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**ECOLOGICAL AREAS DECISION-MAKING
PROCESSES AND CASE STUDIES**

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INTRODUCTION

Development of Ecological Area/Reserve programs requires that a process be identified for their establishment. Currently a variety of processes exist across Canada. These developed more or less in isolation with each meeting the needs of the jurisdiction responsible for it.

In February 1982 the Canadian Council on Ecological Areas identified the need to disseminate information on successful and unsuccessful attempts to establish Ecological Areas/Reserves. As a result a task group lead by Manitoba and assisted by New Brunswick and the Northwest Territories prepared this report.

METHOD

The task group was asked to document case studies. This would, however, be more valuable if viewed against the background of the appropriate decision making/establishment process. Thus descriptions of the pertinent processes are included in this report.

The following material was requested from program co-ordinators of Manitoba, New Brunswick, the Northwest Territories, British Columbia and Canada:

1. A schematic diagram of the normal decision making/establishment process.
2. Identification of:
 - a) one successful, typical proposal
 - b) one unsuccessful, typical proposal
3. A description of the successful proposal's progress identifying problems encountered and describing how they were overcome.
4. A description of the unsuccessful proposal's progress identifying:
 - a) problems encountered with a description of how they were overcome
 - b) the major problem(s) which caused the proposal to be rejected or shelved and attempts made to overcome the problem(s)

DECISION MAKING / ESTABLISHING PROCESS

Diagrams showing decision making/establishment processes are shown for British Columbia, Canada, Manitoba and New Brunswick. One or more reserves have gone through each of the provincial processes; however, the Federal Government's (Canada) process has not been fully tested to date.

BRITISH COLUMBIA

In British Columbia, (*Figure 1*), proposed areas (proposals) may be identified by the general public, government employees or the Ecological Reserves Unit of BC's Department of Lands, Housing and Parks. Proposals are screened by the Ecological Reserves Unit and may be rejected because of conflicts with resource users, low ecological values, disturbances, inappropriate tenure and related reasons.

Proposals considered appropriate for further consideration are field checked and more detailed information is gathered. Subsequently a formal proposal is made to the Annual General Meeting of the Ecological Reserves Committee. Upon approval of the proposal by the Committee an information sheet is prepared by the Ecological Reserves Unit and sent to the Regional Land Manager within whose region the proposal is located. This marks the beginning of the problem identification stage.

The Regional Land Manager forwards the proposal to the appropriate District Managers and to a wide variety of governments and agencies. These include provincial government departments, federal government departments, local municipalities, Indian bands, Crown corporations and private business. This widespread referral completes the problem identification stage. Efforts are then made to resolve problems through boundary changes, compromise agreements, etc. When problem solving efforts have been successfully completed, the proposal moves through the administrative hierarchy to Cabinet to establish ecological reserve status for the proposal by Order-in-Council. If problem solving efforts are not successful the proposal is rejected.

CANADA

The process used by Canada (*Figure 2*) accomplishes the same ends but is quite different from the BC process. It should be noted that this process is used almost exclusively in the northern territories where Canada exercises a number of powers which are the responsibility of provincial governments in the more southerly parts of the country.

Candidate ecological areas (proposals) were identified for Canada during the International Biological Program (IBP). The IBP panels (9 & 10) responsible for the program initiate the decision-making process by submitting proposals to

