

KEYNOTE ADDRESS

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Integrated Natural Resource Management

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INTEGRATED NATURAL RESOURCE MANAGEMENT

Trying to find a definition for Integrated Natural Resource Management reminds me of the definition of a bachelor, as someone who comes to work from a different direction every morning.

Certainly, integrated resource management involves a considerable number of land and water users, each with their own needs and priorities. In addition to every other interest group, you who are involved in the extraction of minerals, fossil fuels, aggregates, etc., and the subsequent reclamation, have a significant role to play.

Integrated Natural Resource Management is a difficult and misunderstood art, involving understanding of the land - water ecosystem and a great deal of patience and interdisciplinary compromise, all moving in a wavy path toward more informed attention to interactions between the land and human activities.

Particularly in B.C., with its biogeoclimatic diversity, a great complexity of land use demands must be accommodated. These include, among many others:

Residential - whether single family or high density development in both rural and urban areas;

Transportations - namely highway alignments, railway location or corridors to alternate use areas;

Wildlife - increasingly must compete for key winter habitat, and is most often a loser-user in any economic trade-off;

Rural life-style pursuits - whether recreational small-holdings, hobby farms or rural residential, lakeside cottaging;

Community Watersheds - recognizing that our water supply areas must often be single-use oriented or near to it, to provide quality-quantity combinations acceptable from a health and demand point of view;

Forestry - those pursuits that provide for long-range wood production and its economic infrastructure;

Fisheries - concern, particularly with the anadromous fishes, that spawning habitats must be protected from the impact of other users of land and water;

Industrial - the pressure to manicure the landscape to whatever degree to provide opportunity to pursue the local tax base;

Agriculture - not only must it compete with other potential users of the land base but it also has conflicts within, such as the nursery trades at odds with the pork producers;

Mining - due to you people in the industry and government and with the small area of land involved as we see on T.V. - there obviously should be no land use or integration problems?;

Energy - whether flooding agricultural valleys or taking productive forest lands for transmission corridors, the result is conflict;

Recreational - intensive and extensive uses have various integration capabilities with other users;

- and the list goes on.

The question is, on a practical day-to-day basis, how do we feel with the competitors for that scarce resource "land" and how do we "integrate natural resource management"?

INTEGRATED NATURAL RESOURCE MANAGEMENT - WHAT IS IT?

Most of us support the philosophy of Integrated Natural Resource Management. Unfortunately, in practice, support only lasts as long as the land and its use is not affected or, in government, their agencies' interests are paramount and others can fit in wherever possible, if they don't interfere with the prime use thrust.

Compromises must be more than "have to" situations; "lip service" to integrated management is not good enough. Part of the problem is that most of us are trained in specific disciplines, with little opportunity for cross-disciplinary education. Then we are turned loose as resource managers with a specific piece of most often, single purpose legislation or single purpose company objectives and are told to make decisions on a well rounded, integrated basis. It's not possible - not without a great deal of practice.

Another part of the problem is that we can never really be sure we all mean the same thing when we talk of Integrated Natural Resource Management or, as in the following example, the term, multiple use. In a presentation to the Canadian Institute of Forestry Annual Meeting in Jasper, October, 1979, K.S. King, Director - General, International Council for Research in Agro-Forestry stated:

"It used to be strongly argued (and there is still some validity in the argument for some places and for some types of combination) that multiple-use forestry is the answer to the conflicting demands for forest land. It is now recognized, however, that although it is possible to optimize the production of various packages of forest goods and services, the maximization of all the individual, single, goods and services which emanate from a forest cannot be attained. There has to be a trade-off. Use priorities have to be established.

In the multiple-use package, there has to be a dominant use."

Thus, "poof" goes the long advertised U.S. Forest Service multiple-use motto, in real terms. I agree with K.S. King that there must be a dominant user. In my opinion, this is why I have always felt integrated resource management is the more acceptable term, implying, I hope, compromise and understanding of all managers and users.

For true integration we must weigh the environmental aspects of natural resource decision making with the economic ones. John Fraser, outgoing federal Minister of Environment, capsulized this well in response to a question reported in the January - March, '80 issue of *Nature Canada*.

The question was: "To what extent is our environmental quality dependent on our population and rate of economic development?"

Mr. Fraser replied:

"Well, I see environment as an economic issue. If you ignore the environmental consequences of short-term economic developments you just pay a huge cost later. I've always said you've got to put the environmental considerations at the front end of the decision making process. I think it's fundamentally sound economics."

