri.org/publications/1986/global-resources-and-international-conflict-environmental-factors-strategic-policy-and-action>

Westing, A. H. (1993). *Transfrontier Reserves for Peace and Nature: A Contribution to Human Security*. Nairobi, Kenya: United Nations Environment Programme.

WGIPP Association. (nd). Waterton-Glacier International Peace Park Association History [NGO]. Retrieved July 5, 2018, from <http://www.watertonglacierpeacepark.org/wgippa-history.html>

Whetho, A., & Okeke Uzodike, U. (2009). Religious Networks in Conflict and Peace: The Case of the Democratic Republic of the Congo, 1996-2006. *Gandhi Marg*, 31(1), 83–109.

- Wilson, E. O. (2016). *Half-earth: our planet's fight for life*. New York: Liveright Publishing Corporation.
- Wolf, K. (2010). *The Impetus for Transitions from Relief to Development in Post-Conflict Environments: Food Security, Land Access, and Livelihood Reconstruction among the Acholi of Northern Uganda* (Master's Thesis). University of South Carolina, Columbia, SC.
- Wolmer, W. (2003). Transboundary Protected Area governance: tensions and paradoxes. In *Transboundary Protected Areas Workshop in Governance Stream* (p. 12). Durban, South Africa.
- Woods, K. (2011). Ceasefire capitalism: Military-private partnerships, resource concessions and military-state building in the Burma-China borderlands. *The Journal of Peasant Studies*, 38(4), 747–770.
- World Commission on Environment and Development. (1987). *Report of the World Commission on Environment and Development: Our Common Future* (UNGA No. A/42/427 Annex). New York, USA: WCED.
- World Conservation Congress. Prevention, management and resolution of social conflict as a key requirement for conservation and management of ecosystems, Pub. L. No. WCC-2016-Res-068-EN (2016).
- Xu, J., & Melick, D. R. (2007). Rethinking the Effectiveness of Public Protected Areas in Southwestern China. *Conservation Biology*, 21(2), 318–328.
- Ybarra, M. (2012). Taming the jungle, saving the Maya Forest: sedimented counterinsurgency practices in contemporary Guatemalan conservation. *The Journal of Peasant Studies*, 39(2), 479–502.
- Ybarra, M. (2015). “Blind passes” and the production of green security through violence on the Guatemalan border. *Geoforum*, 69, 194–206.
- Young, L. A., & Sing’Oei, K. (2011). *Land, livelihoods and identities- Inter-community conflicts in East Africa* (p. 48). United Kingdom: Minority Rights Group International. Retrieved April 30, 2017, from <http://minorityrights.org/wp-content/uploads/old-site-downloads/download-1076-Land-livelihoods-and-identities-Inter-community-conflicts-in-East-Africa.pdf>

- Yui, M. (2014). *The Development of National Parks and Protected Areas around the World* (p. 20). Tokyo, Japan: National Environment Coexistence Technology Association.
- Zbicz, D. C. (1999). The “Nature” of Transboundary Cooperation. *Science and Policy for Sustainable Development*, 41(3), 15–16.
- Zbicz, D. C. (2003). Imposing Transboundary Conservation: Cooperation Between Internationally Adjoining Protected Areas. *Journal of Sustainable Forestry*, 17(1-2), 21–37.
- Zbicz, D. C., & Green, M. J. B. (1997). Status of the world’s transfrontier protected areas. *PARKS*, 7(3), 5–10.
- Zephyrin, K. (2001). *The situation of the Batwa forest dwellers and conservation of the Volcanoes National Park and Nyungwe Natural Forest* (Case Study No. Case Study 1). Rwanda.

APPENDICES

Appendix I: List of TBCAs and last armed conflict

The table below provides a list of all of the TBCAs included in this research, comparing the date of establishment (based on the date of its first transboundary legal agreement) and last armed conflict. Data on inter-state armed conflicts is derived from the Correlates of War (COW) project's Inter-State War Data v4.0 from 1816-2007 and the joint Uppsala Conflict Data Program (UCDP) with PRIO covering 1946-2009 (Gleditsch, Wallensteen, Eriksson, Sollenberg, & Strand, 2002; Sarkees & Wayman, 2010). Where dates of conflict are listed as 'unknown', no armed conflict was listed by the datasets utilized within their periods of review. Armed conflicts may have occurred prior to 1816 or 1946, but that data was not obtained.

TBCA Name	Countries	Date of Establishment (per agreement)	Date of Last Armed Conflict
North America			
Ellesmere/Greenland Transboundary Complex	Canada, Greenland	Unrecognized	Unknown
Tatshenshini-Kluane-Wrangell St Elias Complex	Canada, USA	1979 (World Heritage Site listed)	1812 – War of 1812
Waterton-Glacier International Peace Park	Canada, USA	20 May 1998	1812 – War of 1812
Roosevelt Campobello International Park	Canada, USA	22 January 1964	1812 – War of 1812

Dry Borders-Sonoran Desert Biosphere Reserve Network	Mexico, USA	14 August 1983	1846 – Mexican-American War
El Carmen-Big Bend Complex	Mexico, USA	14 August 1983	1846 – Mexican-American War
Latin America			
Corredor Biológico Binacional Omoa-Punta Manabique-Merendon	Belize, Guatemala, Honduras, Mexico	2008	1906 – Third Central American War
Biosfera Maya-Calakmul-Río Bravo	Belize, Guatemala, Mexico	26 August 2005	1906 – Third Central American War
Montecristo Trifinio Transboundary Protected Area Complex	El Salvador, Honduras	31 October 1997	1969 – Football War
Río Plátano-Tawahka-Bosawas (Proyecto Corazón)	Costa Rica, El Salvador, Honduras, Nicaragua	December 2001	1969 – Football War
San Juan River Basin (Sí-a-Paz)	Costa Rica, Nicaragua	Unrecognized	Unknown
Parque Internacional La Amistad	Costa Rica, Panama	3 May 1992	Unknown
Cordillera del Cóndor	Ecuador, Peru	29 May 1942	1995 - Cenepa Valley
Iguazu-Iguazú	Argentina, Brazil, Paraguay	Unknown	1865 – Lopez
Glaciares-Torres del Paine-O'Higgins Complex	Argentina, Chile	Unknown	Unknown
Europe			
Pasvik-Inari Trilateral Park	Finland, Norway, Russia	23 January 2008	1941 – World War II
Friendship Nature Reserve	Finland, Russia	Unknown	1941 – World War II
Pyrenees-Mount Perdu WHS	France, Spain	Unknown	1823 – Franco-Spanish War
Wadden Sea International Protected Region	Denmark, Germany, Netherlands	Unknown	1939 – World War II

Lake Fertö	Austria, Hungary	Unknown	Unknown
Eastern Carpathian Biosphere Reserve	Poland, Slovakia, Ukraine	Unknown	Unknown
Prespa Park	Greece, Macedonia	2 February 2010	Unknown
Rhodope Mountains	Bulgaria, Greece	Unknown	1940 – World War II
Mura-Drava-Danube TBBR	Moldova, Romania, Ukraine	25 March 2011	Unknown
Balkan Peace Park (BPP)	Albania, Kosovo, Montenegro	13 November 2006	1999 – War of Kosovo
Bjeshkët e Namuna/Prokletije Mountains (Dinaric Arc)	Albania, Kosovo, Montenegro	No date	1999 – War of Kosovo
Mediterranean Sanctuary for Marine Mammals	France, Italy, Monaco	25 November 1999	1943 – World War II
Parc Naturel Nordeifel/Schneifel/Hauts-Fagnes-Eifel	Belgium, Germany	3 February 1971	1940 – World War II
Africa			
Delta du Saloum	Mauritania, Senegal	Unknown	Unknown
Niokolo Koba-Badiar	Guinea, Senegal	Unknown	Unknown
Mount Nimba	Côte d'Ivoire, Guinea, Liberia	Unknown	Unknown
"W" PARK	Benin, Burkina Faso, Niger, Togo	11 February 2008	Unknown
Tri-National de la Sangha	Cameroon, CAR, Congo	Unknown	Unknown

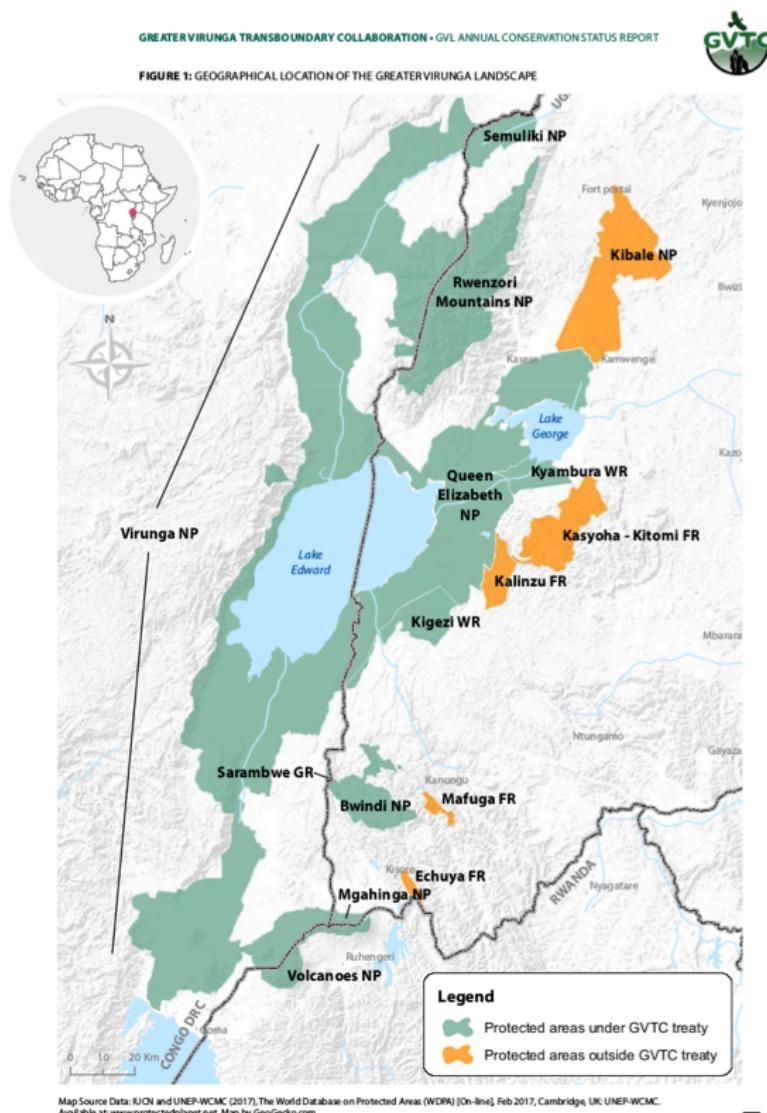
Landscapes for Peace	South Sudan, Uganda	5 February 2007	Unknown
Mount Elgon	Kenya, Uganda	In draft	Unknown
Greater Virunga Landscape	DRC, Rwanda, Uganda	9 January 2004	Unknown
Serengeti-Masai	Kenya, Tanzania	Unknown	Unknown
Kilimanjaro	Kenya, Tanzania	Unknown	Unknown
Vwaza Marsh	Malawi-Zambia	7 July 2015	Unknown
KAZA: Kavango-Zambezi TFCA	Angola, Botswana, Namibia, Zambia, Zimbabwe	18 August 2011	Unknown
Iona/Skeleton Coast TFCA	Angola, Namibia	Unknown	Unknown
Kgalagadi TFP	Botswana, Namibia, South Africa	1999	Unknown
Greater Limpopo TFP	Mozambique, South Africa, Zimbabwe	9 December 2002	Unknown
Lubombo TFCA	Mozambique, South Africa, Swaziland	Unknown	Unknown
Maloti-Drakensberg TFCDA	Lesotho, South Africa	Unknown	Unknown
Ai- Ais/Richtersveld Transfrontier Park	Namibia, South Africa	August 2003	Unknown
Kibira-Nyungwe	Burundi, Rwanda	September 2008	Unknown
Binational Lac Télé-Lac Tumba (BILTLT)	Congo, DRC	No date	Unknown