Figure 1. BRITISH COLUMBIA: DECISION-MAKING/ESTABLISHMENT PROCESS

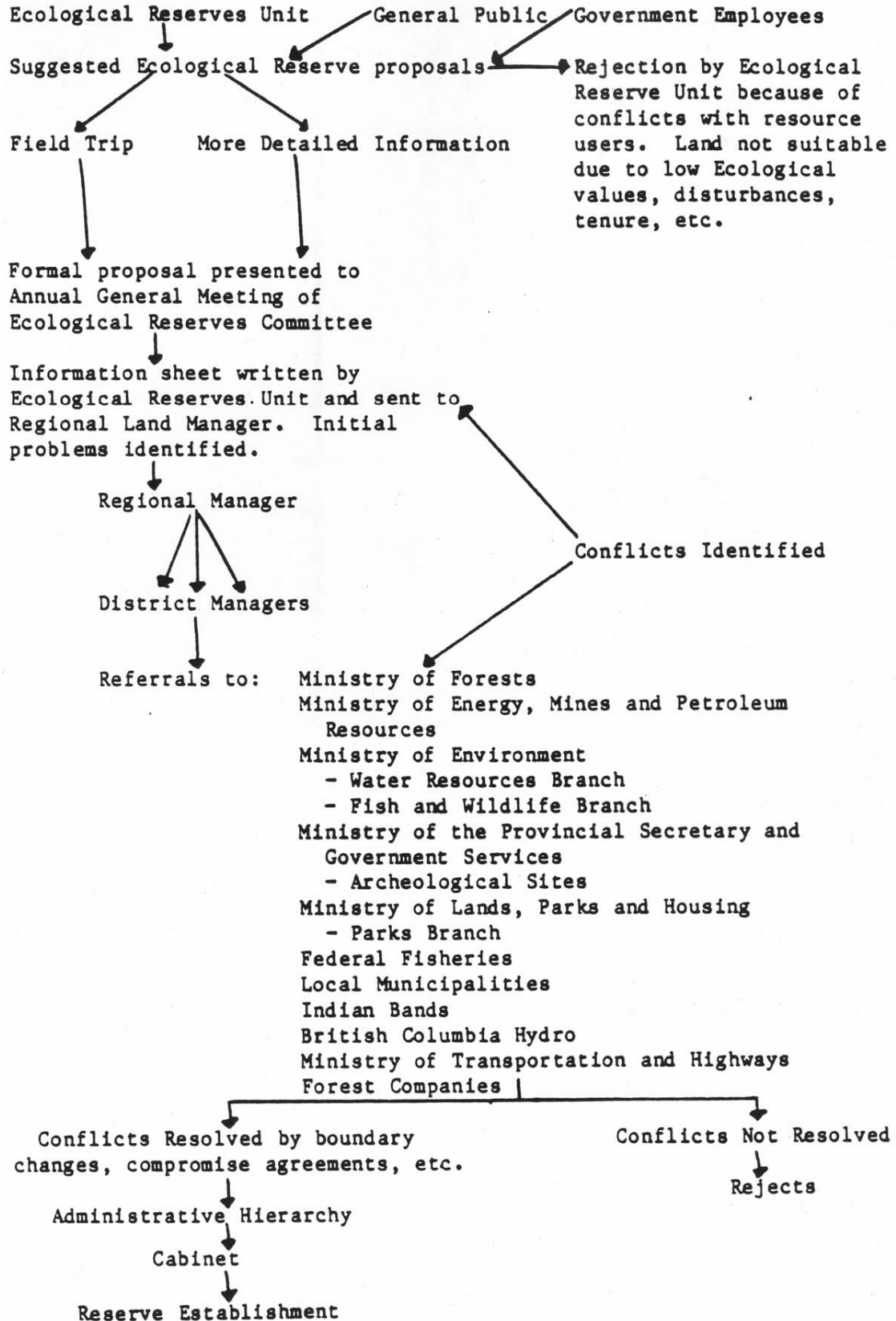
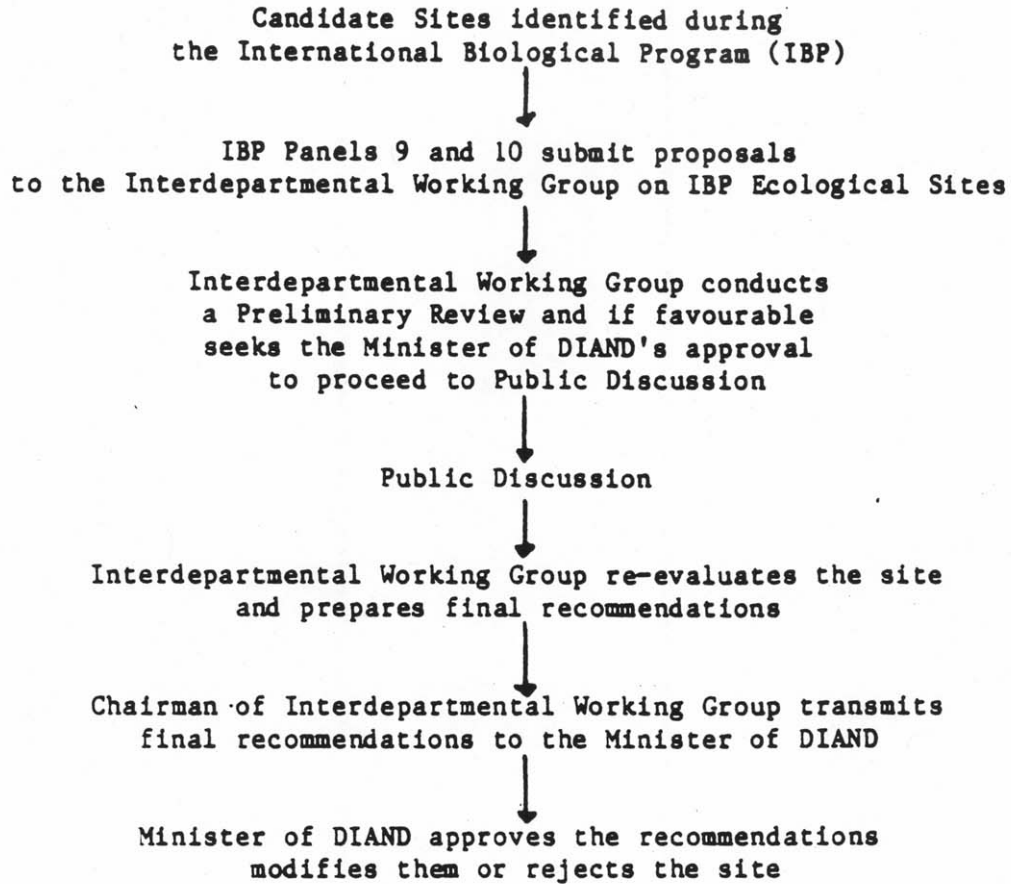


