Co-ordinated Resource Plans: Room for Improvement?

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Co-ordinated Resource Planning is a fairly new tool in the hands of land managers concerned for multiple use of renewable resources, although the underlying concepts are far from novel. As pressures on the landbase grow steadily, the needs to develop a multiple-use orientation in our land-use philosophy strengthen, and so any device which mitigates the pressures and enhances or reinforces the philosophy is to be welcomed. However, this welcome should not preclude constructive criticism which could lead to either an improved device or to better use of it, particularly when that device is still being developed.

Co-ordinated Resource Planning was introduced into British Columbia in the mid-seventies as government responded to the need to resolve land-use conflicts on the Crown rangelands of the Province, particularly where cattle-grazing, recreational uses, timber production, and wildlife management impinge upon one another. In practice this means largely the southern interior though multiple use practise is by no means confined to this region.

Purposes of Co-ordinate Resource Planning

The co-ordinated resource planning concept was developed for rangelands in Oregon where the possibilities for integrated multiple use or for conflict are similar to those of B.C. These possibilities arise from the open nature of much of the forest, which allows grasses and other forage plants to grow under the tree canopy, and from the juxtapositioning of alpine meadows, forests, grasslands, and water, which facilitates commercial exploitation and wildlife management, as well as encouraging recreational use. The land manager, then, has to balance and integrate all these possibilities to make the best possible use of our one continuing resource, the land-base itself. As applied to B.C., the concept calls initially for a lengthy and free-wheeling discussion amongst actual and potential users of the Crown lands in which differences are exposed, examined in detail, and finally resolved into a comprehensive management plan, a plan to foster integrated multiple use. The plan for each area is developed and accepted by local resource users. It will be, of course, to some extent a compromise based on the presumption that, in these areas, the net benefit to society from the sum of a number of partial or restricted uses is greater than exclusive unrestricted use for only one product. With increasing regional autonomy, plans and planning can develop in ways appropriate to regional needs and possibilities.

The plan sets out an agreed program for such operations as the grazing intensities and rotations to be applied—how many animals can graze where and at what times of the year; where fences are to be erected; what fire suppression measures will be attempted; what thinning will be implemented in tree stands; where watering points could be developed; how road or trail building will be regulated to avoid or minimize soil erosion; what habitat manipulation to foster wildlife is needed, and so on, covering the whole gamut of renewable resource management activities appropriate in the plan's area. Funding for assistance in the planning and for approved works and treatments is provided through the Agricultural and Rural Development Subsidiary Agreement (ARDSA).

E. William Anderson of Oregon, one of the originators of co-ordinated resource planning, set up a sequence of planning activities:

Land use planning: formulation of guidelines for use over large areas (e.g. province or state); provision of a conceptual framework.

Resource management planning: specific to a particular area. Decisions by landowners and principal resource users.

Project planning: very specific; involves actual users of the land; may stand alone or along with others as an addendum to a resource management plan.

In B.C., co-ordinated resource plans fall between the two latter categories, incorporating some elements of each but tending towards project planning. By way of an interesting contrast, co-ordinated resource planning in adjacent Washington State has been taken to mean the rationalization and integration of the use made by any one rancher of his access to different parcels of land under a number of different jurisdictions. It does not seek to integrate the needs of several users on the same tract of ground.

Application in British Columbia

When first applied in B.C., in the East Kootenay region where conflicts between cattle and wildlife were conspicuously severe, co-ordinated planning was hailed with something approaching euphoria. Certainly, it was a major and most welcome advance along the road to multiple use and, like many initial steps, was probably the most difficult. As one early participant is aprocryphally quoted, "... now we are talking to each other, not shouting at one another!" This is a promising and commendable start and over 80 plans involving some 2,000,000 ha (5 million acres) now are in being. Can this encouraging beginning be improved?

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Editor's Note: Co-ordinated Resource Planning of British Columbia and Co-ordinated Resource Management Planning of the United States—essentially the same—are gaining in importance, popularity, and practical application. This new approach was discussed several times during the 1980 SRM annual meeting in San Diego.

It is fitting to publish an article now from Canada on this subject since several have already appeared from the United States.

Perhaps this approach is new in Canada—but it is interesting that presently, administrative changes are going on to assure that environmental assessment will be considered to satisfy the critics. This angle is discussed in the section on Inadequacy of the Data Base and Objectives just prior to the section on Environmental Evaluation and Follow-up.