Asia			
Great Altai Transboundary Biosphere Reserve	China, Kazakhstan , Mongolia, Russia	22 December 2004	1929 – Manchurian War
Daurian Steppes (Dauria International PA)	China, Mongolia, Russia	Unknown	1929 – Manchurian War
Taxkorgan	China, Pakistan	Unknown	Unknown
Western Tien Shan/Chatkal Mtns	Kazakhstan , Kyrgyzstan, Uzbekistan	Unknown	Unknown
Sundarbans	Bangladesh , India	Unknown	1971 – Bangladesh War
Royal Belum-Hala Bala WR	Malaysia, Thailand	Unknown	Unknown
Pha Taem Protected Forest Complex	Laos, Thailand	Unknown	Unknown
Unknown	Cambodia, Thailand	31 January 2018	Unknown
Lanjak Entimau/Batang Ai/Betung Kerihun Complex	Indonesia, Malaysia	Unknown	Unknown
Borneo Island (Indonesia-Malaysia)	Indonesia, Malaysia	Unknown	Unknown
Labi Hills/Gunung Pulu TB Complex	Brunei Darussalam , Malaysia	Unknown	Unknown
Wasur-Tonda TBCA	Indonesia, Papua New Guinea	Unknown	Unknown
Turtle Islands	Malaysia, Philippines	31 May 1996	Unknown
Perlis State Park - ThaleBan NP	Malaysia, Thailand	Unknown	Unknown
Emerald Triangle Protected Forests Complex (Cambodia-Laos-Thailand)	Cambodia, Laos, Thailand	Unknown	Unknown
Coral Triangle Initiative on Coral Reefs, Fisheries	Indonesia, Malaysia,	23 October 2008	Unknown

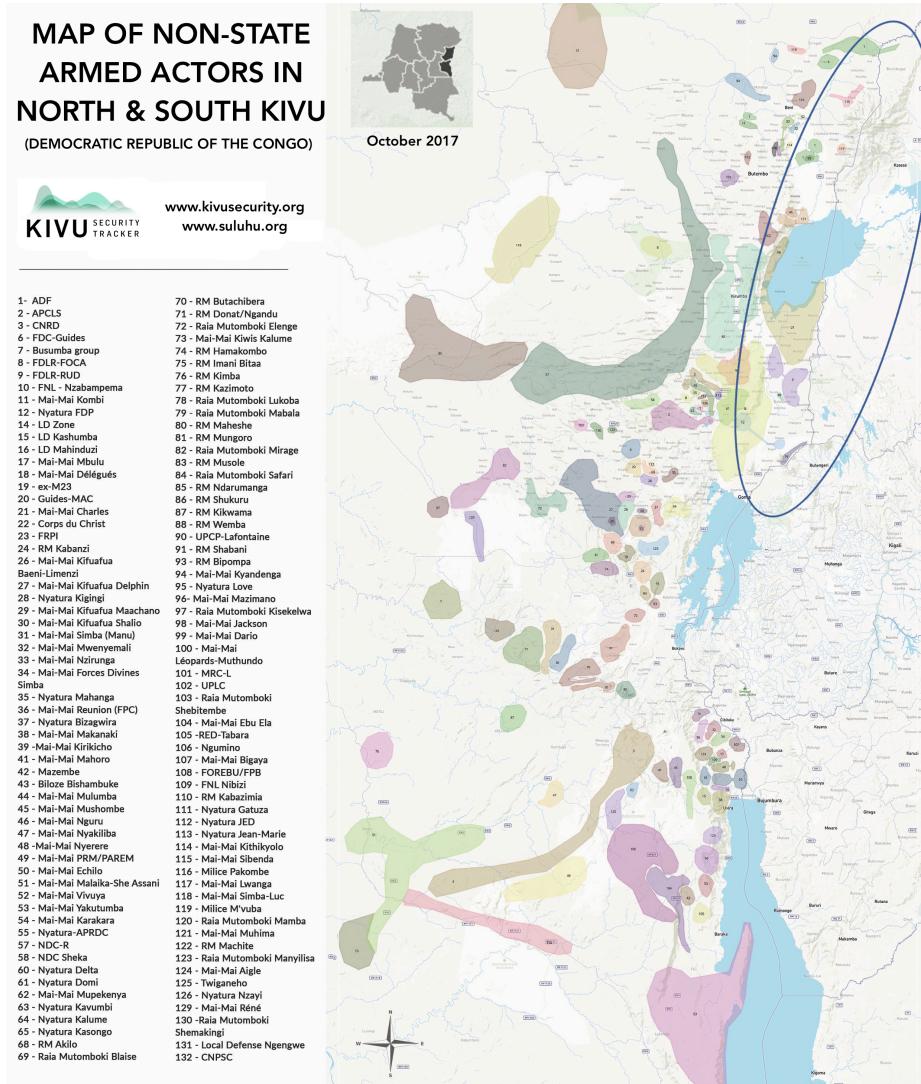
and Food Security (CTI-CFF)	Papua New Guinea, Philippines, Solomon Islands, Timor Leste		
Middle East			
Al Bakkoora/Naharyim/Gesh ar Peace Park	Israel, Jordan	26 October 1994	1982 – War over Lebanon

Appendix II: Enlarged maps from Table 3-6 Conflict mapping in the GVL

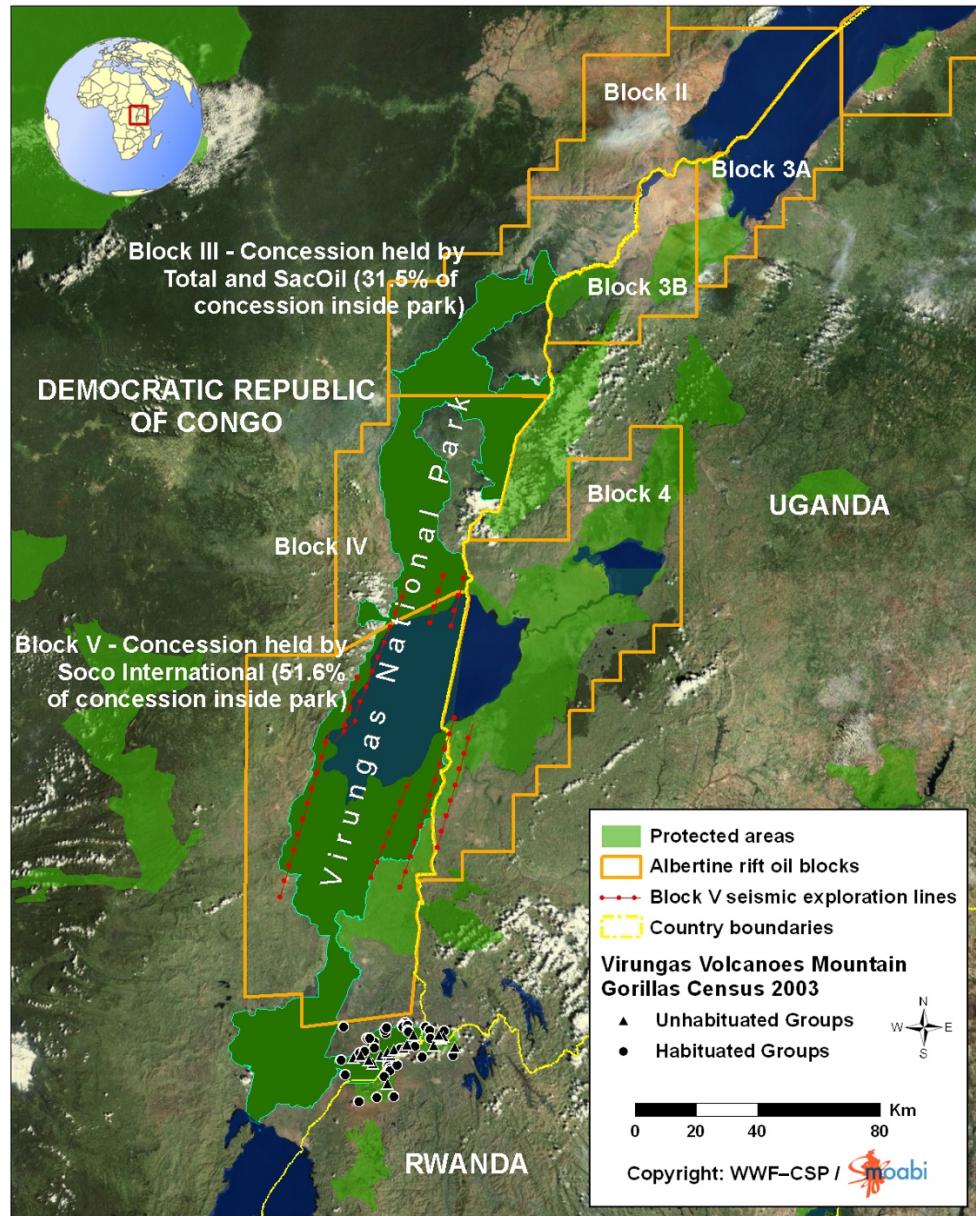
Map of GVL and international conflict



Map of GVL and social conflict



Map of GVL and ecological conflict



Appendix III: List of transboundary agreements by TBCA and region

TBCA Name	Agreement Name	Agree ment Type*	Date of Agreement (DD/MM/Y YYY)
North America			
Ellesmere/Greenland Transboundary Complex	No agreement exists		
Tatshenshini-Kluane-Wrangell St Elias Complex	No agreement exists		
Waterton-Glacier International Peace Park	MoU between the NPS of the Dept of the Interior of the USA and Parks Canada of the Dept of Canadian Heritage of the Government of Canada, on cooperation in management, research, protection, conservation and presentation of NPs and Natl Historic Sites (May 1998)	2	20/05/1998
Roosevelt Campobello International Park	Agreement between the Govt of Canada and the Govt of the USA relating to the Establishment of the Roosevelt Campobello Intl Park	2	22/01/1964
Dry Borders-Sonoran Desert Biosphere Reserve Network	Agreement between the USA and the United Mexican States on Cooperation for the Protection and Improvement of the Environment in the Border Area	1	14/08/1983
	Letter of Intent between the Dept of Interior (DOI) of the United States and Secretariat of Environment, Natural Resources and Fisheries (SEMARNAP) of the United Mexican States for Joint Work in Natural Protected Areas on the United States - Mexico Border	4	05/05/1997
El Carmen-Big Bend Complex	Agreement between the USA and the United Mexican States on Cooperation for the Protection and Improvement of the Environment in the Border Area	1	14/8/1983