Figure 2. CANADA: DECISION-MAKING/ESTABLISHMENT PROCESS



NOTE: This is the process utilized to Spring 1982. It may be subject to revision in the context of the emerging comprehensive conservation policy and the new northern land use planning policy.

the Interdepartmental Working Group on IBP Ecological Sites. This group conducts a preliminary review of each proposal. If the review is favourable the approval of the Minister of Indian Affairs and Northern Development is sought in order that the process can continue on to public discussion. If the review is not favourable or if Ministerial approval is not forthcoming the process stops.

Subsequent to public discussion the Inter-departmental Working Group re-evaluates the proposal and prepares its final recommendations. These are forwarded to the Minister of Indian Affairs and Northern Development who may approve, modify or reject the proposal.

Canada's process is untested to date hence modifications may occur. These are most likely to be related to the emerging comprehensive conservation policy and to the northern land use planning policy.

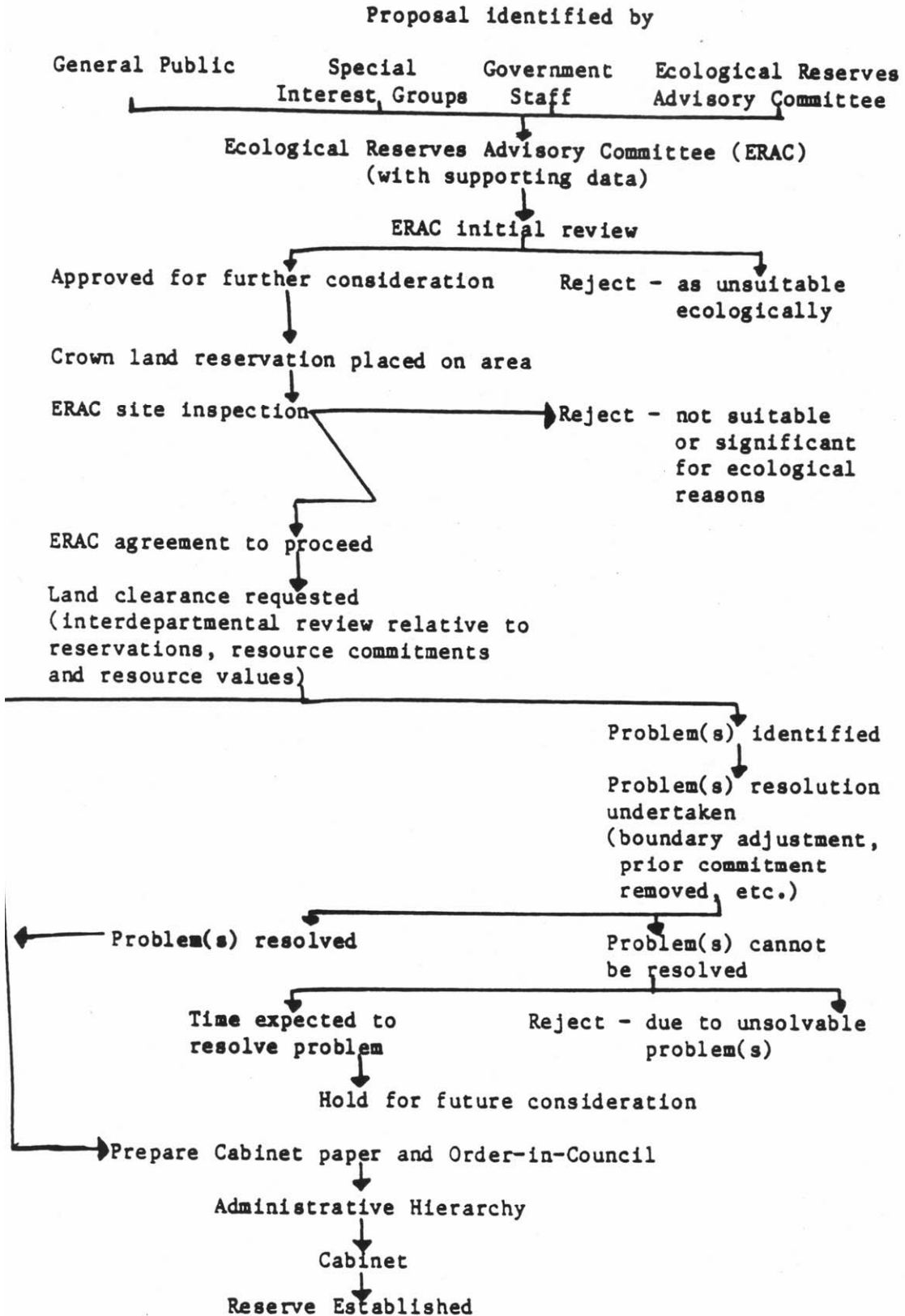
MANITOBA

Manitoba's (*Figure 3*) process allows for the initiation of proposals by any person or group. Hence the general public, special interest groups, government staff and the Ecological Reserves Advisory committee may all initiate proposals. Once a proposal is initiated available information is gathered and reviewed. To a limited extent additional data is gathered, if necessary, by the Ecological Reserves Advisory Committee (ERAC). This constitutes an initial review during which the proposal is either rejected as being unsuitable ecologically or approved for further consideration. Approval leads to placing a Crown land reservation, for temporary protection, on the proposal area and to field inspection. A second review of the proposal by ERAC is based on results of the field inspection. This proposal is then either rejected for ecologically significant reasons or approved as worthy of reserve status by ERAC with the proviso that no major problems are identified in subsequent stages of the decision-making/ establishment process.