In my opinion, we miss this basic principle in many of our natural resource decisions. Eventually, unless we correct ourselves, we will be in a position of having no choice but to proceed on straight economic grounds. With the international historical legacy of littered ruins and battered landscapes left by former civilizations, you'd think we would know better.

INTEGRATED NATURAL RESOURCE MANAGEMENT - ARE WE PRACTISING IT?

No, unfortunately we are not. In many cases, Integrated Natural Resource Management has become synonymous with overregulation, slowed economic development, etc. Granted, any form of land use planning or management integration, whether urban or rural oriented, means a certain loss of personal, company, or agency freedom; but, hopefully, this is compensated for by a greater good for society as a whole. Undoubtedly, on occasion, we do get carried away with controls, especially when we fail to coordinate them with existing authorities, and we thus create bureaucratic monsters that alienate the public they are designed to serve.

There is the experience of the gentleman who owned a 40-acre parcel of land near the estuary of a major river on Vancouver Island. He wished to subdivide this parcel into two 20-acre lots along a paved access easement granted in 1940 to his neighbour. He discovered that all of the following agencies and their responsible legislation would have to be involved:

1. Municipal zoning was agricultural with a 30-acre minimum lot size, which meant he had to consider an application for rezoning.
2. Regional District regulations and by-laws had to be complied with.
3. As the land was in an Agricultural Land Reserve he was subject to the Agricultural Land Commission Act; consequently he would need to submit an application under that legislation.
4. Ministry of Highways would require access to lands beyond, as well as access to the river.
5. Most of the property was on a floodplain, therefore Water Resources regulations would also apply.

6. Public Health were concerned about effluent disposal due to high water tables.
7. The adjacent river was navigable water and under Federal jurisdiction, therefore he had to consider that regulation.
8. The river was a salmon spawning stream and therefore subject to the Environment Canada's Fisheries Act.
9. National Harbour Board's legislation had some influence, because of marine frontage.
10. A historical trail, unidentified but recorded on the property title, traversed the property.
11. Finally, there were Land Registry Act problems, as the marine foreshore property boundary had not been accurately identified.

This was all very frustrating to the individual, to say the least. On the other side, line agencies of government, when confronted with all these referrals and forced to answer to political criticism of time spent on such attempts at integrated natural resource management, too often revert to single use cocoons, forgetting the other users, except when open confrontation necessitates attention to their presence.

As a solution to this problem, some propose grouping all these interests under one regulatory umbrella. Unfortunately, this "one stop shopping centre" approach to all regulatory approvals leaves much to be desired.

THE FUTURE

Where do we go from here? At the risk of oversimplifying the situation, I will leave you with a few of my basic directions:

1. Government legislation affects almost every facet of natural resource management. Much is at stake for all involved: the quality of life for some, life itself for others. Someone, and that means Government, must take the responsibility for the shape and tone of laws and regulations that encourage integration including, what is encompassed, what is expected, what is prescribed and what is tolerable.
2. Integration efforts must recognize provincial diversity, and I feel that decentralization of natural resource agencies provincially is a step forward. However, legislation, regulation and staffing commitments must follow if it is going to be a significant integrative force. Recently, there have been indications that single-use oriented decision making is moving to the fore front again.
3. We are still in need of an overall provincial land use strategy. What are the provincial commitments to food production, wood production, recreational resources, wildlife populations, and mining? The usable land resource is limited and a provincial policy is still lacking.
4. Some of the extant integrating mechanisms need encouragement and further support:
 - a. The new energy policy refers to an improved public involvement process - it should be encouraged.
 - b. Coordinated Resource Management Plan process on rangelands needs careful examination and could be viewed as a base for other coordinated efforts.
 - c. The E.L.U.C. Secretariat needs support as an integration mechanism. There is also a need for regional coordination support staff.

- d. Guidelines, such as the Coal Development Guidelines, need amendment to regulation status, to ensure that integration is undertaken.

- e. There is some evidence that we are working toward integrated water basin planning - it should be encouraged.

Fundamental, of course, is the need for integrated resource management principles and policies. Every land or resource use that exists is in some way, directly or indirectly, associated with another use. And, hand-in-hand with these principles and policies there must be guidelines, regulations and fair-to-all enforcement. Like Integrated Natural Resource Management itself, this is a package deal and none can exist effectively without the other. To quote, from an unknown source:

"The society which scorns excellence in plumbing because plumbing is a humble activity and tolerates shoddiness in philosophy because it is an exalted activity will have neither good plumbing nor good philosophy. Neither its pipes nor its theories will hold water."