	Letter of Intent between the Dept of Interior (DOI) of the United States and Secretariat of Environment, Natural Resources and Fisheries (SEMARNAP) of the United Mexican States for Joint Work in Natural Protected Areas on the United States - Mexico Border	4	05/05/1997
Latin America			
Corredor Biológico Binacional Omoa-Punta Manabique-Merendon	Convenio de Coordinación para la Creación del Corredor Biológico Binacional Omoa-Punta Manabique-Merendon Celebrando entre la República de Honduras Representada por la Secretaría de Recursos Naturales (SERNA) y la República de Guatemala representada por el Ministerio de Ambiente y Recursos Naturales (MARN)	2	2008
Biosfera Maya-Calakmul-Río Bravo	Memorandum de Entendimiento para la Cooperación en Materia de Conservación de Áreas Protegidas entre el Consejo Nacional de Áreas Protegidas de la República de Guatemala, la Secretaría de Medio Ambiente y Recursos Naturales de los Estados Unidos Mexicanos, y el Ministerio de Recursos Naturales, Gobierno Local y Medio Ambiente de Belice	2	26/08/2005
Montecristo Trifinio Transboundary Protected Area Complex	Tratado entre las Repúblicas de El Salvador, Guatemala y Honduras para la Ejecución del Plan Trifinio	1	31/10/1997
Río Plátano-Tawahka-Bosawas (Proyecto Corazón)	Declaración para la Creación del "Corazón del Corredor Biológico Mesoamericano"	3	12/2001
	Acuerdo de Creación de la Comisión Binacional Intergubernamental, para la Cooperación e Integración de la Gestión en la Zona "Corazón del CBD"	1	30/06/2005
	Convenio Tripartito entre la Comisión Centroamericana de Ambiente y Desarrollo, la República de Honduras representada por la Secretaría de Finanzas de Honduras y la República de Nicaragua representada por el Ministerio	2	25/06/2006

	del Ambiente y los Recursos Naturales de Nicaragua para la Ejecución del Proyecto Reserva de Biosfera Transfronteriza "Corazón del Corredor Biológico Mesoamericano"		
San Juan River Basin (Sí-a-Paz)	No agreement exists		
Parque Internacional La Amistad	Convenio entre el Gobierno de la República de Costa Rica y el Gobierno de la República de Panamá sobre Cooperación para el Desarrollo Fronterizo y su Anexo	1	03/05/1992
	Acuerdo Operativo para el Funcionamiento del Convenio entre la República de Costa Rica y la República de Panamá sobre Cooperación para el Desarrollo Fronterizo y su Anexo	2	Unknown
	Acuerdo de cooperación para la administración, conservación y gestión adecuada del Parque Internacional La Amistad	4 (Diplomatic Notes)	16/11/2004
Cordillera del Cóndor	The Rio Protocol: Peace, Friendship, and Boundaries between Peru and Ecuador	4 (Protocol)	29/01/1942
	Declaración de cese de fuego en la zona de la Cordillera del Cóndor	4 (Diplomatic notes)	05/03/1981
	Declaración de Paz de Itamaraty entre Ecuador y Perú	3	14/02/1995
	Montevideo Declaration	3	28/02/1995
	Acta Presidencial de Brasilia	3	26/10/1998
Iguacu-Iguazú	Legal status unknown		
Glaciares-Torres del Paine-O'Higgins Complex	Legal status unknown		
Europe			
Pasvik-Inari Trilateral Park	Cooperative Agreement between Lapland Natural Heritage Services of Metsähallitus (Finland), Pasvik Zapovednik (Russia)	2	23/01/2008

	and the County Governor of Finnmark (Norway)		
Friendship Nature Reserve	Legal status unknown		
Pyrenees-Mount Perdu WHS	Legal status unknown		
Wadden Sea International Protected Region	Legal status unknown		
Lake Fertö	Legal status unknown		
Eastern Carpathian Biosphere Reserve	Legal status unknown		
Prespa Park	Agreement on the Protection and Sustainable Development of the Prespa Park Area	2	02/02/2010
	Declaration of Commitment on the Creation of a Biosphere Reserve (Area/Park) OHRID-PRESPA	3	02/10/2012
Rhodope Mountains	Legal status unknown		
Mura-Drava-Danube TBBR	Ministerial Declaration on the preparation of the establishment of the "Mura-Drava-Danube Transboundary Biosphere Reserve" (MDD-TBR)	3	25/03/2011
Balkan Peace Park (BPP)	Letter of Good Intent for Cross-Border Local Authorities of Albania, Montenegro and Kosovo	4	13/11/2006
Bjeshkët e Namuna/Prokletije Mountains (Dinaric Arc)	Memorandum of Understanding between The Local Action Group (LAG) of Albania and The Local Action Group (LAG) of Montenegro concerning cooperation in environmental protection, tourism, recreation and sustainable development in the territories of the two communities either side of the international border between Albania and Montenegro in the Bjeshkët e Namuna/Prokletije Mountains	2	No date
	Memorandum of Understanding between National Agency for Protected Areas of Albania and Public Enterprise National Parks of Montenegro	2	No date
Mediterranean Sanctuary for Marine Mammals	Accord Relatif a la Creation en Mediterranee d'un Sanctuaire pour les Mammifères Marins	1	25/11/1999

Parc Naturel Nordeifel/Schneifel/Hau- tes-Fagnes-Eifel	Traité entre le Grand-Duché de Luxembourg et le Land Rheinland-Pfalz concernant la création d'un parc naturel commun	1	17/04/1964
	Accord entre la Gouvernement du Royaume de Belgique, la Gouvernement du Land Nordrhein-Westfalen et le Gouvernement du Land Rheinland-Pfalz sur la cooperation en vue de la creation et de l'amenagement d'un parc naturel dans les zones Nordeifel/Schneifel/Hautes-Fagnes-Eifel	2	03/02/1971
Africa			
Delta du Saloum	Legal status unknown		
Niokolo Koba-Badiar	Legal status unknown		
Mount Nimba	Legal status unknown		
"W" PARK	Accord relatif à la gestion concertée de la Réserve de Biosphère Transfrontalière du W	4 (Inter-Ministerial Agmt)	11/02/2008
	Declaration de la Tapoa	3	11/05/2000
	Accord relatif à la lutte anti braconnage		12/06/1984
Tri-National de la Sangha	Legal status unknown		
Landscapes for Peace	Memorandum of Understanding Between the Government of Southern Sudan and the Government of Uganda	2	05/02/2007
Mount Elgon	Memorandum of Understanding Between the Government of the Republic of Kenya And the Government of the Republic of Uganda On Transboundary Collaboration for the Management of Mount Elgon Ecosystem as a Transboundary Biosphere Reserve	2	Draft agreement (2 versions: IUCN/Kenya Wildlife Service (KWS)) - not yet signed
Greater Virunga Landscape	Trilateral Memorandum of Understanding between the Office Rwandais de Tourisme et des Parcs Nationaux, the Uganda Wildlife Authority and the Institut Congolais pour la Conservation de la	2	09/01/2004

	Nature on the Collaborative Conservation of the Central Albertine Rift Transfrontier Protected Area Network		
	Tripartite Ministerial Declaration of Goma on the Transboundary Natural Resources Management of the Transfrontier Protected Area Network of the Greater Virunga Landscape	3	14/10/2005
	Trilateral Memorandum of Understanding Between the Uganda Wildlife Authority, "UWA" the Office Rwandais de Tourisme et des Parcs Nationaux "ORTPN" and the Institut Congolais pour la Conservation de la Nature "ICCN" on the Collaborative Monitoring of and Sharing Revenues from Transfrontier Tourism Gorilla Groups	2	28/05/2006
	Ministerial Declaration of Rubavu	3	15/07/2008
	Interministerial Board Meeting on the institutionalization of the GVTC	4	06/02/2009
	Greater Virunga Transboundary Collaboration Treaty on Wildlife Conservation and Tourism Development (GVTCT)	1	30/10/2015
Serengeti-Masai	Legal status unknown		
Kilimanjaro	Legal status unknown		
Vwaza Marsh	Treaty between the Government of the Republic of Malawi and the Government of the Republic of Zambia on the Establishment of the Malawi Zambia Transfrontier Conservation Area	1	07/07/2015
KAZA: Kavango-Zambezi TFCA	Treaty between the Government of the Republic of Angola, the Government of the Republic of Botswana, the Government of the Republic of Namibia, the Government of the Republic of Zambia, and the Government of the Republic of Zimbabwe on the establishment of the Kavango Zambezi Transfrontier Conservation Area	1	18/08/2011
Iona/Skeleton Coast TFCA	Legal status unknown		
Kgalagadi TFP	Bilateral Agreement between the Government of the Republic of Botswana	1	1999

	and the Government of the Republic of South Africa on the Recognition of the Kgalagadi Transfrontier Park		
Greater Limpopo TFP	Treaty between the Government of the Republic of Mozambique, the Government of the Republic of South Africa and the Government of the Republic of Zimbabwe on the Establishment of the Great Limpopo Transfrontier Park	1	09/12/2002
Lubombo TFCA	Legal agreement not found		
Maloti-Drakensberg TFCDA	Legal agreement not found		
Ai- Ais/Richtersveld Transfrontier Park	Treaty between the Government of the Republic of Namibia and the Government of the Republic of South Africa on the Establishment of the Ai- Ais/Richtersveld Transfrontier Park	1	08/2003
Kibira-Nyungwe	Memorandum of Understanding between L'Institut National pour l'Environnement et la Conservation de la Nature (INECN) and the Institution in Charge of Park Conservation in Rwanda on the Transboundary Collaboration Regarding Conservation and Protection of Kibira National Park (Burundi) and Nyungwe National Park (Rwanda)	2	09/2008
Binational Lac Télé-Lac Tumba (BILTLT)	Accord de Cooperation Entre Les gouvernements de: La Republique du Congo et La Republique Democratique du Congo Relatif a la Gestion Transfrontaliere du Paysage Lac Tele - Lac Tumba	2	No date
Asia			
Great Altai Transboundary Biosphere Reserve	Agreement between the Government of the Russian Federation and the Government of the Republic of Kazakhstan on cooperation in the field of environmental protection	2	22/12/2004
	Agreement between the Government of the Russian Federation and the Government of the Republic of Kazakhstan on the establishment of a transboundary reserve "Altai"	2	15/09/2011

Daurian Steppes (Dauria International PA)	Legal status unknown		
Taxkorgan	Legal status unknown		
Western Tien Shan/Chatkal Mtns	Legal status unknown		
Sundarbans	Legal status unknown		
Royal Belum-Hala Bala WR	No legal agreement exists		
Pha Taem Protected Forest Complex	Legal status unknown		
Unknown	Memorandum of Understanding on Cooperation on Protected Areas and Transboundary Biodiversity Conservation and Landscape Management	2	31/01/2018
Lanjak Entimau/Batang Ai/Betung Kerihun Complex	No legal agreement exists		
Borneo Island (Indonesia-Malaysia)	Legal agreement not found		
Labi Hills/Gunung Pulu TB Complex	Legal status unknown		
Wasur-Tonda TBCA	Legal status unknown		
Turtle Islands	Memorandum of Agreement between the Government of the Republic of the Philippines and the Government of Malaysia on the Establishment of the Turtle Island Heritage Protected Area	2	31/05/1996
Perlis State Park - ThaleBan NP	No legal agreement exists		
Emerald Triangle Protected Forests Complex (Cambodia-Laos-Thailand)	Legal agreement not found		
Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF)	Manila Resolution on the Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security	3	23/10/2008
	Joint Ministerial Statement	3	10/03/2009
	Coral Triangle Initiative Leaders' Declaration on Coral Reefs, Fisheries and Food Security	3	15/05/2009
	Wakatobi Commitment	3	14/12/2009

	The Agreement on the Establishment of the Regional Secretariat of the Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security	2	28/10/2011
	Resolution on Sustainable Live Reef Food Fish Trade for the Southeast Asian and CTI-CFF Member Countries	3	01/02/2013
	Host Country Agreement between the Regional Secretariat of the Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security and the Government of the Republic of Indonesia on Privileges and Immunities	2	01/12/2015
Middle East			
Al Bakkoora/Naharyim/Geshar Peace Park	Treaty of Peace between the State of Israel and the Hashemite Kingdom of Jordan	1	26/10/1994
	Memorandum of Understanding To Create the Al Bakkoora/Naharyim/Geshar Peace Park	2	01/10/2007

* Agreement Type: 1=Treaty; 2=MoU; 3=Declaration/Statement; 4=Other

Appendix IV: List of TBCAs identified by survey respondents

North America

1. Dry Borders-Sonoran Desert BR Network/Sky Island Alliance (Mexico-USA: El Pinacate-El Gran Desierto de Altar-Organ Pipe)
2. El Carmen-Big Bend Complex (Mexico-USA: Cañon de Sta Elena, Maderas del Carmen, Big Bend, Río Bravo del Norte, Ocampo, Black Gap)
3. Kluane/Wrangell St. Elias/Glacier Bay/Tatshenshini-Alsek World Heritage Site (Canada-USA)
4. Shared Beringian Heritage Program (Canada-Russia-USA)
5. US-Mexico Area of Binational Conservation Interest (Mexico-USA)