Following ERAC approval an interdepartmental review is undertaken to determine conflicting land uses, resource commitments and resource values. This is the major problem identification stage. If problems are identified efforts are made to solve them by adjusting boundaries, removing prior commitments, etc. Failure to resolve one or more problems causes rejection of the proposal unless time is expected to eliminate the problem through expiration of a commitment. In this case the proposal is held on file for further consideration when the commitment has expired.

Proposals having no problems or for which problems have been resolved are forwarded through the administrative hierarchy for preparation of an Order-in-Council, Cabinet approval and establishment of reserve status.

Figure 3. MANITOBA DECISION-MAKING/ESTABLISHMENT PROCESS



NEW BRUNSWICK

New Brunswick (*Figure 4*) process starts with the identification of the province's ecosystems. The identification of prospective alternate and additional proposals for consideration then follows. Subsequently, priorities are set for proposals and selections made for consideration in the annual Ecological Reserves program. Selected proposals are field checked by the Environmental Council's Resource Committee, a management plan is prepared and a public meeting held to discuss establishment of the proposal as an ecological reserve. The end result of these steps, which have incorporated problem identification, is either rejection or qualified acceptance.

Proposals receiving qualified acceptance are recommended to the Minister of Natural Resources for establishment. The proposal area is then surveyed to establish its exact location and declared through Order-in-Council. Following establishment, the area having reserve status is re-inventoried on a periodic basis and research is encouraged on an ongoing basis.