Needs for a Planning Philosophy

Looking back to Anderson's three levels of planning, it is immediately apparent that level one is missing from the B.C. scene. No overall land-use policy for the province has yet been articulated, nor is there a clearly defined and explicit philosophy of land-use. The 1977 Agricultural Land Act goes part of the way to fill this vacuum but it is restricted to land of relatively high agricultural capability; and the Agricultural Ministry has a stated aim of 65% self-sufficiency in foodstuffs for the Province without relating this to other resource uses. The new Forest Act (1978) requires the Chief Forester to assess the Province's forest estate for its potential to grow wood, provide recreational opportunities, produce forage, and to accommodate other forest uses. The Act also empowers him to identify lands which will make their greatest contribution to the Province's well-being by growing tree crops in perpetuity but it gives no guidance on what is the minimum area needed for tree crops nor on evaluating "trade-offs" between fibre production and other uses.

The preliminary Wildlife Management Plan distributed by the Ministry of Environment similarly treats wildlife in a conceptual vacuum without discussion of possible interactions or conflicts with other uses of the land. There is an unfortunate multiplicity of government agencies all concerned with the land base and with land as a resource, and all in some measure competing for hegemony; there is a lack of coincidence amongst the Forest District boundaries, the Agricultural Reporting Regions, and the Wildlife Administrative Regions.

Thus, a conceptual framework is lacking, and so plans can develop locally in an overall policy vacuum. There is no general provincial guide to assist in determining, for example, how many deer should be maintained and at what diminution of cattle forage; again, to what extent must logging be constrained by aesthetic considerations; or, on the large scale, should a fertile valley and a fish spawning ground disappear under a hydro-electric reservoir to produce energy? Decisions on such issues are too often piecemeal. Within this conceptual framework, of course, one must not lose sight of the physical and financial capabilities and needs of the resource users. Involvement of ranchers, loggers, and the like in the planning process ensures that their interests will not be neglected or over-ridden. There appears to be a tendency to attempt still to maximize each product, with inadequate recognition that not all resource uses are wholly compatible and that some, such as conventional logging and recreation, are quite the opposite.

A Resource Agency Steering Committee of senior officials from the Province's four resource ministries: Agriculture, Environment, Forests, and Lands, Parks and Housing, has a watching brief over the planning process. It is catalytic rather than authoritative, concerned with smoothing administrative procedures more than of engendering planning philosophies.

Regional Resource Management Committees (RRMC) operate at the regional level, as their name implies. They are primarily an informational exchange forum for Regional Managers in resource and related Ministries. However, they name composite Task Groups to work on area development plans on a priority basis. The R.R.M.C.'s are directly responsible to the Environment and Land Use (E.L.U.) Technical Committee and the latter does refer local land and resource issues to the respective R.R.M.C. for attention. The E.L.U.C. Secretariat is a mix of resource specialists who carry out assignments of a kind which cross Ministry jurisdictions; but the Resource Analysis Branch, formerly attached to Secretariat, is now in Ministry of the Environment.

Increasing regional autonomy increases the need for an overall guiding philosophy. The most far-reaching weakness at present, then, is not so much a flaw in co-ordinated resource planning itself but in the system within which it operates. There does not yet seem to be the political will to tangle with this very difficult problem.

It is, in essence, asking the people of the Province to apportion relative values and priorities to all of the renewable natural resources. Perhaps this is asking too much?

Inadequacy of the Data Base and Objectives

What of the plans themselves? One immediately obvious weakness is the paucity of well-based data. If one is to decide, say, between fall grazing for cattle and providing winter forage for a deer herd, it is necessary to know the forage productivity and carrying capacity of the specific area in question, as well as the food requirements of animals using the area. Only in a general way are these kinds of data available although the situation is slowly improving as field work progresses. Similarly, we are not yet in a position to predict the precise response of an extensive and variable range unit to the application of a detailed grazing management scheme. We know the likely direction of change but, again, specific local data are lacking. This absence of hard and fast information becomes apparent time and again. It must be recognised, of course, that planning has to go forward and cannot wait indefinitely for completion of detailed inventories; however, an adequate data-base is lacking.

At least partly because of this lack of data, the setting of objectives too tends to be generalised and imprecise. It is a laudable aim "to increase the yield of wood by stocking control," "to provide recreational opportunities consistent with objective 1," or "to control the water supply...for irrigtion and conservation use..." but, are these clearly defined objectives for planning management in a specific area? The usual first objective of all plans runs something like this: "to manage the various plant communities for the purpose of improving the quality and quantity of (1) forage, (2) wildlife habitat, (3) anti-erosion cover, (4) wood products, (5) aesthetics, and (6) outdoor education and recreation." All this is right, proper, and necessary, but it belongs in an overall set of guidelines not in a particular management plan.