Latin America

1. Bosawas-Río Platano (Costa Rica-El Salvador-Honduras-Nicaragua)
2. Calakmul-Selva Maya (Belize-Guatemala-Mexico)
3. Cerros de Amotape-RN de Tumbes-SN Los Mangares de Tumbes-RE Arenillas (Ecuador-Peru)
4. Corredor Biológico San Juan-La Selva (Costa Rica-Nicaragua)
5. Esquema asociativo de ordenamiento territorial trifronterizo Leguizamo, Puerto del Carmen Ecuador y Soplin Vargas (Colombia-Peru)
6. Golfo de Fonseca (Honduras-El Salvador-Nicaragua)
7. Parque Nacional Kaa Iya del Gran Chaco y el Parque Nacional Defensores del Chaco en (Bolivia-Paraguay)
8. Programa Trinacional de Conservación y Desarrollo Sostenible del Corredor de Áreas Protegidas PNN La Paya, ZR Gueppí y RPF Cuyabeno (Colombia-Ecuador-Peru)
9. Río San Juan (Costa Rica-Nicaragua)
10. Rivas-La Flor (Costa Rica-Nicaragua)
11. Sistema Arrecifal Mesoamericano (Belize-Guatemala-Honduras-Mexico)

12. Volcan Tacana (Guatemala-Mexico)

Europe

1. Balkans Peace Park (Albania-Kosovo-Montenegro)
2. Bohemian-Elbe Sandstone - Saxon (Germany-Switzerland)
3. Buna River Velipoje Protected Landscape (Albania-Montenegro)
4. Fertő-Hanság National Park & Neusiedler see - Seewinkel NP (Austria-Hungary)
5. Lake Skadar, Ramsar Site (Albania-Montenegro)
6. Parc national du Mercantour / Parco Naturale Alpi Marittime (France-Italy)
7. Parque Transfronteiriço Gerês-Xurés
8. Pasvik-Inari Trilateral Park (Finland-Norway-Russia)
9. Podyji / Thayatal National Parks (Austria-Czech Republic)
10. Prespa Lake, Albania, FRYO (Greece-Macedonia)
11. Prokletije / Bjeshket e Namuna National Parks (Albania-Kosovo-Montenegro)
12. Sharr Mountains National Park (Albania-Kosovo-Mac)
13. Shebenik Jablanice National Park (Albania-Macedonia)
14. Specially Protected Areas of Mediterranean Importance (Biodiversity Protocol to Barcelona Convention) (France-Italy-Monaco)

Africa

1. Ais-Ais / Richtersveld Transfrontier Park & Conservation Area (Namibia-South Africa)
2. Alatish-Dinder National Park (Ethiopia-Sudan)
3. Bia-Diambarakro (Ghana-Côte d'Ivoire)
4. BSB Yamoussa, Sena Oura-Bouba Njida (Chad-Cameroon)
5. Comoé-Leraba (Burkina Faso and Ivory Coast)
6. Congo-Nile Divide/Nyungwe-Kibira (Burundi-Rwanda)
7. Delta du Fleuve Sénégal Transboundary Biosphere Reserve (Mauritania-Senegal)

8. Gashaka-Gumti National Park - Faro National Park (Cameroon-Nigeria)
9. Great Limpopo Transfrontier Conservation Area (Mozambique-South Africa-Zimbabwe)
10. Greater Mapungubwe Transfrontier Conservation Area (Botswana-South Africa-Zimbabwe)
11. Greater Virunga Landscape/GVTC (DRC-Rwanda-Uganda)
12. Kavango-Zambezi Transfrontier Conservation Area (Angola-Botswana-Namibia-Zambia-Zimbabwe)
13. Kgalagadi Transfrontier Park (Botswana- South Africa)
14. Kidepo Landscape (South Sudan-Uganda)
15. Kilimanjaro/Amboseli/Manyara (Kenya-Tanzania)
16. Korup-Takamanda National Park - Cross River National Park (Cameroon-Nigeria)
17. Lac Télé-Lac Tumba (Congo-DRC)
18. Lake Victoria Shared Ecosystems (Kenya-Tanzania-Uganda)
19. Lubombo TFCA (Mozambique-South Africa-Swaziland)
20. Kasungu Lukusuzi (Malawi-Zambia)
21. Maloti-Drakensberg Transfrontier Conservation Area (Lesotho-South Africa)
22. Masai Mara – Serengeti (Kenya-Tanzania)
23. Mayombe Transfrontier Initiative (Angola-Congo-DRC-Gabon)
24. Mt. Elgon Transboundary Ecosystem (Kenya-Uganda)
25. Nazinga, Kabore Tambi, Mole NP (Burkina Faso-Ghana)
26. Niokolo Koba NP - Badiar NP (Guinea-Senegal)
27. Parc du W (Bénin-Burkina Faso- Niger)
28. Réserve sylvo-pastorale et partielle de faune du Sahel (Burkina Faso-Mali)
29. Sanctuaire a Gorilles de Mengam / Kom National Park (Cameroon-Gabon)
30. Sango Bay-Minziro (Tanzania-Uganda)
31. Tai - Sapo (Ivory Coast-Liberia)
32. Tri National Dja Odzala Minkebe (TRIDOM) (Cameroon-Congo-Gabon)
33. Tri-National de la Sangha (Cameroon-Central African Republic-Congo)

Middle East

1. Al Bakoora/Naharyim/Geshar Peace Park (Israel-Jordan)

Asia

1. Dawna Tennesserim Landscape (DTL) (Myanmar-Thailand)
2. Eastern Plains Landscape (EPL) (Cambodia-Vietnam)
3. Great Altai Transboundary Biosphere Reserve (Kazakhstan-Russia)
4. Lanjak Entimau - Bentung Kerihun, Borneo (Malaysia-Thailand)
5. Perlis State Park - Thaleban NP (Malaysia-Thailand)
6. Royal Belum - Hala Bala WR (Malaysia-Thailand)
7. Sundarbans TBA (Bangladesh-India)
8. Terai Arc Landscape (TAL) (India-Nepal)
9. Transboundary Manas Conservation Area (TrAMCA) (Bhutan-India)
10. Turtle Islands Heritage & Protected Areas (Malaysia-Philippines)
11. Yok Don National Park (Cambodia-Laos-Vietnam)

Appendix V: TBCAs identified in 2007 Global List, legal review and survey

The TBCAs listed below were identified through the 2007 Global List, legal review and practitioners' survey. Some are referenced by the same name, but not always. Discrepancies in the TBCA name are identified through this parallel listing. The TBCAs number provided is according to its listing in the 2007 Global List. Where no TBCA number is provided, that is because the TBCA was not found in the 2007 Global List.

TBCA #	TBCAs with Name in 2007 List	TBCAs in Legal Review	TBCAs in Survey
North America			
1	Ellesmere/Greenland Transboundary Complex (Canada-Greenland)		
3	Alaska-Yukon-British Columbia Borderlands (Canada-USA)		Kluane/Wrangell St. Elias/Glacier Bay/Tatshenshini-Alsek World Heritage Site (Canada-USA)
5	Waterton-Glacier International Peace Park (Canada-USA)	Waterton-Glacier International Peace Park (Canada-USA)	
9	Roosevelt Campobello International Park (Canada-USA)	Roosevelt Campobello International Park (Canada-USA)	
11	Dry Borders-Sonoran Desert Biosphere Reserve Network (Mexico-USA)	Dry Borders-Sonoran Desert Biosphere Reserve Network (Mexico-USA)	US-Mexico Area of Binational Conservation Interest (Mexico-USA)/Dry Borders-Sonoran Desert BR Network/Sky Island Alliance (Mexico-USA: El

			Pinacate-El Gran Desierto de Altar-Organ Pipe)
12	El Carmen-Big Bend Complex (Mexico-USA)	El Carmen-Big Bend Complex (Mexico-USA)	US-Mexico Area of Binational Conservation Interest (Mexico-USA)/El Carmen-Big Bend Complex (Mexico-USA: Cañon de Sta Elena, Maderas del Carmen, Big Bend, Río Bravo del Norte, Ocampo, Black Gap)
			Shared Beringian Heritage Program (Canada-Russia-USA)
Latin America			
13	Unnamed (Belize-Guatemala-Honduras-Mexico)	Corredor Biológico Binacional Omoa-Punta Manabique-Merendon	
14	Maya Tropical Forest Complex (Belize-Guatemala-Mexico)	Biosfera Maya-Calakmul-Río Bravo (Guatemala-Honduras)	Calakmul-Selva Maya (Belize-Guatemala-Mexico)
15			Volcan Tacana (Guatemala-Mexico)
18	Montecristo Trifinio Transboundary Protected Area Complex (El Salvador-Honduras)	Montecristo Trifinio Transboundary Protected Area Complex (El Salvador-Honduras)	
20	Unnamed (Honduras-Nicaragua)	Río Plátano-Tawahka-Bosawas (Proyecto Corazón) (Costa Rica-El Salvador-Honduras-Nicaragua)	Bosawas-Río Platano (Costa Rica-El Salvador-Honduras-Nicaragua)
21	San Juan River Basin (Sí-a-Paz) (Costa Rica-Nicaragua)		Río San Juan
22	Parque Internacional La Amistad (Costa Rica-Panama)	Parque Internacional La Amistad (Costa Rica-Panama)	
26			Programa Trinacional de Conservación y Desarrollo Sostenible del Corredor de

			Áreas Protegidas PNN La Paya, ZR Gueppí y RPF Cuyabeno (Colombia-Ecuador-Peru)
27	Cordillera del Cóndor (Ecuador-Peru)	Cordillera del Cóndor (Ecuador-Peru)	
34	Iguazu-Iguazú (Argentina-Brazil-Paraguay)		
42			Parque Nacional Kaa Iya del Gran Chaco y el Parque Nacional Defensores del Chaco en (Bolivia-Paraguay)
47	Glaciares-Torres del Paine-O'Higgins Complex (Argentina-Chile)		
			Cerro de Amotape-RN de Tumbes-SN Los Mangares de Tumbes-RE Arenillas (Ecuador-Peru)
			Corredor Biológico San Juan-La Selva El Castillo (Costa Rica-Nicaragua)
			Esquema asociativo de ordenamiento territorial trifronterizo Leguizamo, Puerto del Carmen Ecuador y Soplin Vargas (Colombia-Peru)
			Golfo de Fonseca (Honduras-El Salvador-Nicaragua)
			Reserva Vida Silvestre La Flor (Costa Rica-Nicaragua)
13			Sistema Arrecifal Mesoamericano (Belize-Guatemala-Honduras-Mexico)
Europe			
55	Pasvik Nature Reserve (Finland-Norway-Russia)	Pasvik-Inari Trilateral Park (Finland-Norway-Russia)	Pasvik-Inari Trilateral Park (Finland-Norway-Russia)

59	Friendship Nature Reserve (Finland-Russia)		
69			Parque Transfronteiriço Gerês-Xurés (Portugal-Spain)
71	Pyrenees-Mount Perdu WHS (France-Spain)		
74	Unnamed (France-Italy)		Parc national du Mercantour / Parco Naturale Alpi Marittime (France-Italy)
80	Wadden Sea International Protected Region (Denmark-Germany-Netherlands)		Bohemian-Elbe Sandstone - Saxon (Germany-Switzerland)
82	(Unnamed (Belgium-Germany)	Parc Naturel Nordeifel/Schneifel/Hautes-Fagnes-Eifel (Belgium-Germany)	
95	Unnamed (Austria-Czech Republic)		Podyji/Thayatal National Parks (Austria-Czech Republic)
97	Lake Fertö (Austria-Hungary)		Fertő-Hanság National Park & Neusiedler see-Seewinkel NP (Austria-Hungary)
104	Eastern Carpathian Biosphere Reserve (Poland-Slovakia-Ukraine)		
113	Unnamed (Greece-Macedonia)	Prespa Park	Prespa Lake, Albania, FRYO (Greece-Macedonia)
114	Rhodope Mountains (Bulgaria-Greece)		
115	Danube Delta/Green Corridor of Europe (Moldova-Romania-Ukraine)	Mura-Drava-Danube TBBR	
		Balkan Peace Park (BPP)	Balkans Peace Park (Albania-Kosovo-Montenegro)

		Bjeshkët e Namuna/Prokletije Mountains (Dinaric Arc)	Prokletije/Bjeshket e Namuna National Parks (Albania-Kosovo-Montenegro)
		Mediterranean Sanctuary for Marine Mammals	Specially Protected Areas of Mediterranean Importance (Biodiversity Protocol to Barcelona Convention) (France-Italy-Monaco)
			Buna River Velipoje Protected Landscape (Albania-Montenegro)
			Lake Skadar, Ramsar Site (Albania-Montenegro)
			Sharr Mountains National Park (Albania-Kosovo-Macedonia)
			Shebenik Jablanice National Park (Albania-Macedonia)