CASE STUDIES

SUCCESSFUL

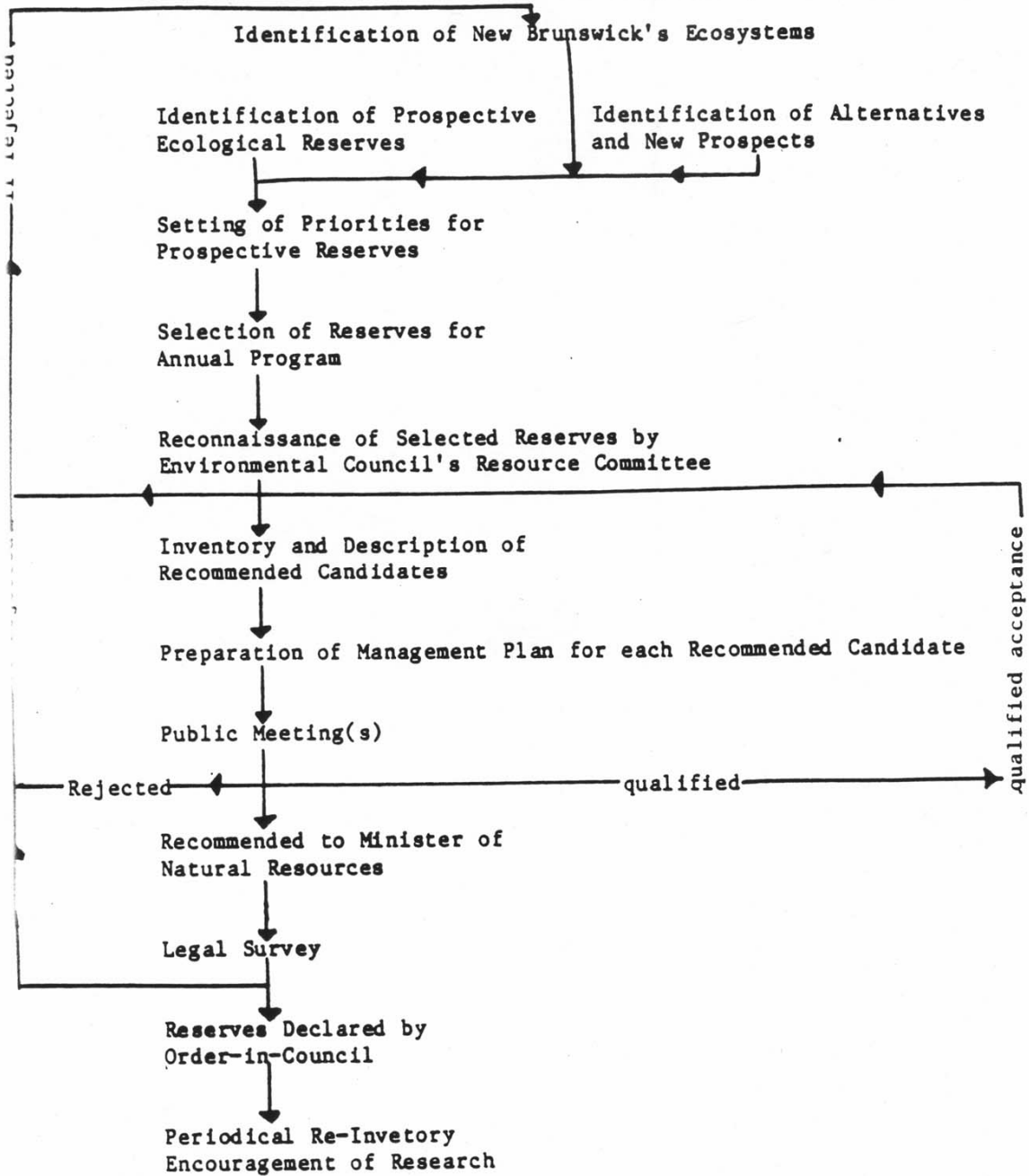
Doc English Bluff, British Columbia

The reserve is a limestone bluff area supporting rare flora and fauna. It was proposed by the Williams Lake Field Naturalists, the B.C. Ministry of Forests, a University of British Columbia professor and by the Ecological Reserves Unit.

A review of the site identified both a flooding reserve, to 475.5 m ASL, and an archaeological reserve on parts of the area. The archaeological reserve was not considered to present a problem according to the regional archaeologist hence could be disregarded in the decision-making process. The flooding reserve did constitute a problem which was resolved by placing the area boundary above 475.5 m.

A question of recreational use of the area was raised and resulted in rejection of the proposal by the Regional Resource Management Committee. This appeared to kill the proposal, however, the local naturalists presented a resolution to the Federation of British Columbia Naturalists who wrote the Minister of Environment, The Minister of Lands, Parks and Housing, who is responsible for Ecological Reserves, then agreed to review the proposal. At about the same time the local naturalists wrote the Regional Land Manager in support of the area indicating that they were advocating the reserve status for recreational reasons. The Regional Resource Management Committee then

Figure 4. NEW BRUNSWICK: DECISION MAKING/ESTABLISHMENT PROCESS



approved the proposal on condition that the boundaries be changed to eliminate all grazing land.

The final problem encountered was that the local MP, who was also a provincial government Minister, objected to Ecological Reserves in his constituency. He was contacted by the Williams Lake Field Naturalists who requested his support. The Order-in-Council was then prepared and passed to establish the reserve.

Wampum Red Pine, Manitoba

The area is a mature stand of red pine within Sandilands Provincial Forest in South-eastern Manitoba. It was recommended by the South-eastern Regional Director of the Department of Natural Resources.

Gravel is common in the vicinity hence the land clearance procedure required discussions with the Department of Mines and the Department of Highways. This resulted in an assessment of the site for gravel by the Department of Mines and an estimation of future gravel demands in the vicinity by the Department of Highways. The result of both activities resolved the gravel issue so that mineral rights were withdrawn from the area under consideration and the reserve was established.

Reindeer Island, Manitoba

Reindeer Island is located in the north basin of Lake Winnipeg. It is approximately 142 square kilometers in area and possesses a variety of ecosystems and land forms. The island is an IBP site and as such was recommended by the Ecological Reserves Advisory Committee.

Efforts to place a Crown land reservation on the island brought to light the only problem encountered in the establishment process. This problem related to a proposal that a commercial fishing station be located on the island. It was resolved by adjusting the boundaries of the proposal to exclude the proposed fishing station site and to establish a buffer between the fishing station site, its harbour and the main part of the island which now constitutes the reserve.

Glazier Lake Mixed Forest, New Brunswick

The area is located in north-eastern New Brunswick. It was inventoried as an IBP site and recommended on that basis.