Steps are now being taken to carry out an economic assessment of expenditures proposed in the plans. This was not done in the earlier years but lately the federal agency which provides the bulk of the funding, Dept. of Regional and Economic Expansion (D.R.E.E.) through the Agricultural and Rural Development Act (A.R.D.A.), has established an office to look at expenditures and the anticipated rate of return for range improvement projects. Critical evaluation will, however, be hampered by lack of data and the absence of a framework within which a benefit/cost analysis can be carried out. Will second, third, or higher orders of interaction be examined, or only the primary one?

Environmental Evaluation and Follow-up

While economic evaluation is now developing, environmental evaluation is still absent although, recently, measures to correct this have been set in train. There is no

provision for formal progress evaluation of a plan after a few years of implementation, and periodic range inventories will provide only part of the answer at best. True, there are periodic assessments, annual or biennial reviews, but these lack specificity and are hampered by lack of data and the absence of a time frame for implementation of a plan, which makes it difficult for a review team to assess progress towards objectives. In any case, they are carried out by members of the planning team. It is asking for a superhuman exercise in objectivity to invite one group to prepare, implement, and then to evaluate without prejudice the success of any plan—whether it be a co-ordinated resource plan, an urban renewal scheme, or even something as remote from renewable resources as an exercise in military tactics. There could be a small external review team, technically expert but impartial insofar as they had no part in preparing or carrying out a plan, which would review each plan, comment on its successes or weaknesses, and suggest modifications. It has been argued that only those with local familiarity can prepare or review any plan, and while there is some merit in this point of view, the disadvantages—bias or partiality from being too close to the plan from its inception; failure to place the plan in its Provincial context; inaccurate assumptions based on untested familiarity—far outweigh any benefits. Even with local familiarity there may be oversight regarding indications of progress made or opportunity missed.

Another area of concern is inadequate follow-up to steps implemented in the field. A recent extreme example is painfully obvious near Kamloops. In a plan area there, certain localities were set aside for all-terrain vehicles or trailbike use and others were restricted. Signposts were erected to indicate these areas. For only a short time the signs were respected but disregard grew and now the signposts have been removed or cut down—no control was achieved nor, at the time of writing, had the markers been replaced. Without continued supervision and management, planning is a wasted effort. It may well be that personnel are too few in number, or jurisdictional authority is too ill-defined to facilitate the supervision needed; whatever the reason, a remedy is called for.

What Should be in a Plan

Another easily remedied deficiency is the use of a standard form in preparing plans. There should certainly be a list of topics to be addressed but not all will be equally important in all regions—recreational use is of more concern in accessible areas near towns than in the remote north, for example, and wildlife concerns are more pressing in well-stocked areas, such as the East Kootenays, than where the wild animal population is small. There is an understandably real but unfortunate tendency for planning committees to feel constrained to restrict comments to the space allowed on the standardized form, and this can lead to undue brevity or inadequate explanation. It might be preferable to provide only a check list of headings to be dealt with, or to be omitted if inappropriate, and to put no boundaries, real or imaginary, on the subsequent presentation.

The plans lack background information. To cite one example amongst many, the plan for St. Mary's Prairie gives no demographic or ecological outline of the area, no indication of the relationship to adjoining areas, and no summary of current production or use statistics. It can, of course, be argued that plans are, in a sense, internal documents in which background material is superfluous, being well-known to the planners. However, the plans concern the use and allocation of publicly owned lands and as such should be accessible and comprehensible to the "owners." Without a brief geographical and historical summary and an outline of the local environment and plant communities, plans have no context and little meaning to outside readers. While it is true that plans are developed for the immediate interests of the resource users they should, ultimately, contribute to general habitat improvement and wise resource utilization for the whole community. Subsequent reviews would be facilitated, too, if the local demography, topography and so on were sketched out when the plan was first written.

Heady and Bartoleme reported in some depth on a range rehabilitation program in southeastern Oregon and, though their report was not a co-ordinated resource plan, it does illustrate the kind of environmental and demographic context and background which could usefully be outlined in a plan.

Co-ordination with Other Planners

Another small point which warrants attention is insufficient correlation between co-ordinated resource plans and the B.C. Forest Service's resource folios, which form the background for timber management and harvesting, though, again, things are improving, under the direction of Chief Forester Bill Young. As planning extends, we might find one area being the subject of two separate plans with possibly conflicting aims, with obvious resulting confusion and duplication of effort. No instances of conflicts have yet arisen; can steps be taken now to eliminate the possibility before it arises? Since water resources are of growing concern, it would be advantageous if plan area boundaries coincided with watersheds as this would foster planning and management of ecologically whole units.

With co-ordinated resource planning now in effect, we are "on to a good thing." But, the good can be made better yet and that should be our next step. We need to provide a framework within which plans can be prepared, develop the necessary data base, foster economic and operational reviews, and make provision for adequate implementation. The subsequent step will be to more comprehensive resource planning and to more specific project plans—but that will come later.