Africa

131	Delta du Saloum (Mauritania-Senegal)		Delta du Fleuve Sénégal Transboundary Biosphere Reserve (Mauritania-Senegal)
133	Niokolo Koba-Badiar (Guinea-Senegal)		Niokolo Koba NP - Badiar NP (Guinea-Senegal)
136	Mount Nimba (Côte d'Ivoire-Guinea-Liberia)		
138	Unnamed (Burkina Faso-Côte d'Ivoire)		Comoé-Leraba (Burkina Faso-Côte d'Ivoire)
139-140	Unnamed (Ghana-Côte d'Ivoire)		Bia-Diambarakro (Ghana-Côte d'Ivoire)
142	"W" Park (Benin-Burkina Faso-Niger-Togo)		Parc du W (Bénin-Burkina Faso- Niger)
145	(Cameroon-Nigeria)		Gashaka-Gumti National Park - Faro National Park (Cameroon-Nigeria)
146	Unnamed (Cameroon-Nigeria)		Korup-Takamanda National Park - Cross River

			National Park (Cameroon-Nigeria)
148	Tri-National de la Sangha (Cameroon-CAR-Congo)		Tri-National de la Sangha (Cameroon-Central African Republic-Congo)
152-153	Unnamed/Kidepo (South Sudan-Uganda)	Landscapes for Peace	Kidepo Landscape (South Sudan-Uganda)
154	Mount Elgon (Kenya-Uganda)		Mt. Elgon Transboundary Ecosystem (Kenya-Uganda)
156	The Virunga Volcanoes Transboundary Conservation Area	Greater Virunga Landscape (DRC-Rwanda-Uganda)	Greater Virunga Landscape/GVTC (DRC-Rwanda-Uganda)
157	Unnamed (Burundi-Rwanda)	Kibira-Nyungwe	Congo-Nile Divide/Nyungwe-Kibira (Burundi-Rwanda)
159	Unnamed (Tanzania-Uganda)		Sango Bay-Minziro (Tanzania-Uganda)
160	Serengeti-Masai (Kenya-Tanzania)		Masai Mara – Serengeti (Kenya-Tanzania)
161	Kilimanjaro (Kenya-Tanzania)		Kilimanjaro/Amboseli/Manyara (Kenya-Tanzania)
166	Vwaza Marsh (Malawi-Zambia)		Kasungu Lukusuzi (Malawi-Zambia)
169	Unnamed (Angola-Botswana-Namibia-Zambia-Zimbabwe)	KAZA: Kavango-Zambezi TFCA	Kavango-Zambezi Transfrontier Conservation Area (Angola-Botswana-Namibia-Zambia-Zimbabwe)
170	Iona/Skeleton Coast TFCA (Angola-Namibia)		
171	Unnamed (Namibia-South Africa)	Ai- Ais/Richtersveld Transfrontier Park (Namibia-South Africa)	Ais-Ais / Richtersveld Transfrontier Park & Conservation Area (Namibia-South Africa)
172	Kgalagadi TFP (Botswana-Namibia-South Africa)		Kgalagadi Transfrontier Park (Botswana- South Africa)

174	Greater Limpopo TFP (Mozambique-South Africa-Zimbabwe)		Great Limpopo Transfrontier Conservation Area (Mozambique-South Africa-Zimbabwe)
175	Lubombo TFCA (Mozambique-South Africa-Swaziland)		Lubombo TFCA (Mozambique-South Africa-Swaziland)
176	Maloti-Drakensberg TFCDA (Lesotho-South Africa)		Maloti-Drakensberg Transfrontier Conservation Area (Lesotho-South Africa)
	Binational Lac Télé-Lac Tumba (BILTLT)		Lac Télé-Lac Tumba (Congo-DRC)
			Alatish-Dinder National Park (Ethiopia-Sudan)
			BSB Yamoussa, Sena Oura-Bouba Njida (Chad-Cameroon)
			Mayombe Transfrontier Initiative (Angola-Congo-DRC-Gabon)
			Tri National Dja Odzala Minkebe (TRIDOM) (Cameroon-Congo-Gabon)
			Tai - Sapo (Ivory Coast-Liberia)
			Sanctuaire a Gorilles de Mengam / Kom National Park (Cameroon-Gabon)
			Réserve sylvo-pastorale et partielle de faune du Sahel (Burkina Faso-Mali)
			Nazinga, Kabore Tambi, Mole NP (Burkina Faso-Ghana)
			Lake Victoria Shared Ecosystems (Kenya-Tanzania-Uganda)
Asia			
182	Unnamed (China-Kazakhstan-Mongolia-Russia)	Great Altai Transboundary Biosphere Reserve	Great Altai Transboundary Biosphere Reserve (Kazakhstan-Russia)

186	Daurian Steppes (China-Mongolia-Russia)		
193	Taxkorgan (China-Pakistan)		
202	Western Tien Shan/Chatkal Mtns (Kazakhstan-Kyrgyzstan-Uzbekistan)		
209	Unnamed (Bhutan-India)		Transboundary Manas Conservation Area (TrAMCA) (Bhutan-India)
210	Sundarbans (Bangladesh-India)		Sundarbans TBA (Bangladesh-India)
214	Unnamed (Cambodia-Laos-Vietnam)		Yok Don National Park (Cambodia-Laos-Vietnam)
215	Unnamed (Malaysia-Thailand)	Royal Belum-Hala Bala WR	Royal Belum - Hala Bala WR (Malaysia-Thailand)
219	Unnamed (Laos-Thailand)	Pha Taem Protected Forest Complex (Laos-Thailand)	
220, 221?	Unnamed (Cambodia-Thailand)	Unknown (Cambodia-Thailand)	
223	Lanjak Entimau/Batang Ai/Betung Kerihun Complex (Indonesia-Malaysia)		Lanjak Entimau - Bentung Kerihun, Borneo (Malaysia-Thailand)
222, 224?	Unnamed (Indonesia-Malaysia)	Borneo Island (Indonesia-Malaysia)	
225	Labi Hills/Gunung Pulu TB Complex (Brunei Darussalam-Malaysia)		
226	Wasur-Tonda TBCA (Indonesia-Papua New Guinea)		
227	Turtle Islands (Malaysia-Philippines)		Turtle Islands Heritage & Protected Areas (Malaysia-Philippines)
		Perlis State Park - Thaleban NP (Malaysia-Thailand)	Perlis State Park - Thaleban NP (Malaysia-Thailand)
		Emerald Triangle Protected Forests Complex (Cambodia-Laos-Thailand)	

		Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF) (Indonesia-Malaysia-Papua New Guinea-Philippines-Solomon Islands-Timor Leste)	
			Terai Arc Landscape (TAL) (India-Nepal)
			Dawna Tennesserim Landscape (DTL) (Myanmar-Thailand)
			Eastern Plains Landscape (EPL) (Cambodia-Vietnam)
Middle East			
		Al Bakoorah/Naharyim/Gesher Peace Park (Israel-Jordan)	Al Bakoorah/Naharyim/Gesher Peace Park (Israel/Jordan)

Appendix VI: Interview schedules

Protecting Place, People and Peace: A Critical Socio-Legal Review of Transboundary Parks for Peace

Interview Schedule (Case Study - Field Research)

Overall Research Questions

Q1. Do peace parks contribute to peace?

- 1.1 What kind of peace (positive, negative, international, social or ecological)?
- 1.2 Based on what indicators?
- 1.3 How?
- 1.4 Under what conditions (see also Question 2)?
- 1.5 What role do the legal arrangements play in how these spaces contribute to peace?

Q2. How did the legal and governance arrangements for the peace park come into being? How do these legal agreements work on-the-ground?

- 2.1 What factors, histories, actors, etc., influenced the development of the peace park and its governance framework (legal placemaking)? And vice versa?
- 2.2 To what extent have these factors, including the peace park's governance framework, affected or contributed to the situation on-the-ground today?
- 2.3 How do these factors and the peace park's legal arrangement contribute (or not) to peace in the territory/region?
- 2.4 Are there any discrepancies between the legal arrangements and the customary arrangements?
- 2.5 What customary law may also apply to support these transboundary protected areas in their contribution to peace?

Interview Objectives

Interviews will seek to understand the history of the transboundary initiative, its establishment, evolution and governance framework, as well as its current circumstances and challenges and how practices on-the-ground are developed or adapted to accommodate these local circumstances, particularly where they represent formal and informal peace processes. These histories will qualitatively evaluate implementation of the transboundary initiative's legal framework (e.g., are peace park arrangements products of certain socio-political or economic circumstances, are they being implemented as negotiated and codified in formal arrangements/agreements, are codified arrangements sufficient to respond to on-the-ground needs, are these legal arrangements

supporting the key objectives of conservation and peace and if so, to what degree, or are alternative informal/formal arrangements being developed in response to circumstances on-the-ground). My objective is to understand what a legal framework for transboundary conservation would look like if it arose from the experiences and practices of local communities and actors on-the-ground.

Interview Methodology

Interviews will be based primarily on semi-structured and structured interviews with individuals and groups to provide a variety of qualitative narratives. They will include certain sets of questions tailored to characterizations of the stakeholder; e.g., those who were engaged in the creation of the peace park will be questioned about the negotiation process, whereas stakeholders who are engaged in its implementation will be interviewed about day-to-day realities of peace park management. Some stakeholders will be interviewed on multiple occasions in order to gather new or deeper insights as the researcher's relationship with them develops over time. Multi-sessional interviews and breadth of stakeholder representation will help the researcher triangulate interview data, thus producing more complete histories of peace park processes and everyday modes of operation.

Identified Research Participants

- Protected area authorities (e.g., park wardens and rangers),
- Other relevant government officials (e.g., representatives of environmental ministries and local governments),
- Representatives of NGOs and civil society that are contributing to peace park governance or participating in cross-border activities,
- Regional experts and scholars,
- People living in or adjacent to peace parks (particularly those who also live adjacent to the international boundary).

Interview Questions

Protected area managers/government officials/representatives of NGOs, civil society or academia

- [Transboundary Experience] Please describe:
 - **Prompts:** your current role/position? Connection to the [name of field site]? Transboundary activities that you participate in?
- [History of Transboundary Conservation] Please describe key factors in the development of the transboundary cooperation...
 - **Prompts:** What was the initial basis for cooperation in [name of field site]? And now?
 - What factors (people/organizations involved, events or circumstances, etc.) do you think were most influential in the development of the [name of field site] and the way that it was set up?

- To what extent have or do these factors, especially the way that [name of field site] is managed, affect or contribute to the situation on-the-ground today?
- **What forms of violence or conflict occur within the [name of field site]?**
 - **Prompts:** fighting between belligerents/armed groups? violence within and between communities? Violence between armed groups and local communities? Violence between armed groups and the protected areas?
 - **Follow-up:** How did this affect your work or ability to cooperate towards conservation across the border(s)? What did you do to resolve these challenges? Do you believe that transboundary collaboration has helped to mitigate violence/insecurity/conflict or to improve relations between these groups? How so/why not?
- **Are you aware of human rights abuses in or around the [name of field site]?**
 - **Follow-up:** How does this affect your work or ability to cooperate towards conservation across the border(s)? What did you do to resolve these challenges? Do you believe that transboundary collaboration has helped to mitigate human rights abuses in the area? How so/why not?
- **[International Peace] In the past there has been conflict between your nations, can you please share some experiences that are relevant to the [name of field site]?**
 - **Prompts:** How did this affect your work or ability to cooperate towards conservation across the border(s)? What did you do to resolve these challenges? Do you believe that transboundary collaboration has helped to mitigate violence/insecurity/conflict or to improve relations between your countries? How so/why not?
- **[Social Peace] What happens when there is conflict between the local people and [name of field site]?**
 - **Prompts:** Have you heard of, witnessed or personally experienced any conflicts between the park and local people? Please describe them. Has this ever escalated to violence (please describe)? What arrangements exist for resolving conflicts between park management and local residents? What more do you think can be done to transform these conflicts?
- **[Ecological Peace] In your opinion, how does nature conservation/protected areas/transboundary conservation help to contribute to peace or harmony between humans and nature?**
 - **Prompts:** help to reduce poaching, industrial or unsustainable extraction, environmental degradation, etc.? Help to increase understanding of nature, care for the land/water/species/Earth, better relations with our environment? Can you share any experiences that you have heard of, witnessed or participated in?
- **[Legal Agreements and Peace] In your experience, do the legal agreements play a role in the ways that transboundary cooperation can contribute to peace? In your case, which aspects of the legal agreements play a role in the ways that transboundary cooperation can contribute to peace?**
 - **Follow-up:** If so, how? What aspects of the legal instruments were most effective in supporting peace? If not, why? And how could they be improved to support peace?