The decision making process flowed smoothly and quickly including the public meeting. Support was received from both the local people and the local pulp and paper company. It is considered that the key to success was through preparation by the Ecological Reserves staff.

UNSUCCESSFUL

Browning Inlet, British Columbia

The proposed area included foreshore, backshore, tidal lands, and sub tidal lands around Browning Inlet and Grants Bay plus intervening forest lands. It was identified by the Ecological Reserves Unit.

An initial status check on the area showed that it included part of a Provincial Forest, a pulp lease and a possible archaeological site. The presence of a cabin and trail suggested recreational use of the area. The pulp lease holder objected to the proposed reserve status due to the loss of timber within the area and to access limitations relative to reserve status which would result in a timber loss outside the area.

A meeting was held to discuss and clarify the issues relevant to the proposal. These included recreational use of Grant's Bay, hunting restrictions proposed for Browning Inlet and restrictions on shellfish harvesting as well as the logging issues previously identified. Attempts were made by the Ecological Reserves Unit to re-locate a proposed road inland because of the road's impact on mud flats. These were unsuccessful.

The Ecological Reserves Unit then suggested eliminating Grants Bay from the proposal. Subsequently approvals were received from the Fish and Wildlife Branch, Marine Resources Branch and Federal Fisheries. However, local people sent a petition to the Ecological Reserves Unit opposing reserve status for the area. Forest interests remained negative and the Fish and Wildlife Branch withdrew its support because of the loss of local hunting opportunities. The widespread objections to the proposal caused it to be rejected.

Landry Lake, Manitoba

The area proposed included a small island in Landry Lake and an adjacent shore which supported ecosystems typical of the Saskatchewan River Delta in west central Manitoba. Landry Lake was an IBP site and as such was recommended by the Ecological Reserve Advisory Committee.

Land clearance procedures identified that the lake was commercially fished with a fish camp on the island and that road access was planned which would result in increased local recreation pressure. Attempts made to close the fishery and relocate the proposed road were unsuccessful.

An alternative location, having similar characteristics, was identified about 24 km to the southeast. The Landry Lake proposal was abandoned and the

process initiated on the alternative area. This process resulted in the establishment of Red Rock Lake Ecological Reserve.

Coastal Sphagnum Bay, New Brunswick

The proposed area is an offshore island dominated by sphagnum bog in the northeast corner of New Brunswick. Local residents are dependent upon the bog as a fresh water supply. It was recommended for reserve status through IBP.

The decision-making process was successfully completed to the public meeting stage at which time ownership problems were identified. These related to the local survey fabric which was such that ownership of the area could not be determined. A secondary problem, access for hunting, could have been resolved through the management plan.

As a result of the ownership problem the area was rejected and an alternate area 0.4 km south was identified for consideration.

SUMMARY

Decision-Making Process

The elements common to the decision making processes described earlier are shown in *Figure 5*. All processes start with the identification of a potential area. This is followed by an inventory and data gathering step which could result in rejection based on ecological or other considerations. The third step includes a land clearance procedure and/or public meetings. This is the major problem identification step. It is followed by a problem-solving step during which areas considered for reserve status which have unsolvable problems are rejected. Proposals without problems or for which problems have been solved proceed into and through the administrative hierarchy to the approval step by Order-in-Council or other appropriate vehicle.

Case Studies

Similarity of problems and solutions existed between the case studies provided. Problems related to previous commitments of the required land through alienation from the Crown by grant, sale or lease or through the establishment of Crown reserves. Solutions involved boundary adjustment or re-location of the area proposed for reserve status. Use of the boundary adjustment approach related to successful attempts to establish specific areas. Use of the relocation approach related to unsuccessful second attempts to protect the ecosystem of concern through establishment of an area at a different location.

Major people problems were documented from British Columbia. These were overcome in one case through countervailing people pressure. In another

case they had to be accepted and efforts to establish reserve status discontinued.

Figure 5. OVERVIEW OF DECISION-MAKING/ESTABLISHMENT PROCESS