- [Legal Agreements and Conflict] In your experience, how do the legal agreements play a role in managing different types of conflict, violence or insecurity in or around [name of field site]?
 - **Prompts:** Did the legal agreements provide sufficient authority to intervene/manage/mitigate the situation? What was missing? What was helpful? How do you think that the legal agreements could be strengthened to better support management of conflict, violence or insecurity in transboundary conservation?
- [Customary Law] How does customary law support transboundary conservation and peace?
 - **Prompts:** What practices or customs (formal or informal) exist to (1) support transboundary conservation? And (2) to promote or celebrate peace, either in your own area or across the border with other communities? Are there any discrepancies between the legal arrangements and the customary arrangements?
- [Peace in Practice] How is peace operationalized in [name of field site]?
 - **Prompts:** Is peace officially an important objective of the transboundary collaboration? Of your work?
 - [Have you heard of/In your experience] Has transboundary cooperation in [name of field site] ever helped to transform a situation of conflict or helped to support regional peace? Please tell me about it...
 - In your experience or opinion, do you think that transboundary conservation has a greater contribution to positive peace (absence of direct/physical, structural/systemic and cultural/identity-related violence) or negative peace (absence of direct violence, e.g., war)? Please explain.
 - What challenges do you face in supporting peace through transboundary conservation? Alternate Question: What challenges do you think transboundary conservation faces in supporting peace across borders?
 - What do you think could be put in place to improve the potential for greater conflict transformation or peacebuilding through transboundary conservation?
- [Effective Legal Agreements] Have you ever participated in the drafting or negotiation of a TBCA agreement? In your opinion and/or experience, what makes legal agreement(s) effective...
 - in providing a framework for transboundary cooperation?
 - in providing clarity on the activities that fall within the transboundary cooperation?
 - in providing sufficient legal authority to conduct transboundary activities?
 - in encompassing transboundary activities that will fulfill the objectives of transboundary cooperation or of the TBCA?
- Is there anything else that you would like to share? i.e., regarding the relationship between a TBCA, law/legal instruments, and peace/conflict?

Members of local communities living in and around the peace park

- **Please tell me a bit about yourself.** [Name, age, village, community/ethnic affiliation, profession]
- What relationships have the communities across the borders had historically?
- What traditional practices exist for protecting natural resources shared across the border?
- How do local people participate in transboundary or nature conservation activities?
- Do you think that the park or transboundary conservation contributes to peace or conflict in this area? How so?
- **What forms of violence or conflict occur in this area/does your community experience?**
 - **Prompts:** fighting between belligerents/armed groups? violence within and between communities? Violence between armed groups and local communities? Violence between armed groups and the protected areas?
 - **Follow-up:** How did this affect your work or ability to cooperate towards conservation across the border(s)? What did you do to resolve these challenges? Do you believe that transboundary collaboration has helped to mitigate violence/insecurity/conflict or to improve relations between these groups? How so/why not?
 - **Which group does your community experience the most conflicts with?** Armed groups? Other members of the community? Other communities? Protected area(s)? Other state organization? Private security? Businesses/Tourism/Investors?
 - Do you know about the regulations of this [name of field site]? How does it address conflicts with these groups? How should it address conflict with these groups?
- **[International Peace] In the past there has been conflict/violence/insecurity between your nations, can you please share some experiences that are relevant to your area/community?**
 - **Prompts:** What traditional practices exist for mitigating violence/insecurity? Or to promote or celebrate peace, either in your own community/area or across the border with other communities?
- **[Social Peace] Have you heard of, witnessed or personally experienced any conflicts between the local people and [name of field site]? Or armed groups and belligerents (please identify)? Or other local communities (please identify)?**
 - **Prompts:** Please describe...Has this ever escalated to violence (please describe)? What customs/practices exist for resolving conflicts between [park management and local residents/armed groups and local residents/other communities and local residents]? What more do you think can be done to transform these conflicts?
- **[Ecological Peace] In your opinion, how does nature conservation/protected areas/transboundary conservation help to contribute to peace or harmony between humans and nature?**
 - **Prompts:** help to reduce poaching, industrial or unsustainable extraction, environmental degradation, etc.? Help to increase understanding of nature, care for the land/water/species/Earth, better relations with our environment? Can you share any experiences that you have heard of, witnessed or participated in?

- **Is there anything else that you would like to share? (i.e., regarding the local communities, park, peace and conflict)**

Appendix VII: Consent form for interviews

Contact letter for interviews (English)

Elaine Hsiao, PhD Candidate
Institute for Resources, Environment and Sustainability
The University of British Columbia
Phone: [REDACTED]
Email: [REDACTED]

16 November 2016

RE: Protecting Place, People and Peace: A Critical Socio-Legal Review of Transboundary Parks for Peace

This letter serves to invite your participation in a study exploring transboundary protected areas, law and peace. This research project is part of a PhD thesis that will be relevant to the international conservation and protected areas community, peace and security agencies, humanitarian aid and development agencies, and members of communities living in/near protected areas, by providing a better understanding of how peacebuilding, peacekeeping and peacemaking can be better integrated in transboundary conservation initiatives. The final thesis, "Protecting Place, People and Peace: A Critical Socio-Legal Review of Transboundary Parks for Peace," will be submitted to the University of British Columbia in Vancouver, Canada, for completion of a PhD in Resources, Environment and Sustainability.

As part of the study, I am planning to interview protected areas authorities, representatives of NGOs and/or civil society and experts or practitioners who are engaged in transboundary conservation, protected areas management, peace and conflict/security, or other related fields. You have been asked to participate because of your membership in one of these groups.

I would like to inquire into your interest and availability for participating in an interview that would last for approximately 30-60 minutes, to take place at your earliest convenience. The interview could be conducted at a place of your designation. In some cases, you may be invited to participate in follow-up interviews of approximately the same duration. Should you be interested in participating but wish to remain anonymous in my

reports, I will certainly respect your wishes. Before beginning the interview, you will be asked to review the attached Consent Form.

Please email or telephone to discuss your interest and availability for an interview. In addition, if you have any questions, you may contact me by email or [REDACTED]
[REDACTED]. Thank you in advance for your time and valuable input.

Sincerely,

Elaine Hsiao, PhD Candidate
University of British Columbia

Consent form for interviews (English version)

Protecting Place, People and Peace: A Critical Socio-Legal Review of Transboundary Parks for Peace

Consent Form (Interviews)

Principal Investigator: Dr. Philippe Le Billon, Department of Geography and the Liu Institute for Global Issues, University of British Columbia, Canada: [REDACTED]

Co-Investigator: Elaine Hsiao, PhD Candidate, Institute for Resources, Environment & Sustainability, University of British Columbia, Uganda: [REDACTED]
[REDACTED]

This research project is being undertaken for the purposes of completing a PhD in Resources, Environment and Sustainability at the University of British Columbia (Vancouver, Canada) by Elaine Hsiao and is supervised by Dr. Philippe Le Billon. This research is almost entirely self-funded, with limited support from UBC's Go Global Programme, and therefore has very minimal resources. This study has been approved by the UBC Behavioural Research Ethics Board, Go Global Student Safety Abroad, Uganda Wildlife Authority, Rwanda Development Board and Kenya Wildlife Service.

Purpose

The broad aim of this research is to assess whether transboundary protected areas are contributing to peace (international, social and ecological) and the role of legal agreements and laws governing these territories in affecting their capacity to promote peace. To do this, the research team's first objective is to gather experiences and recommendations from participants in designing and implementing legal frameworks for transboundary protected areas and how they may or may not contribute to peace objectives. The result of this research will be to produce a PhD thesis on "Protecting Place, People and Peace: A Critical Socio-Legal Review of Transboundary Parks for Peace." You are being invited to take part in this research study because of the following reason: you are managing a protected area identified in a global list of transboundary protected areas, are engaged in the governance of a transboundary protected area, transboundary protected areas research or practice, and/or are impacted by a transboundary protected area.

Procedures

We will be conducting interviews with transboundary protected areas managers and authorities, government officials, relevant knowledge-holders, as well as NGO and civil society representatives. You have been asked to participate because of your affiliation with one of these groups. If you choose to participate in this study, the total interview time is expected to be one session of approximately 30-45 minutes, no more than 1 hour. Some participants may be invited to participate in more than one session of approximately the same duration of time.

Before starting the interviews, the consent form will be explained by the Co-Investigator and translated if appropriate or requested. Consent will be obtained by the same Co-Investigator who will, after asking you to sign the consent form and/or record verbal consent, conduct the interview. You may consent to the interview, but not the audio-recording (interview data in this event will be recorded by hand-written notes). You have the right to consent at a later time and will have at least 24 hours to consider your consent (up to the Co-Investigator's departure from East Africa). You may also request provision for a witness at appropriate stages of the informed consent process, particularly in the case of illiterate, mentally or physically challenged research participants. Materials can be verbally translated into other languages if requested (limited to Spanish, Mandarin, French and availability of local translators).

With your permission the interview will be recorded as a digital audio file accurately recording the responses you give. The interview recording will be transcribed, coded and analyzed by the Co-Investigators. You will be asked below if you would like to receive a summary transcript of the interview by email so that you can review it to ensure accuracy. If you disagree with the transcript or feel that certain information should not be published, you may discuss this with the researchers to determine how and where it will be stored and what safeguards will offer a mutually agreeable way forward. You will have three options: (1) you may agree with the transcript as recorded (after having verified it with the digital audio recording), (2) you may choose to clarify your statement (e.g., if you feel that you were not clear before), (3) you may withdraw your consent. In such a case, the transcript will be destroyed (audio as well as text format) and that data will not be used for research. Information from interviewees who withdraw their consent will not be included in any published reports or studies.

Potential Risks

This research is designed and intended to prevent exposure to any risk that may be greater than ordinary due to participation in this study. The groups identified for interview participation are considered to have an already high level of exposure to research/other researchers due to their connection to the parks/protected areas and are often very familiar with interview processes, therefore no additional risk or discomfort is foreseen. Participants who may perceive differences in levels of literacy/education, language capacity and economics or cultures, can be provided with local translators, a witness and/or additional time to review decisions regarding consent, interview transcriptions, amending or revoking consent, or to provide further clarifications.

Some of the information that will be shared in the interviews may be work sensitive. You will not be asked to share any information which does not comply with their organizations' internal privacy policies or protocols. To minimize risks from providing sensitive information, you will be: (1) reminded that you may refuse to answer any questions and may withdraw from the study at any time; (2) offered to be provided a summary of the interview for verification; and (3) asked explicitly whether or not you consent to having responses attributed to you by name. In all cases, if you feel that you may be exposed to any risk(s) out of the ordinary, you may contact the researchers for support and/or to explore mechanisms that will reduce those risks to you.

Confidentiality

All recordings, transcripts and notes from your interview will be kept only electronically in encrypted password-protected files. The data collected for this research will be published as a policy paper and may be used in future publications related to the research. You will be asked below if you consent to being identified in study reports, and your response will be noted in the interview transcript and respected. If you do not consent, no identifiable information about you will be included in any publications and any recorded data associated with you will be protected. You may refuse to answer any specific question(s) raised during the interview. If you wish to withdraw from the study or leave, you may do so at any time before the end of the interview without giving a reason or explanation for doing so. If you do withdraw from the study, this will have no effect on your relationship with the University of British Columbia or the researchers involved. If for any reason the circumstances or direction of the research change during the time of this research project, consenting participants will be notified (by email or other primary form of contact provided by the participant) and informed of the changes made and asked if they agree to renew their consent.

Potential Benefits

By participating in an interview, you will have the opportunity to share your experiences on-the-ground of working with transboundary protected areas in the context of peace and to discuss what works and what does not work in context. You will have the opportunity to discuss these issues further with the Co-Investigators and may learn from other peoples' experiences, which could prove beneficial to your organization and work. Interviews with civil society organizations representing local communities living within or nearby protected areas may result in motivating some additional intra- community and community/park management discussions on the protected area and its impacts. This may benefit (transboundary) park governance overall. Your participation in this study is voluntary and without compensation.

Concerns and Contact

If you have any questions or would like further information about this study, please contact Elaine Hsiao ([REDACTED]). If you have any concerns or complaints about your rights as a research participant and/or your experiences while participating in this study, contact the Research Participant Complaint Line in the UBC Office of

Research Ethics at +1-604-822-8598 or if long distance e-mail RSIL@ors.ubc.ca or call toll free +1-877-822-8598. You may contact the Researchers or the UBC Office of Research Ethics in your preferred language; the Researchers will assist in securing any language interpretation that may be needed.

Consent

By signing below, you indicate that you:

- understand your rights as a research participant
- understand what the study is about
- voluntarily consent to participate in this study
- have received a copy of this consent form for your own records

You may sign in writing, by fingerprint, with a personal mark, through an approved proxy (i.e., your assigned representative or witness) or alternatively, via verbal consent which shall be audio recorded.

Signature of Participant	Date (DD/MM/YYYY)
Full Name (Printed)	Contact Information

 Please initial here if you are willing to have the information you provide attributed to you by name.

Appendix VIII: Consent form and legal survey on TBCAs, law and peace (English version)

Survey on TBCAs, Law and Peace

Protecting Place, People and Peace: A Critical Socio-Legal Review of Transboundary Parks for Peace

Survey on Transboundary Conservation Areas, Law and Peace

This message is to thank you for agreeing to participate in a study exploring transboundary protected areas, law and peace. The collected information will serve as a basis for developing recommendations for peacebuilding, peacekeeping and peacemaking in and around transboundary protected areas. The questionnaire will also invite you to submit legal documents and agreements associated with specific transboundary protected areas; by submitting these documents, you may consent to the researchers collecting them for the purposes of developing an online legal database of TBCA legal agreements to be made available through the IUCN WCPA and for research. Please refer to your initial Contact Letter and Consent Form for further details. Before beginning the survey, you will have the opportunity to review the Consent Form, whereupon you will be invited to provide your consent to participate in the survey.

We invite you to take approximately 30 minutes to complete the questionnaire and to submit legal documents online or separately to the Researcher, Elaine Hsiao, at the addresses provided. You do not need to answer questions that you are not comfortable answering and may save your responses at any time to complete at a later time. All information received will be confidential. Submission of the questionnaire confirms your agreement to participate and your understanding of the research study. If you have any questions about this project or if you do not wish to participate or receive any follow-up reminders by email or telephone you may contact, Elaine Hsiao at [REDACTED] (USA) or [REDACTED].

If you have any concerns or complaints about your rights as a research participant and/or your experiences while participating in this study, contact the Research Participant Complaint Line in the UBC Office of Research Ethics at +1-604-822-8598 or if long distance e-mail RSIL@ors.ubc.ca or call toll free +1-877-822-8598. Thank you in advance for your participation.

Sincerely,

Elaine Hsiao

UBC IRES, PhD Candidate

Survey Consent Form

PhD Supervisor: Dr. Philippe Le Billon, Department of Geography and the Liu Institute for Global Issues, University of British Columbia, Canada: [REDACTED]

Investigator: Elaine Hsiao, PhD Candidate, Institute for Resources, Environment and Sustainability, The University of British Columbia, USA: [REDACTED]
[REDACTED]

Purpose

The broad aim of this research is to assess whether transboundary protected areas are contributing to peace (international, social and ecological) and the role of legal agreements and laws governing these territories in affecting their capacity to promote peace. To do this, the research team's first objective is to gather legal information on identified transboundary protected areas (e.g., legal agreements concerning transboundary cooperation, national protected areas laws and policies) and secondly, to invite experiences and recommendations from participants in designing legal frameworks for transboundary protected areas that may contribute to peace objectives. The result of this research will be to produce a PhD thesis on "Protecting Place, People and Peace: A Critical Socio-Legal Review of Transboundary Parks for Peace." You are being invited to take part in this research study because of the following reason: you are managing a protected area identified in a global list of transboundary protected areas and/or are engaged in the governance of a transboundary protected area.

Procedures

We will be conducting an online legal survey and creating an online legal database with transboundary protected areas managers and authorities. You have been asked to participate because of your affiliation with one of these groups. If you choose to participate in this study, the total survey time is expected to be one session of approximately 45 minutes, no more than 1 hour. You may save your responses at any time and complete the survey at a later time. You will be asked below if you would like to receive a copy of your survey by email so that you can review it to ensure accuracy. With your permission the survey will be recorded as an encrypted password-protected digital file accurately recording the responses you submit. The online legal survey will be analyzed by the Co-Investigators.

Confidentiality

All results of the online legal survey will be kept electronically in encrypted password-protected files. You will be asked to upload any legal documents that are associated with the creation of a transboundary protected area with which you are or have been engaged. You will be asked if these legal documents can be made publicly available through an online database to be hosted by Legal Atlas (www.legal-atlas.net) and the Global Transboundary Conservation Network

(www.tbpa.net). The data collected for this research will be published as a PhD thesis and may be used in future publications related to the research. You will be asked below if you consent to being identified in study reports, and your response will be noted in the survey results and respected. If you do not consent, no identifiable information about you will be included in any publications. In all cases, your personal information will not be identified in the online database of legal documents. Your participation in this online survey is voluntary and without compensation, but greatly appreciated. You may refuse to answer any specific question(s) raised during the survey. If you wish to withdraw from the survey, you may do so at any time before the end of the survey without giving a reason or explanation for doing so. If you do withdraw from the survey, this will have no effect on your relationship with the University of British Columbia or the researchers involved. It is not anticipated that you will face risks greater than usual as a result of this survey. However, if you feel that you may be exposed to any risk(s) out of the ordinary, you may contact the researchers for support and/or to explore mechanisms that will reduce those risks to you.

Contact

If you have any questions or would like further information about this study, please contact Elaine Hsiao (elaine.hsiao@alumni.ubc.ca). If you have any concerns or complaints about your rights as a research participant and/or your experiences while participating in this study, contact the Research Participant Complaint Line in the UBC Office of Research Ethics at +1-604-822-8598 or if long distance e-mail RSIL@ors.ubc.ca or call toll free +1-877-822-8598.

Please provide your full name and date (Day/Month/Year) below:

By signing below you indicate that you:

- Understand your rights as a research participant
- Understand what this survey is about
- Voluntarily consent to participate in this survey
- May request a copy of this consent form for your own records

Please sign below.

Signature _____

Do you consent to have your personal information identified in the results of this study?

- Yes
- No

Please provide your personal information below:

Name

Title/Position

Institution/Organization

Do you consent to the use of legal documents you provide in this Survey for research purposes via an online database provided by Legal Atlas and the IUCN Transboundary Conservation Network?

* Please note that you may consent to the use of these legal documents for research purposes ONLY and not for public use. In this case, these documents will be securely stored by the Researchers for the purposes of completing the PhD dissertation, but will not be made publicly available through the online databases mentioned above.

- Yes, these documents may be made publicly available by Legal Atlas and the IUCN Transboundary Conservation Network
- No, these documents may ONLY be used for the purposes of completing the PhD dissertation.

Do you consent to being contacted in the future about any of your answers to this survey or for purposes of following up on this survey within the duration of this research project?

- Yes
- No

Please provide your contact information below:

Email

Telephone Number

Address

Please indicate the method by which you would prefer to be contacted:

- Email
- Telephone
- Post/Mail

Section I: Transboundary Conservation Areas (TBCA) Experience

According to the International Union for the Conservation of Nature (IUCN), Transboundary Conservation is defined as:

"a process of cooperation to achieve conservation goals across one or more international boundaries".

Transboundary Conservation Areas (TBCAs) include three types:

- (1) Transboundary Protected Areas
- (2) Transboundary Conservation Landscape and/or Seascapes
- (3) Transboundary Migration Conservation Area

Any of these three types can be designated as a Park for Peace.

1. How long have you worked with TBCAs?

- Less than 2 years
- 2-8 years
- 8-15 years
- 15 years or more

2. Please list the names of up to five (5) TBCAs that you have worked in or been engaged with, currently or in the past. E.g., Parque Internacional La Amistad

Name of first TBCA

Name of second TBCA

Name of third TBCA

Name of fourth TBCA

Name of fifth TBCA

Please answer the following questions considering the first TBCA you listed in Section I - Question 2 on page 6.

2a. Please provide the following information for the first TBCA.

TBCAs and the protected areas within them are listed in the 2007 Global List of Transboundary Protected Areas (TBPA) here. If any of the information in the 2007 Global List of TBPA is incorrect or is not provided, please provide the correct information below according to your knowledge. If you do not see your TBCA in the list, please provide the requested information according to your knowledge.

Protected Areas Numbers can be located through the [World Database of Protected Areas](#).

Name of protected area(s) in the TBCA that you were most directly involved in

Protected Area Number(s)	<input type="text"/>
Countries involved	<input type="text"/>
Other protected area(s) that are part of the TBCA	<input type="text"/>
Other protected area(s) that are part of broader regional cooperation but are NOT part of the TBCA	<input type="text"/>

2. In what capacities have you engaged with transboundary conservation in the first TBCA?

Please check all that apply.

- Park Warden/Head
- Park Management
- Field Ranger
- Scientist/Researcher
- Consultant
- Community Liaison
- Other (please specify): _____

3. Please describe the transboundary activities that you participated in at the first TBCA?

Please check all that apply.

- Species protection
- TBCA establishment
- Negotiation or drafting of TBCA legal agreements
- Transboundary planning or strategy
- Joint research initiatives
- Joint patrols, security or intelligence sharing
- Joint tourism and interpretation activities
- Transboundary ecological restoration
- Transboundary fire or disaster prevention/management
- Joint fundraising
- Joint community outreach
- Joint publicity, marketing or communications
- International designations for the TBCA (e.g., World Heritage, Biosphere Reserve, RAMSAR, etc.)
- Joint legal action, law enforcement or legal harmonization
- Other (please list below)

Section II: Transboundary Conservation Area (TBCA) Cooperation

According to the IUCN, cooperation implies: "transboundary collaboration for conservation of various kinds; a minimum being regular communication and information sharing, but often also involving prior consultation, coordinated action, joint management planning and/or joint implementation of decisions."

1. Would you describe the transboundary cooperation in the first TBCA as:

- Low
- Medium
- High

2. When did cooperation in the first TBCA begin?

Please provide the year transboundary cooperation began.

3a. What were the initial priority activities or areas of cooperation in the first TBCA?

Please read the complete list of options first and then select the top 5 activities starting with the most important.

	Highest priority	Second highest priority	Third highest priority	Fourth highest priority	Fifth highest priority
Species protection	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
TBCA establishment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Negotiation or drafting of TBCA legal agreements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Transboundary planning or strategy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Joint research initiatives	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Joint patrols, security or intelligence sharing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Joint tourism and interpretation activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Transboundary ecological restoration	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Transboundary fire or disaster prevention/management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Joint fundraising	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Joint community outreach	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Joint publicity, marketing or communications	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
International designations for the TBCA (e.g., World Heritage, Biosphere Reserve, RAMSAR, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Joint legal action, law enforcement or legal harmonization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (please list below)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If you responded "Other" in Question 3a, please list the activities here:

3b. Which of these activities is most important now in the first TBCA?

Please read the complete list of options first and then select the top 5 activities starting with the most important.

	Highest priority	Second highest priority	Third highest priority	Fourth highest priority	Fifth highest priority
Species protection	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
TBCA establishment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Negotiation or drafting of TBCA legal documents	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Transboundary planning or strategy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Joint research initiatives	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Joint patrols, security or intelligence sharing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Joint tourism and interpretation activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Transboundary ecological restoration	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Transboundary fire or disaster prevention/management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Joint fundraising	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Joint community outreach	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Joint publicity, marketing or communications	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
International designations for the TBCA (e.g., World Heritage, Biosphere Reserve, RAMSAR, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Joint legal action, law enforcement or legal harmonization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (please list below)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If you responded "Other" in Question 3b, please list the activities here:

4a. What was the primary basis/impetus for initial cooperation in the first TBCA?

- Existing Relationship Between PA Managers
- Legal Mandate (please describe the source, e.g., MoU): _____
- NGO Supported
- Other (please describe): _____

4b. Did the basis for cooperation change over time in the first TBCA?

- Yes
- No

4c. If yes, how?

- Growing relationship between PA managers
- Increasing support from NGOs
- Developed a legal framework (i.e., became increasingly formalized)
- Cooperation diminished over time and/or failed to receive sufficient support
- Other (please describe): _____

4d. Please read the complete list of options first and then rank the following in the order of their importance to the success of the first TBCA over time.

	Highest priority	Second highest priority	Third highest priority	Fourth highest priority	Fifth highest priority	Sixth highest priority
Growing relationship between PA managers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increasing support from NGOs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Developed a legal framework (i.e., became increasingly formalized)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sustainable financial support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Growing support from local communities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increasing political support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (please describe below)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If you selected "Other" in Question 4d above, please describe here:

5a. Overall, would you say that transboundary cooperation has added value to the protected area(s) you are/were working in?

- Yes, definitely
- Yes, somewhat
- No, not really
- Not at all

5b. Please explain your response to 5a. In what ways did it add value? Or why not?

***Important Note: If you have listed experience in more than one TBCA in Section I – Question 2 on page 6, please answer the previous questions for each of the TBCAs you listed (up to 5 total). If you have worked in only one TBCA, you can skip to Section III on page 38.**

Section III: Transboundary Conservation Area (TBCA) Agreements

TBCA Agreements are legal documents or instruments that are drafted in order to formally support the establishment, governance, or cooperative activities of a TBCA. They may be binding or non-binding. These include, inter alia: international treaties, Memorandums of Understanding, Memorandums of Cooperation, Joint Statements, National Laws (declaring a protected area part of a TBCA), etc.

1. Have you ever participated in the drafting or negotiation of a TBCA agreement?

- Yes
- No

1b. Please list the TBCA agreements you have been involved in:

2. Please email a scanned copy of any TBCA agreement(s) related to the TBCAs you have worked with to elaine.hsiao@alumni.ubc.ca or mail a photocopy of the original(s) to:

Elaine Hsiao
UBC-IRES, AERL 411
2202 Main Mall
Vancouver, BC V6T1Z4
Canada

* Please note that if you did not consent to making these documents publicly available through the online databases mentioned (Legal Atlas/IUCN), they will be securely stored by the Researchers and used only for purposes of completing the PhD dissertation.

3a. In your opinion, are TBCA agreements effective in...

	Yes, definitely	Yes, somewhat	No, not really	Not at all
Providing a framework for transboundary cooperation?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Providing clarity on the activities that fall within the transboundary cooperation?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Providing sufficient legal authority to conduct transboundary activities?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Encompassing transboundary activities that will fulfill the objectives of the TBCA?

3b. If you answered NO to any of the above, please explain here:

4. Do the legal instruments in the TBCA(s) that you were/are engaged in provide...

	Yes, definitely	Yes, somewhat	No, not really	Not at all	N/A (no legal instruments exist)
Guidance on how situations of conflict are to be managed?	<input type="radio"/>				
Guidance on how to strengthen peace processes, peacebuilding or improve peaceful relations?	<input type="radio"/>				
Mechanisms for managing or transforming situations of conflict?	<input type="radio"/>				
Mechanisms for peace or peacebuilding?	<input type="radio"/>				
Sufficient legal authority for you to intervene to manage conflict?	<input type="radio"/>				
Sufficient legal authority for you to intervene to undertake peace initiatives?	<input type="radio"/>				

4b. If you answered NO to any of the above, please explain here:

5a. In your opinion and/or experience, how effective is implementation of the TBCA agreements?

- Very Effective
- Somewhat Effective
- Not Very Effective
- Not Effective At All

5b. In your opinion and/or experience, which aspects of the legal agreements are most important for effective implementation.

Please read the complete list of options first, then rank them from most important (left) to least important (right).

	Most import ant	2n	3r	4t	5t	6t	7t	8t	9t	10	11	12	Least import ant
Identifies the reasons for or origins of cooperation	○	○	○	○	○	○	○	○	○	○	○	○	○
Sets forth clear objectives (vision, goals and aspirations)	○	○	○	○	○	○	○	○	○	○	○	○	○
Clearly defines the territory of cooperation	○	○	○	○	○	○	○	○	○	○	○	○	○
Territory identified is appropriate for reasons and objectives of cooperation	○	○	○	○	○	○	○	○	○	○	○	○	○
Sets forth clear areas of cooperation (activities)	○	○	○	○	○	○	○	○	○	○	○	○	○
Includes protocols for cooperation	○	○	○	○	○	○	○	○	○	○	○	○	○
Includes all of the relevant parties	○	○	○	○	○	○	○	○	○	○	○	○	○
Identifies specific responsibilities of the parties involved	○	○	○	○	○	○	○	○	○	○	○	○	○

Includes a funding mechanism	<input type="radio"/>												
Includes mechanisms for conflict or dispute resolution	<input type="radio"/>												
Facilitates information, knowledge and experience sharing	<input type="radio"/>												
Provides for monitoring, evaluation and adaptation	<input type="radio"/>												
Other (please specify)	<input type="radio"/>												

5c. Please list any other aspects of a TBCA legal agreement that are important for effective implementation.

Section IV: Transboundary Conservation Areas (TBCAs) and Peace

It is theorized that TBCAs contribute to regional peacebuilding by bringing parties on different sides of an international boundary together in environmental cooperation, rather than in conflict or non-engagement.

1a. In the TBCA(s) you were/are engaged in, do you agree or disagree with the statement above?

- Agree Strongly
- Agree Somewhat
- Disagree Somewhat
- Disagree Strongly

1b. What are key factors for why you feel that transboundary cooperation impacted on peace in the TBCA(s) you were/are engaged in?

Please read the complete list of options on the left first and then select the 5 most significant factors.

	Most significant impact	Second-most significant impact	Third-most significant impact	Fourth-most significant impact	Fifth-most significant impact
Improved relations between protected areas managers	○	○	○	○	○
Improved relations between governments	○	○	○	○	○
Improved relations between communities on-the-ground	○	○	○	○	○
Prevented violent conflict from escalating	○	○	○	○	○
Mitigated violent conflict that was present	○	○	○	○	○
Transformed conflict through non-violent mechanisms	○	○	○	○	○
Desecuritized the territory	○	○	○	○	○
Contributed to disarmament in the region	○	○	○	○	○
Prevented illegal activities that were contributing to violence in the region (e.g., wildlife trafficking, poaching, etc.)	○	○	○	○	○
Allowed for sharing of critical security information	○	○	○	○	○
Allowed for security interventions across the shared border	○	○	○	○	○
Other (please describe below)	○	○	○	○	○

If you selected "Other", please list all of the key factors not listed above that apply to your response in 1b.

1c. If in your experience, transboundary cooperation impacted negatively on peace, please explain here.

E.g., What happened? What specifically did cooperation impact negatively? What were key factors for why cooperation impacted negatively? How can these issues be resolved in the future?

2a. Did the TBCA(s) you were/are engaged in ever experience violent conflict?

- Yes
- No

2b. Was this violent conflict directly related to:

- The TBCA
- A broader conflict (e.g., war)

If you selected "broader conflict" in Question 2b above, please describe the circumstances or nature of that conflict here:

2c. Did transboundary cooperation help to transform the conflict?

- Yes
- No

2d. Please describe your experience of how transboundary cooperation did or did not help to transform conflict.

If you selected YES, how or in what ways did transboundary cooperation help to transform the conflict? What factors were most critical in supporting conflict transformation? If you selected NO, why did transboundary cooperation not help to transform the conflict? What mechanisms could be put in place to change that?

3a. Do the legal agreements play a role in how transboundary cooperation can contribute to peace?

- Yes, definitely
- Yes, somewhat
- No, not really
- Not at all

3b. Please explain your answer to 3a in greater detail below. If the legal agreements played a role, how? If they did not help contribute to peace, why not? What factors were most important to this contribution (positive or negative)?

3c. Which aspects of the legal instruments are/were most effective in preventing or resolving conflicts, and in supporting peace? Please check all that apply.

- Stipulate clear shared/common values and guiding principles
- Stipulate clear areas of cooperation and specific joint or transboundary activities

- Include all parties who are salient to effective transboundary cooperation
- Provide mechanisms and processes for non-violent dispute/conflict resolution
- Provide mechanisms for financing joint/transboundary activities and cooperation
- Provide mechanisms and processes for cooperating with other partners to support transboundary activities and cooperation
- Provide mechanisms for information, knowledge and experience sharing
- Provide mechanisms and processes for environmental peacebuilding
- Other (please describe): _____

3d. Of the legal mechanisms most effective in preventing or resolving conflicts, and in supporting peace that you selected in Question 3c, please rank the top 3 below.

	Most significant factor	Second-most significant factor	Third-most significant factor
Stipulate clear shared/common values and guiding principles	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stipulate clear areas of cooperation and specific joint or transboundary activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Include all parties who are salient to effective transboundary cooperation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Provide mechanisms and processes for non-violent dispute/conflict resolution	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Provide mechanisms for financing joint/transboundary activities and cooperation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Provide mechanisms and processes for cooperating with other partners to support transboundary activities and cooperation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Provide mechanisms for information, knowledge and experience sharing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Provide mechanisms and processes for environmental peacebuilding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (please describe): _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4a. If no legal instruments exist(ed), what alternative mechanisms do you feel are most important to supporting peace in and around a TBCA?

Please rank each of the following options with Choice 1 being the most significant factor.

	Most significant factor	Second-most significant factor	Third-most significant factor	Fourth-most significant factor	Fifth-most significant factor	Sixth-most significant factor
Good relations amongst	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

protected area managers	<input type="radio"/>					
Partnership and support from NGOs	<input type="radio"/>					
Support of local communities	<input type="radio"/>					
Informal support from government	<input type="radio"/>					
Presence of peace officers (domestic or international)	<input type="radio"/>					
Informal customary practices or traditional systems	<input type="radio"/>					

4b. When no legal instruments exist, what other mechanisms do you feel are important to supporting peace in and around a TBCA (please describe)?

4c. Where no legal instruments exist, do you believe that legal instruments can make a positive difference for peace efforts in and around a TBCA?

- Yes, definitely
- Yes, maybe
- No, not really
- Not at all

4d. How would you improve TBCA legal instruments or their use and implementation to better support peace in and around a TBCA?

Please read all of the options below and select all that apply.

- Stipulate clear shared/common values and guiding principles
- Stipulate clear areas of cooperation and specific joint or transboundary activities
- Include all parties who are salient to effective transboundary cooperation
- Provide mechanisms and processes for non-violent dispute/conflict resolution
- Provide mechanisms for financing joint/transboundary activities and cooperation
- Provide mechanisms and processes for cooperating with other partners to support transboundary activities and cooperation
- Provide mechanisms for information, knowledge and experience sharing
- Provide mechanisms and processes for environmental peacebuilding
- Other (please describe): _____

4e. Of the options listed in question 4d, which two do you think are most important for TBCA legal instruments in better supporting peace in and around a TBCA?

Most important

Second-most important

Thank you for your participation in this Survey on Transboundary Conservation Areas, Law and Peace!

Are there any additional insights or experiences that you would like to share regarding the relationship between TBCA(s), law/legal instruments, and peace or conflict?

Your input, experience and responses are highly valued. If you would like to discuss these topics or issues further, please feel free to contact the Researchers by email at:

[REDACTED] or provide your contact information below: