

GUIDELINES FOR LAND USE PLANNING



Ontario

Ministry of
Natural
Resources

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Foreword

The Ministry of Natural Resources programs include a wide variety of objectives ranging from resource production to outdoor recreation and preservation. To achieve these objectives very large areas of land and water are required.

The Ministry of Natural Resources is the official custodian and manager of Ontario's Crown land which covers some 87% of the Province. A major portion of the Ministry of Natural Resources objectives is achieved through the use of this land. Crown land is also required for many other government programs such as housing and transportation.

The Ministry of Natural Resources objectives are also achieved through the use of private land. In this case the Ministry seldom has direct control of land use but must achieve its objectives by influencing the use of land rather than by direct control.

As a result of all the foregoing conditions, the potential for land use conflicts and inefficiencies is very high. Therefore there is an urgent need for land use planning to reduce these problems.

The guidelines provided herein are to be used by those who are involved in the preparation of the Ministry of Natural Resources land use plans. The guidelines may also be of interest to others who are concerned with land use planning and the environment and who wish to examine the Ministry of Natural Resources approach to planning.

These guidelines have been specifically developed for the purpose of preparing Ministry of Natural Resources district land use plans and will be the basis for evaluating all such plans.

These guidelines will also be used as a general guide for all levels of land use planning of the Ministry.

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Introduction

This report outlines the Ministry of Natural Resources' approach to land¹ use planning. The Ministry's corporate planning system includes five subsystems:

1. policy planning, which answers the question of what is to be achieved and why;
2. land use planning, which answers the questions of generally where the Ministry of Natural Resources programs are to occur;
3. resource management planning, which answers the question of how a particular resource will be managed;
4. work program planning, which deals with funding, and timing for programs; and
5. work program evaluation, which answers the question of how well programs are completed.

These five subsystems are intricately linked together into an overall system designed to achieve Ministry of Natural Resources objectives. This system is described in a separate report so no further details will be given here except to explain the difference between resource management and land use planning.

Resource management deals primarily with one objective and use such as forestry. Land use planning on the other hand must recognize all the objectives of the Ministry and deal in a comprehensive way with all basic uses required to meet the objectives.

A further difference in the two kinds of planning is that land use planning leads to decisions about the general use of land, whereas resource management planning is much more specific. For example, a land use plan may indicate that a group of lakes is to be used for cottage development. The lake management plan would then indicate the specific location for the cottages.

Land use planning is a process which culminates in a decision regarding the intended use of land. A plan is therefore a commitment, or stated intent, about the use of land. The purpose of a land use plan is to coordinate the various Ministry programs, concerning the use of land, so that conflicts and inefficiencies are avoided and all objectives are met.

A Ministry of Natural Resources land use plan must set the stage and create a condition where the various Ministry programs can function harmoniously and effectively. Decisions must be made concerning which use or uses are assigned to each particular part of the planning area. From these decisions resource management can proceed.

It is important to understand that land use planning is not a replacement for resource management planning. The commitment to land use planning and the relation between it and resource management plans is summarized by an extract from the Deputy Minister's statement² of November, 1977: "Henceforth District Managers will be responsible for the preparation of local land use plans and for the integration of resource plans consistent with the land use plan."

The Ministry of Natural Resources is concerned with the use of Crown land and also with private land. On Crown land the Ministry can achieve its objectives by direct control of land use. However, for private land the Ministry must attempt to achieve its objectives through indirect control and influence.

¹ Where the term "land" is used in this report, it is intended to include both land and water.

² Statement by Dr. J.K. Reynolds, Deputy Minister, Ministry of Natural Resources, Management Improvement Plan 978-1980, November 24, 1977.

Therefore a suitable definition of a Ministry of Natural Resources land use plan would be: a document which indicates how the Ministry plans to use Crown land and how the Ministry intends to influence the use of private land in order to achieve its objectives.

For Crown land, the Ministry must not only identify the land and water requirements for its own programs but for all other government programs as well. This means that liaison and coordination with other government agencies is essential.

For private land the Ministry plans will identify the land required for Ministry of Natural Resources programs. This will necessitate intensive liaison and consultation with agencies, such as the local municipalities, which have control over private land.

In some parts of the province the term land use strategy may be preferred to land use plan. The policy for the appropriate terms to use in the various levels and locations of Ministry of Natural Resources planning is outlined in Appendix 9.

The Planning Principles



Nine planning principles are recognized. These will be used as the basis for evaluating all land use plans prepared for the Ministry.

1. Plans are made to achieve objectives. These must be clearly identified in the planning process.

Objectives are quantifiable ends chosen to be achieved.

For land use planning the objectives must indicate what is to be done and for whom it is to be done. Objectives must be set to cover all significant environmental concerns about the planning area.

2. Public participation is essential in the planning process.

Public participation means that the public takes part in the planning process rather than just reacting to decisions made. Further explanation of this topic is given in Chapter V.

3. The planning process must include distinct points where options are considered and full disclosure is given of the consequences and trade-offs associated with each option.

The consequences disclosed must include all environmental impacts including noise.

4. Planning is a dynamic process.

Planning is continuous and must be sensitive to changing conditions and new information.

Each planning process must culminate in a plan. However, the planning process must continue. The environment for which a plan is made should be constantly monitored so that the plan can be reviewed and revised if necessary. Otherwise the plan can become irrelevant.

It should be stressed, however, that changes to the plan may not be made unless all of the planning principles are adhered to. For example, since public participation is required to prepare a plan, so it is to revise a plan significantly.

5. Plans must be made for a long term and should provide for future options.

The planning horizon for land use plans will normally be at least 20 years. However, many parts of the plan will require longer commitment. For example, the practice of forestry requires land allocations to remain in effect at least 60 years and the designation of areas as wilderness is assumed to be relatively permanent.

Future options for a planning area means that some choices are left open to future generations. This is desirable to enhance the chances of providing continuous benefits, and because of our inability to accurately predict future conditions.

Future options may be provided by a variety of means such as:

- (a) leaving parts of the planning area relatively undeveloped;
- (b) identifying parts of the planning area for planned sequential use;
- (c) avoiding an overemphasis on permanent designations such as parks; and
- (d) maintaining land tenure in the Crown.

6. Planning decisions should be made through a hierarchy of planning areas where broad decisions are made before detailed decisions.

If plans for local areas are made in isolation each one may plan only for high gain economic development and assume that other essential matters like agriculture and recreation will be looked after in other plans. The overall or net effect of such planning would be unacceptable. Therefore a planning framework is desirable to guarantee overall consistency and balance across the province.

7. The public good must take precedence over the individual good.

Historically, all rights to land in the Province are vested in the Crown and only subsequently to private owners. It is the Crown which bestows to

the individual the right to use land.

Although we recognize the need to protect the private individual against arbitrary government decisions, it is a basic principle of our land tenure system that the right to develop land for a particular use is constrained by the community's, or the Province's, interest in how that land is used. To put it simply, the public interest, as defined by the political system, supersedes the private right.

Although the public interest must receive priority over the individual interest it is essential to demonstrate a respect for individual rights and only overrule these where there is a clear and demonstrable reason for so doing.

8. Plans must identify land so that the most efficient use is made of land as it relates to the objectives.

Optional land use plans must be evaluated on their long term economic efficiency. Thus if two plan options are being considered, the one which would permit the achievement of all the objectives at lowest cost would generally be the best plan.

When only one objective is under consideration the most efficient allocation would be that land which is most accessible and of highest capability. For example, it would be more efficient to assign forestry to accessible high capability land than to inaccessible low capability land.

When a whole set of objectives is to be met the simple rules of efficiency must be modified to allow for the overall or net long term cost. Thus it may be that a certain use will be assigned to land of lower capability or to a less accessible location because of the overall considerations.

9. Plans must recognize that the natural environment has a limited ability to provide long term benefits and to withstand use.

Plans are made for the long term, therefore it is

necessary to recognize the environment's ability to provide continuous benefits. This involves the understanding and use of the concept of capacity. Two general types of capacity are recognized, productive capacity and use or development capacity.

Productive capacity refers to the ability of the environment to produce biological crops such as wildlife, forests, farm produce, or fish. This aspect of capacity is largely covered by the Canada Land Inventory and the Ontario Land Inventory under the topic of land capability.

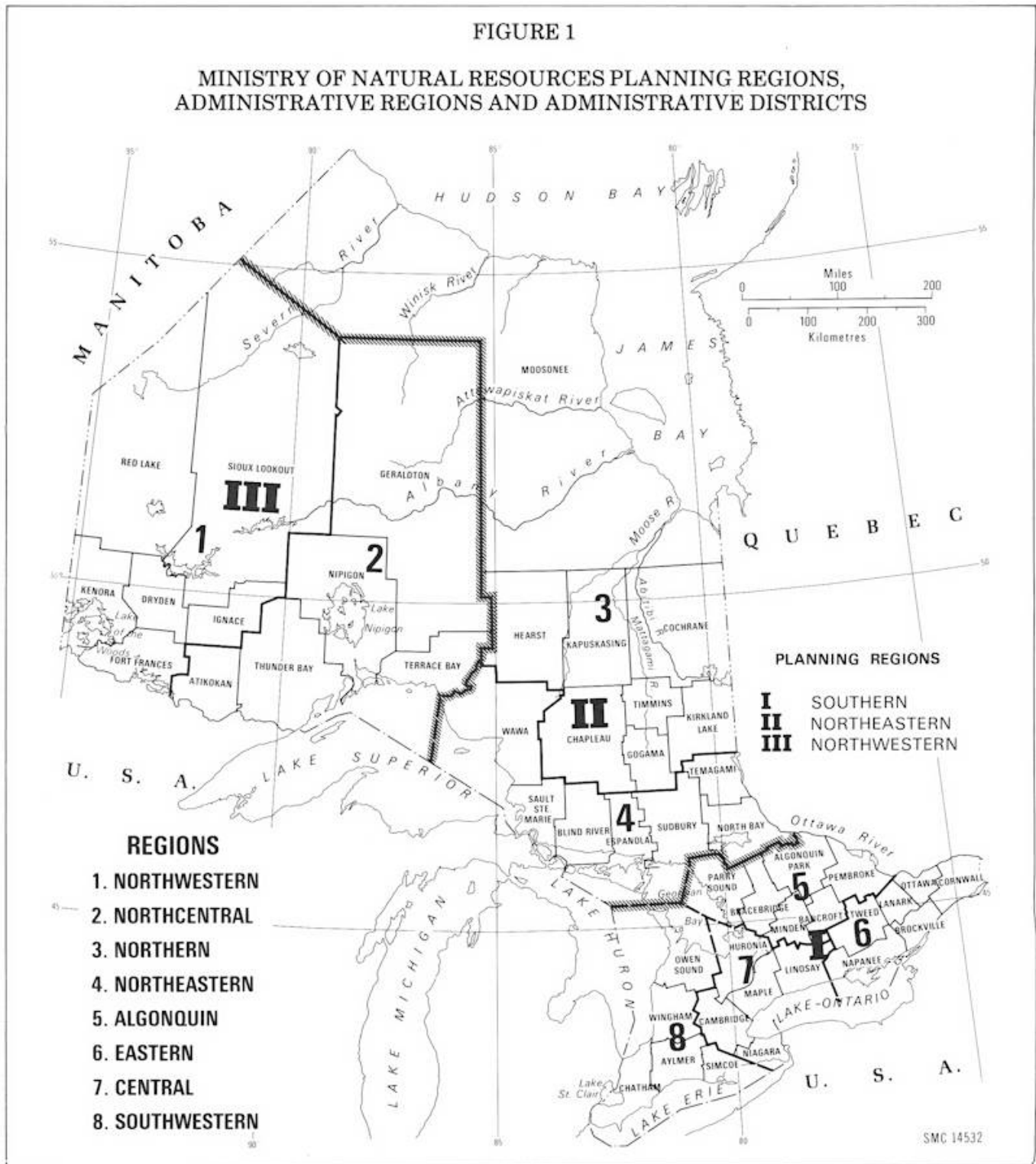
Use capacity is defined as the limit at which human activity will lead to undesirable changes in the environment. This may be caused by a breakdown in one or more biological components of the environment. The limit in use-capacity may also be caused by purely social factors, and in this connection it is useful to understand the term social capacity. Social capacity is defined as the level of use beyond which a decrease in user satisfaction would occur due to the presence of people.

The topic of capacity has not been well developed and few standards exist. This is especially true for recreation use which is very subjective and where overcrowding to one person may be quite acceptable to another. However, it is still necessary to adopt capacity standards in the preparation of a plan so calculations of supply may be made.

It is also important to recognize that capacity does vary according to the level of management. Therefore, the assumed level of management for each capacity standard chosen must be explained.

The rate of harvesting the standing crop or existing population is also an important factor to consider.

When an area is designated to meet a particular target, such as timber, the harvest of the growing crop from that area must, in the long run, be consistent with the productive capacity of the area.



Land use plans must be done through a process understood. outlined by the following steps:

- First** — Establish the Terms of Reference
- Second** — Collect and Analyse Information
- Third** — Develop the Policy (Objectives and Targets)¹
- Fourth** — Develop the Conceptual Land Use Plan¹
- Fifth** — Develop the Land Use Plan
- Sixth** — Develop the Review Procedure
- Seventh** — Plan Approval and Implementation

Public participation is an essential part of this planning process. Chapter five provides details on public involvement in the planning process.

The planning process steps are sequential, so a failure to complete any one of the steps halts the whole process. In addition, the planning process is iterative. This means that the sequential process may frequently be interrupted to go back to a previous step to refine or clarify a point.

The Ministry of Natural Resources Land Use Planning System

The above process must be implemented through a hierarchy of planning areas where broad decisions are made before detailed decisions and where an overall context for decision making is

The Ministry of Natural Resources planning areas are: The Province of Ontario; the planning regions² (3); and the administrative districts. Figure 1 shows these.

The full planning process is not carried out at all levels. The main purpose of the provincial plan is to give policy direction to the regions. The main purpose of the regional plan is to give policy direction and some area designations to the districts. For example, the planning region must plan the location of all large wilderness areas. At the district level of planning, policy must be translated into a land use plan and as a result the entire planning process must be completed.

Figure 2 illustrates how the land use planning process is to be implemented through the hierarchy of planning areas and the relation of land use planning to resource management planning.

¹ The standard approach to completing these steps is: (a) to develop options and (b) to evaluate the options and choose the preferred option.

² The eight administrative regions have been grouped into three planning regions for this program. This was done to facilitate policy development and to ensure a standard approach to planning and liaison with other agencies.

FIGURE 2: Relation Between Provincial, Regional And District Land Use Planning And Resource Management Planning.

Resource Management Planning	Land Use Planning		
	Provincial	Regional	District
Individual Policy Originated by --->> Branch concerned	1. Terms of Reference 2. Information 3. Develop provincial policy by --->> assembling individual policies and assign targets to planning region	1. Terms of Reference 2. Information 3. Develop Regional Policy 4. Develop --->> Conceptual Plan and assign targets to Districts	1. Terms of Reference 2. Information 3. Develop the District Policy 4. Develop the Conceptual Plan 5. Develop the Land Use Plan 6. Develop the Review Procedure 7. Plan Approval and Implementation
Manage Allocated Land to meet policy	< <-----	-----	

Regional in this figure refers to the planning regions. In some planning regions an intermediate step may be taken between the planning region and the districts. Targets may be assigned by the planning regions to the administrative regions who then assign targets to the districts.

It should be stressed that the connections between the various components of Figure 2 are iterative rather than simply sequential. For example, although the basic policies used in land use planning come from the resource management sectors, these policies may subsequently require modification due to the considerations of land use planning. Also, when a higher level planning (e.g. regional) passes policies to local areas, the local areas test these and may request a revision.

Provincial Level

Information is collected by individual Ministry of Natural Resources branches and optional policies are presented to Government where decisions are made. Public involvement at this level occurs through traditional political mechanisms.

Policy development at the provincial level is an on-going process of government and is not a result of the land use planning process. The land use planning process does, however, combine the policies into one report, so conflicts and omissions may be more readily detected.

The provincial level of land use planning also indicates proposed policy (including objectives and targets) to be assigned to each planning region. Because this is a synthesizing process, participation for this is limited to Ministry of Natural Resources staff, other Ministries and the provincial government. While no other participation is sought at this level the information is available to anyone who requests it.

Planning Region Level

Terms of reference are set in adherence to provincial requirements which include the proposed regional targets. Information is collected to assist in testing and modifying the proposed regional

policy.

Policy is developed by testing the proposed targets through public participation and by calculation of the capacity of the region to produce desired benefits. If the proposed targets are unacceptable then alternatives must be proposed, evaluated and negotiated with the provincial level.

If the policy is acceptable a conceptual plan is developed and targets are assigned to districts.

Public participation at the regional level must be open to all concerned individuals and groups within the planning area.

District Level

Terms of reference are set to adhere to regional requirements which include the proposed targets. Information is collected at a more detailed level than for the region.

Policy is developed by testing the proposed targets through public participation and by careful calculation of the district's capacity to meet the assigned targets. If the policy is unacceptable then alternatives must be proposed, evaluated and negotiated with the region.

When the policy is acceptable then a conceptual plan is developed, refined and a review procedure and implementation procedure developed.

The essence of a district plan is an identification of appropriate land and water areas for the various Ministry programs. For Crown land the plan must provide for all government programs. For private land the plan must identify those land and water areas which are critical for the achievement of the Ministry of Natural Resources programs.

Ultimately the plan must be compatible with other agency plans including those of the Conservation Authorities and the plans of the municipalities.

The following details of the planning process are specific to the district level of planning. These may, however, be used as a general guide to other levels of planning as well.

1. Establish the Terms of Reference

The area to be planned must be defined in terms of the boundaries and the general purpose or goal. This must include an explanation of the reason for the plan.

The purpose must indicate what people are to be served by the plan and in what general way they will be served.

The people to be served by the plan may be divided into two or more groups for this purpose. For example, the primary clients are those who would be the principal participants in the process. Others may well be concerned with the plan and may be involved in the process. However, the terms of reference must clearly establish which group of people will be the main participants.

Unless a higher level of planning has indicated otherwise, it may normally be assumed that the primary clients for a planning area are the local and traditional users of that area.

For the majority of planning areas the plan should cover all concerns and should not start with any particular emphasis. However, there are certain special planning areas that start with a particular emphasis, for example the North Georgian Bay Recreational Reserve had its purpose defined by statute.

The process described herein stresses that people are to be served and that plans are made for people. It should be noted that this in no way precludes environmental concerns from being recognized. Indeed, in the final analysis all environmental concerns have their origin in one or another group of people.

As part of the terms of reference the decision

makers for the various planning steps must be identified. These are the persons who have the authority to make the final choice of an option where options are presented in the process. The ultimate decision maker for all Ministry of Natural Resources plans is the Minister of Natural Resources. However, this authority may be delegated to other persons for certain plans or parts of plans.

The terms of reference must include a work program or schedule of events for the entire planning process. In particular, this work program must indicate the planned schedule for public participation and the decision makers' involvement.

2. Collect and Analyze Information

Information is collected to assist in the development of district policy and to assist in the preparation of the land use plan.

Information for land use planning is divided into five broad categories as follows:

- A. PEOPLE
- B. NATURAL RESOURCES
- C. PRESENT USES, DEVELOPMENTS AND PROJECTIONS
- D. EXISTING PLANS
- E. PROBLEMS AND ISSUES

All of the information required for planning must be recorded in a report which outlines the special relationships in the planning area in terms of number of people affected, economic benefits and other social and environmental facts.

Wherever possible and applicable, the information must also be recorded on maps. National topographic maps at scales of 1:50,000 or 1:250,000 must be used for this purpose since these are the only maps compatible with the Ontario Basic Mapping Program which will be used for all geocoding and grid cell referencing in the future. For publication or public meetings, other

map scales may be used.

While information requirements will vary from one planning area to another, the following is a list of topics regarded as minimal.

A. PEOPLE

- Brief history of settlement and development
- Population - number, distribution and projections

B. NATURAL RESOURCES

- Land and water area
- Climate and air quality Watersheds and water quality
- Bedrock geology and unique or rare rock formations
- Topography and soil depth Agriculture capability (CLI)¹
- Timber capability (CLI)¹
- Forest cover and other vegetation including rare or endangered species
- Mineral potential including aggregate and fuels
- Recreation capability (CLI)¹
- Historic and cultural areas and sites
- Fish productivity, populations, and rare and endangered species
- Wildlife capability and suitability (OLI)² populations, and rare and endangered species
- Wetlands, aquifers and recharge zones.

C. PRESENT USES, DEVELOPMENTS AND PROJECTIONS

- Land tenure and other legal rights regarding the use of land and water
- Urban areas, commercial and industrial developments particularly related to resources
- Rural dwellings including cottages, chalets, and farm homes

- Transportation and communications (roads, railways, airports, harbours, power lines, pipelines)
- Agriculture*
- Timber operations and the forest industry*
- Mining and the mining industry* (metallics, industrial minerals and fuels)
- Trapping*
- Commercial fishing*
- Wild rice*
- Public recreation areas*
- Trails, boat routes, and canoe routes*
- Commercial recreation developments*
- Hunting* Sport fishing*

(*) For the items marked with an asterisk it is necessary to give a clear analysis of the potentials for further future development and use by calculating the potential supply.

The general approach to this analysis is that specialists within the Ministry such as foresters, biologists and geologists must be expected to produce the figures. The planner's role is primarily to standardize the approach with special reference to the assumptions regarding land area available. Planners should also be prepared to provide alternative calculations of potential supply as a double check wherever this is feasible.

Supply calculations must be made to indicate the total potential supply as well as the presently accessible supply and must include separate figures for Crown land, other public land and for private land.

For each calculation assumptions must be made and recorded concerning the actual land or water area available for production. For example, when the forest potential is calculated it could be assumed that no land will be available in urban areas or in certain recreation areas but that at least 10% of agricultural land will be used for forest production.

Potentials for further development and use may be indicated by subtracting the present level of supply or production from the total potential level of supply or production.

The potential may also be expressed as a percentage increase over the present or simply by additional areas of land that could be brought into

¹ CLI is the Canada Land Inventory. This information is available as 7 capability classes.

² OLI refers to The Ontario Land Inventory. This information is available as 7 capability classes.

production.

It should also be stressed that a potential for further development may or may not exist in a planning area. A given area could well be already developed to its fullest potential or in some cases the area could already be overdeveloped or overused. In either case the situation concerning the potential for further development must be explained.

To assist in the preparation of the land use plan it is also necessary to analyse the degree of residential development. The proliferation of residential developments in rural or wild-land areas is seen as a detriment to several MNR programs like forestry, mining, parks and wildlife hunting. Therefore an analysis of the present degree of residential development must be made by using the standard scale for determining development classes as given in Appendix 4.

Residential developments for this purpose mean any permanent single family dwelling. This includes houses, cottages and lodge or motel units.

D. EXISTING PLANS

Existing plans and planning areas must be shown on a map and described in a report. This includes official plans of municipalities; plans of other ministries such as the Ministries of Industry and Tourism, Transportation and Communications and agencies such as Ontario Hydro, as well as the resource management plans of the Ministry of Natural Resources and any plans of the Conservation Authorities such as those for watersheds. Plans and studies under preparation by other agencies, but not yet completed, should also be considered.

The official plans and zoning by-laws of municipalities must receive very special attention because they control the use of private land. Therefore, it is essential to know what effect these plans will have on the programs of the Ministry of Natural Resources.

E. PROBLEMS AND ISSUES

A description of the significant problems and issues of the planning area must be made. This

may be done through an analysis of the news media and also through the public participation program. Included here are such topics as air and water pollution, garbage disposal, jobs, and sensitive areas.

Sensitive Areas: In every planning area there are individuals or interest groups who advocate the preservation of certain features which they value. Areas that contain such features are called sensitive areas and they may be geological, biological, historical or cultural or a mixture of all or any combination. Sensitive areas may also be aesthetically pleasing areas with no relation to any scientific or educational purpose.

An inventory of such sensitive areas must be compiled and kept up to date. This inventory shall include the location of the area, a description of the feature whose preservation is proposed and the name of the individual or the organization who is concerned with the area.

Details of this inventory of sensitive areas are given in a separate circular so no further instructions will be given here.

Sensitive areas are discussed again in the policy section and in the plan preparation section of this report.

3. Develop the Policy

Districts will receive proposed policy (Objectives and Targets) for their area from the planning regions or the administrative regions. This is done after initial and relatively general consideration of the district's needs and the district's resource capabilities by the planning team at the regional level.

Developing the district policy consists of taking the proposed policy, testing it socially and physically and negotiating with the region for any changes that may be desired or required.

Developing the district policy also consists of adding any items to the policy that may be required by district conditions. For example, the question of which of the sensitive areas shall be preserved must be decided as a matter of policy.

Proposed policy from regions to districts must

include objectives and targets for at least each of the following topics:

- 1) Forestry
- 2) Mining
- 3) Commercial Fur
- 4) Fisheries
- 5) Wildlife
- 6) Parks
- 7) Cottaging
- 8) Crown Land Recreation
- 9) Land and Water Management (including hazard lands)

In addition, where Crown land is involved, policies for all other government programs requiring land must be identified. Included here are such subjects as agriculture, tourism, urban, rural residential and transportation and communication.

The Ministry of Natural Resources is the government's official custodian of Crown land. Therefore, where Crown land occurs, the Ministry of Natural Resources land use plan must provide for all government programs that require land or water.

THE PHYSICAL TESTING OF DISTRICT TARGETS

Proposed targets must be compared with the potential production or supply that was calculated as a result of the information analyses.

If a proposed target falls below the potential production then it is an acceptable target in the physical sense.

If the target is equal to the potential production then it may be considered acceptable pending the outcome of planning step number four.

If a target is above the calculated level of the potential production then the target must be declared unacceptable.

The Social Test

Targets must be tested to see if they are acceptable socially. A public participation program may be required to determine this.

Policy Options

If the targets are acceptable physically and socially, then the proposed policy for the District may be accepted and approved.

If the targets are not acceptable alternative targets must be proposed, evaluated and negotiated for approval.

Even if targets are acceptable and approved at this stage they may later prove unacceptable and require revision as a result of step four of the planning process.

4. Develop the Conceptual Plan

Prior to this step the development of policy has taken place on a separate program basis. It must now be determined if all the policies are compatible and can be achieved on the land and water base available within the planning area. This can best be achieved by preparing conceptual land use plans. A conceptual land use plan is an approximation of the final plan. The standard approach to develop the conceptual plan is (a) to prepare a series of optional conceptual plans and (b) to evaluate them and to choose the preferred option.

The main purpose of a land use plan is to set the stage and to create a condition where all the Ministry programs may operate efficiently and effectively. This means that land use conflicts must be avoided and that uses must be assigned to or identified for appropriate areas capable of sustaining such uses.

Before a conceptual plan can be developed it is necessary to prepare a list of the various uses that must occur in the planning area and the assumed compatibility of these uses with each other. Incompatible uses must be separated while compatible uses may be integrated in the same general area.

The Ministry of Natural Resources embraces the management style known as "multiple use". This means that all uses are accommodated within the planning area and wherever possible those uses are integrated to make the most efficient use of land.

The concept of multiple use also recognizes that to achieve certain objectives it is necessary to segregate certain uses and to restrict certain areas to a very few uses.

When the district targets are approved they become the specifications for preparing optional conceptual plans. The essential components of a district plan at this stage are:

- (1) The policies— including the targets;
- (2) A map of the district divided into areas which are numbered for reference;
- (3) For each area a policy that states which ministry programs will operate and generally how they will operate and including, where applicable, the output target expected from each area. A general land use code may also be shown;
- (4) The implementation strategy for (a) Crown land and (b) private land.

The scale of map to be used for preparing district land use plans is 1:250,000. Any means may be used to develop the optional conceptual plans provided the resulting plans will meet the targets.

One suggested means of preparing optional conceptual plans is:

- (a) Map all urban areas and other dense developments, agriculture land and established parks. These are assumed to be the non-negotiable parts of the plan¹ (at least for purposes of this step);
- (b) Prepare a conceptual plan for the amenities to meet all the amenity targets. These are such items as proposed parks, proposed recreation areas or sensitive areas, that require restricted or partly restricted use areas;
- (c) Test to see if the balance of the area is adequate and appropriate to meet the targets such as forestry and mining that are economic in nature. If the result is positive the conceptual plan is viable and other plans should be developed by repeating steps (b) and (c);

- (d) If repeated attempts at steps (b) and (c) result in no viable plan then a policy revision is required. This can be done by one of the following (not in order of priority):
Revise² the amenity targets, or
Revise² the economic targets, or
Revise² both of the above, or
Revise the conflict assumptions used in defining policy;
- (e) Repeat steps (b) and (c) until several viable options are found.

To prepare a conceptual plan it is essential to review and understand the background information for the planning area.

Particular reference must be made to present use, degree of residential development and to the various resource potentials. However, because land use planning is for the long term the consideration of land tenure (including licences and Crown reserves) should not be assumed to be overpowering factors although these are certainly very important points to consider. Areas covered by forest management agreements must also be given special consideration. Excepting for the provisions for change, provided by the agreements, these areas must be regarded as relatively nonnegotiable for the duration of the land use plan.

¹ The question of other plans and of land tenure must be given consideration here. Generally, other plans should be respected. However, if other plans cause problems then a negotiation to change them should be undertaken.

Indian lands must be considered as non-negotiable elements of the planning area and beyond the control of the plan.

Private land must not be excluded from the plan since there are a variety of means in influencing or controlling its use to achieve government objectives.

² Revision of targets at this stage is a trade-off that must not be done arbitrarily. All such revisions must be referred to the decision makers who may wish to open the question to public debate. A documentation must be made of the rationale for all trade-offs.

Present use will normally be the starting point for developing a conceptual plan because it is usually very costly to change an established use. This is especially true if the use is associated with permanent developments like cottages or estate residential or agriculture. However, even where there is a high degree of established uses the possibilities for multiple use should be fully explored.

Resource capability is another major factor which cannot be ignored. As a general rule a use should be assigned to the highest capability areas appropriate for that use. However, this does not mean that all high capability areas for a particular use are to be used up for that use. Only sufficient land to meet the target is required.

To prepare a conceptual plan it is essential that a planner be personally familiar with the area to be planned. In no way can a plan be prepared by simply examining the background information.

Ministry of Natural Resources planning must consider private lands, particularly in Southern Ontario where these lands contain the majority of the resource base. However, any Ministry plans that cover these lands must be done in a manner that acknowledges the difference between the Ministry's role on public and private lands.

Perhaps the most critical difference is that although the Ministry can exert some limited direct control over private lands, the primary emphasis must be on persuading the landowners to manage their land in an appropriate manner. Because of this lack of control the Ministry can rarely be certain what products or opportunities will be provided from any area of private land. In such situations the Ministry can only work in terms of probability. For example, in assessing the probable contribution of private forest lands to target achievement allowances must be made for landowners who do not manage their woodlots or manage them improperly.

A second difference between planning for Crown lands and private lands is that the use of private lands by private individuals must conform to local zoning by-laws. (Zoning by-laws are the legal mechanism by which official plan policies are implemented). This has two direct implications — Ministry actions on private lands must conform to

local planning controls, and the municipalities should be encouraged to enact policies which will support this Ministry's programs. Because of this potential impact of municipal planning policies on Ministry of Natural Resources interests, it is essential that Ministry of Natural Resources plans be developed in close consultation with local municipalities, giving due consideration to existing local land use policies.

EVALUATING THE OPTIONS AND CHOOSING THE PREFERRED ONE

The planner's role in the choosing of a conceptual plan is to facilitate the process by providing decision makers with the options and consequences of each option.

Since each conceptual plan to be viable must meet all the targets, the only difference between them would be economic costs, social preference, future options and whatever environmental impacts are not accounted for in the targets. The planner must describe all these variables and clearly portray these to the decision makers who will make the choice.

It is suggested that, all other things being equal, preference be given to plans that:

- (a) cost least to implement;
- (b) maintain most future options;
- (c) are most acceptable socially;
- (d) cause least environmental damage.

5. Develop the Land Use Plan

The conceptual plan is quite general regarding both the area boundaries and the policy for each area. A refined plan must be prepared by starting with the preferred conceptual plan and clarifying the boundaries of areas, adding new areas where necessary and by a more precise documentation of the policy for each area.

Boundaries for areas may be natural, such as a watershed, or artificial, such as a road or arbitrary. In every case the boundaries chosen should be clearly understandable and able to be located on the ground without a survey.

Additional areas may be required on a refined plan to indicate buffer areas or specific variations

within a general area of the conceptual plan.

Each area must be given a reference number relating to the policy outline for the area. The land use policy for each area must be outlined on a form similar to that shown in Appendix 6.

If land use codes are desired on the plan map these must be chosen from the options shown in Appendix 5.

In preparing a land use plan it is essential to understand that land use planning is mainly for the purpose of ensuring that suitable land is available so that ministry programs can operate efficiently and harmoniously. The land use plan is not meant to replace the management plan for various programs like parks, cottaging or forestry.

In preparing the land use plan, it is necessary to avoid becoming involved in details that are best left to resource management. Proliferation of detail should therefore be avoided and plans prepared that utilize as few areas and details as possible. However, areas may be shown as small as one square kilometre.

6. Develop the Review Procedure

Constant monitoring of the planning area is part of the normal duties of ministry staff. This will be greatly facilitated by the public and especially by interest groups who have been involved in the plan preparation and who could give vital assistance in the review of the plan.

The maximum time period between plan reviews must be specified. This may well vary from one planning area to another due to different circumstances. Plan review or amendment may also be undertaken at any time the decision maker¹ for the plan deems appropriate.

Any individual or group may appeal to the decision maker for a review or an amendment. The decision maker must then decide whether to wait for the regular review period or to initiate an immediate review.

Major plan changes may only be made through a formal plan review. Minor plan changes may be made at the discretion of the decision maker and without a plan review.

Major plan changes are those that:

- would significantly affect more than one program;
- would result in a required policy change for any program;
- or would result in significant negative public reaction.

It is important to stress that with plan review, as with plan preparation, the public must be involved. Significant changes to the plan may only be made by a process similar to the overall planning process. The review process must include the following basic steps:

- A. Review terms of reference and revise if necessary;
- B. Update background information;
- C. Review the policy and modify if necessary by negotiating with the region;
- D. Prepare alternative revised land use plans, evaluate them and choose one;
- E. Review the existing review procedure and modify as necessary. Set a date for the next regular review;
- F. Review the implementation procedure and revise as necessary. Take revised plan through the approval procedure and publish for release to the public.

7. Plan Approval and Implementation

All steps of the planning process must be summarized in a report. This report must contain documentation of the public participation program.

The report, which includes the plan, must be submitted to the decision makers for approval. This approval will state that the plan is the official guide for all programs of the Ministry that occur in the planning area. The detailed procedure for plan approval is given in a separate procedural directive.

¹ The decision makers for the plan must be specified as part of the terms of reference.

Implementation of Ministry of Natural Resources plans will be done largely through the regular programs of the Ministry. Therefore, it is essential that staff understand and support the plan. The regular Ministry of Natural Resources programs include those of the Forest Resources, Mineral Resources, Outdoor Recreation and Lands and Waters Groups.

Approved Ministry of Natural Resources land use plans have no overall legal status, however, they do coordinate the Ministry's programs that require land or water.

For Crown land, Ministry plans may be given legal status through Section 16 of The Public Lands Act which gives the Minister the authority to prepare land use plans.

For private land in unorganized municipalities some control of land use is possible through Section 17 of The Public Lands Act which provides for restricted area orders.

For private land in organized municipalities it is essential to achieve integration between Ministry plans and those of the municipalities. This is necessary to ensure that Ministry programs may function on private land where land use is legally controlled by the official plans and zoning by-laws of the municipalities.

No attempt is intended to usurp the role of the municipality in this regard. The Ministry makes an input into the official plan and zoning by-law process as do other ministries and agencies.

When official plans and zoning bylaws are approved they must be recognized as the legal control of private land and all Ministry programs on private land must conform.

While conforming to the official plan the Ministry must still make its own plans to cover certain aspects of private land use. This may well require some of the large and general land use designations of the official plan be subdivided into more specific areas for Ministry of Natural Resources purposes.

In cases where the Ministry of Natural Resources plan would be contrary to the official plan, the Ministry may request a review of the official plan by the municipality. If agreement is not reached the Ministry may consider appealing to the Ontario Municipal Board. However, once a final decision is made, either for or against the official plan, the Ministry land use plan may require revision or the method of implementing the plan may have to be changed.

While working within the provisions of the official plan the Ministry plans are actually implemented on private land by a variety of means. These include:

- (1) subsidizing private landowners through agreements such as those of The Woodlands Improvement Act;
- (2) education and extension programs to encourage private landowners to undertake various projects such as stream improvement or wildlife habitat improvement;
- (3) agreements with municipalities and Conservation Authorities for the acquisition of private land and its long term management for forestry and related purposes; and
- (4) through its plan review process, monitor proposed changes in land use to ensure that they will not detrimentally affect Ministry of Natural Resources programs.

Integration of Ministry of Natural Resources land use plans with other agencies such as the Conservation Authorities and special commissions is also required. This is seen as a further means to implement Ministry of Natural Resources plans.

Integration of plans may be facilitated by:

- (a) sharing of all background information;
- (b) inviting other agencies to take part in our planning process; and
- (c) taking part in other agencies' planning processes.

This Chapter describes how the planning team¹ should go about involving those outside the team in the planning process. Two distinct components are identified; participation by the public and the involvement of government agencies.

1. Public Participation

A. DEFINITION

Public participation includes a great variety of means of communicating with the public such as letters received and answered, phone calls and personal conversations as well as a variety of more formal means like workshops and meetings.

Public participation means that the citizens concerned with the planning area take part in the planning process rather than react to decisions made. However, it must always be understood that decision making remains the prerogative of government.

Public participation involves those affected by the plan, special interest groups, elected representatives at all levels of government, and technical specialists.

It is a process of mutual education and co-operation which provides opportunities for people to work together in the creation of a plan which reflects their collective values, knowledge, experience and best judgment.

B. ADVANTAGES

The purpose of a public participation program is to achieve a better plan, and to facilitate plan implementation.

The advantages of public participation are:

- Citizens who are familiar with an area can correct any errors or omissions in the data which is collected by planners; create an atmosphere of mutual understanding among opposing groups and contribute to the resolution of conflicts;

- Citizens who are involved in a planning process can often produce creative ideas which may not occur to planners restricted by their conventional wisdom;
- Those people who are actively involved in an open planning process will generally be committed to the completed plan;
- Citizen participation is possibly the most efficient and cost-effective way of public decision making that unforeseen consequences can be revealed and opposition can be accommodated before firm positions are reached.

C. METHODS FOR PUBLIC PARTICIPATION

The essence of public participation is the free exchange of ideas. There are many techniques for achieving it, and the merit of each depends at least partly on the amount of two-way communication which is fostered. Some of the more important methods and the relative effectiveness of each in the planning process are discussed in Appendix 7.

2. Involvement of Government Agencies

The involvement of government agencies is essential in the planning process. Much of what was said above regarding the advantages of public participation applies here too. Four categories of governmental agencies must be considered by the planner in deciding on involvement in the planning process

- A. within the Ministry of Natural Resources
- B. other Provincial Ministries and agencies
- C. other levels of government, in particular the organized municipalities
- D. other agencies such as the Conservation Authorities.

¹ The planning team are those Ministry of Natural Resources employees who are directly involved with the preparation of the plan.

A. WITHIN MINISTRY OF NATURAL RESOURCES

It is extremely important that appropriate Ministry staff be identified and involved in the process. Because of the comprehensive nature of land use planning in the Ministry of Natural Resources a broad cross-section of Ministry staff will be involved representing the various resource interests which comprise the Ministry's mandate. And in order to ensure that an accurate appreciation of these interests is developed by the planning team, Ministry staff in the District, Region, and Main Office should be involved. This internal Ministry review of the plan is of vital importance and due allowance must be made for the time that this will require.

B. OTHER PROVINCIAL MINISTRIES AND AGENCIES

It is also critical that other provincial Ministries and agencies with interests in the MNR plan be involved in the process. The planner should take care that this involvement is truly representative of the agency's interest, has an appropriate degree of senior level support and begins as early as possible in the planning process. Generally the Ministries and agencies concerned will be those with significant land based interests. Among these are the Ministries of Agriculture and Food, Transportation, Industry and Tourism and Ontario Hydro. The Ministry of Treasury and Economics, the Ministry of Intergovernmental Affairs, the Ministry of Northern Affairs and the Ministry of Environment should also be involved. Other Ministries and agencies which do not have direct interests in land may also have interest and these should not be overlooked, for example the Ministry of Culture and Recreation (Native Community Branch and Historical Planning and Research Branch). In some cases parts of Ministry of Natural Resources Plans may be implemented by other Ministries (e.g. Housing). In these cases it is essential to achieve input to and understanding of the plan from the Ministry concerned.

C. OTHER GOVERNMENTS AND AGENCIES

In addition to these provincial agencies there are a number of other agencies which must be considered for involvement in the planning

process.

Among these the most important are municipalities, Federal Departments, Ministries and Agencies, Conservation Authorities, and Indian organizations.

Consultation with local municipalities is an important part of the participation program, especially in parts of Ontario where there is a high proportion of private land. If Ministry of Natural Resources objectives are to be met in these areas it is essential that municipal plans and by-laws permit Ministry of Natural Resources programs to function. To achieve this it is necessary to inform and consult with the municipalities so that Ministry of Natural Resources plans and those of the municipalities are integrated and compatible. This process is called plan input and plan review and a separate guideline has been prepared for this function.

Conservation Authorities operate as independent agencies and have their own objectives which in many cases complement those of the Ministry of Natural Resources. Where Conservation Authorities prepare watershed plans it is essential that these be coordinated with Ministry of Natural Resources plans. This will require a mutual sharing of data and consultation during the planning process.

D. METHODS OF INVOLVING GOVERNMENT AGENCIES

A common means of involving government agencies in the planning process is through a technical committee. This may involve just Ministry of Natural Resources staff, or it may be expanded to include other provincial agencies and representatives of other governmental organizations.

It is also advantageous to involve government staff in the events comprising the public participation process.

Beyond these methods the usual means of inter- and intra-governmental communication (personal contact, correspondence, etc.) should suffice. A record must be maintained of all such contacts.

3. The Program for Involvement in the Planning Process

It is possible to identify a range of involvement in the planning process from a very modest effort to a sophisticated program of intensive partnership. The choice of an appropriate program will depend upon the circumstances of each planning exercise. What follows outlines what the planner must do in designing this program. It also identifies those areas where choices are to be made.

A. ESSENTIAL STEPS

In Step 1 (Terms of Reference) of the planning process it is essential that a work program for involvement in the process be prepared. This must itemize all the publics and governmental agencies to be contacted, the means of contact, the dates, and the results expected to be achieved at each step in the planning process.

This work program should be available to the public and be the subject of public debate. This will, no doubt, require frequent revisions of the schedule.

A detailed record must be kept of the measures taken to achieve public participation and government involvement in the planning process. This must be summarized in the plan

report.

B. CHOOSING THE APPROPRIATE PROGRAM

The first choice to be made in designing the program for involvement in the process is the degree or level of involvement that is to be achieved. This will vary from one area to another and is a basic decision to be made for the plan.

The means and techniques to achieve the desired degree of involvement will also vary from one planning area to another. The significance of the various techniques discussed earlier is not just to identify the relative effectiveness of each technique, but to communicate the fact that there are many methods which should be used in combination. A single approach is seldom adequate, neither is any combination appropriate for all planning situations.

Each planning project must have its own program of involvement designed to take into account the unique conditions and circumstances of the area. This requires not only the selection of the appropriate techniques, but also determining who to involve, scheduling the stages and budgeting for the program. Furthermore, details on meeting places, displays, printed material and advertising should be worked out at this time.

Appendix 1

Terminology

AMENITY	A pleasant feature; something that makes life easier and more pleasant or interesting. This term is used in planning to indicate the features or developments whose benefits are difficult to quantify in economic terms.	LAND USE PLAN	A Ministry of Natural Resources land use plan is a document which indicates how the Ministry plans to use Crown land and how the Ministry intends to influence the use of private land in order to achieve its objectives.
BENEFIT	Anything for the good of a person or thing. Common measures of benefits are jobs, dollars earned and user days of recreation.	MANAGEMENT	The judicious use of means to achieve ends. Management may have various levels of intensity. If a high degree of technology is used or if very careful tending is given, the management is high level. Where haphazard care is given with little attention to detail, the level of management is low.
CAPABILITY	The natural ability of an area to provide continuous opportunity for benefits under an assumed level of management.	MULTIPLE USE	A resource management or planning concept applied to very large areas to indicate that all basic uses are accommodated. This may include single use areas which are necessary to achieve certain objectives. The concept of multiple use should be applied to a whole planning area rather than to any particular part of it.
CAPACITY	The upper limit to which an area of land, or water, may be used or developed without an undesirable change taking place in the environment. Also called carrying capacity.	PLANNING AREA	The area for which a planning process is done and for which a land use plan is made.
COMPATIBILITY AND CONFLICT	When two uses can occur on the same general area at the same time they are said to be compatible uses. When uses cannot occur together they are said to be in conflict. Example of uses that could be compatible are forestry and upland wildlife production. Uses in conflict are forestry and wilderness preservation.	PUBLIC PARTICIPATION	The citizens concerned with the planning area take part in the planning process rather than react to decisions made.
COSTS	The financial implications of a proposal, the price paid in dollars.	OBJECTIVE	A quantifiable end result to be achieved.
ENVIRONMENT	All of the natural and man made systems, conditions and commodities of a planning area.	POLICY	The decision concerning the objectives to be achieved and the means of achieving them. For land use planning we are mainly concerned with the objectives and targets.
LAND USE	The human use of the planning area. This may vary from very intensive use in urban areas to very extensive use in wildland areas.	RESOURCE	Any commodity that meets a need.

RESOURCE MANAGEMENT	The wise use of a particular resource like forests to achieve a specific end.	SEQUENTIAL USE	Where one use is followed by another in planned sequence. For example, a first use could be gravel extraction followed by residential development and use.
SENSITIVE AREA	An area of land and/or water that contains features whose protection is advocated by any individual or interest group.	TARGET	A quantified end with a call date.

Appendix 2

Discussion on the Terms Policy, Objectives and Targets

The term policy refers to the objectives and targets for a planning area. To assist in setting tentative policy it is useful to recognize the basic needs of society that are dependent on land and water resources:

- food and water
- shelter (a place to live)
- jobs (income)
- recreation
- quality environment

It is suggested that policy, for land use planning, should recognize all of these basic needs. It is also suggested that a reasonable balance is required among the various basic needs and that variety of choice is desirable within any given need.

Planners in isolation have no way to determine the optimum balance and variety. The best way to approach this task is through an open planning process with the public to be served.

A. POLICY, OBJECTIVES AND TARGETS DEFINED

The term "policy" is used here to mean a long term high level decision that indicates the Ministry stance regarding some question. For land use planning the primary policy question is —which set or group of objectives will be chosen. After the objectives are chosen the targets may be calculated.

Objectives are quantifiable ends which must relate to one or more of the basic needs and should wherever possible be stated in terms of human impacts or benefits like food, shelter, jobs or dollars earned or user days of recreation or environmental quality standards. It is also necessary to specify clearly which group of people will receive the benefits. This is necessary so proposed objectives and any trade-offs may be evaluated.

Targets are quantified objectives with a date for achievement.

Wherever possible or applicable, targets should also be stated in terms of human impacts to assist decision makers in making a choice. After a choice is made the human impact target must be translated into resource production figures or otherwise quantified relative to land, so land area requirements may be calculated.

Targets stated in terms of commodities like wood volume or land area, are called "proxy targets" or "production targets". They are necessary steps in planning, but do not in themselves provide a means of evaluation.

A hypothetical example of an objective and a target for forestry is:

Objective: to maintain the existing number of forest industry jobs in a region.

The target: 1500 jobs in the year 2000.

The wood production target could be 2.1 million cubic metres of wood per annum. The

amount of land required for this would depend on the land capability and the level of management.

For certain environmental concerns the possibility of expressing objectives and targets in human impacts may not exist. Therefore, it is necessary to state these objectives in whatever quantifiable way is most appropriate. For

example, an objective for preservation of Indian Rock paintings could be to preserve all of them. The target would then be the total number of such paintings that are known to exist. Should more be found from time to time, the target could be adjusted, but the objective would remain unchanged.

Appendix 3

Discussion on Capacity, Capability, and Other Related Terms

Capacity means the upper limit to which an area of land, or water, may be used or developed without an undesirable change taking place in the environment. This will be called "use-capacity" or "development capacity". In this context the term "potential" could be used instead of capacity and mean the same thing.

Capacity may also be used to mean the potential of an area to produce biological crops, such as forests, wildlife, or food. In this context the terms "productive capacity", "production potential", or "potential productivity" should be used, but the term "potential" may also be used.

The term carrying capacity had its origin as a cattle grazing concept. However, it is now often used as a general term covering both of the above kinds of capacity.

USE-CAPACITY

Limits to human use and development of the environment may be caused by a breakdown of one or more biological components and indicated by such things as soil erosion and water pollution. For example, a campsite which received too much use, may lose its vegetative cover. This could result in serious soil erosion and the destruction of the site as a suitable place for camping. Considering capacity in this sense it could be called biotic use-capacity.

The limit to use-capacity may also be caused by purely social factors. Social use-capacity is

defined as the level of use beyond which a decrease in user satisfaction would occur due to the presence of people.

In general, the topic of use-capacity has not been well studied or understood, and few capacity standards exist. It is therefore necessary, in planning, to set arbitrary standards or adopt whatever standards are available. Capacity standards are figures that indicate, for a given use, the assumed maximum safe level of use of development for a given site.

Social use-capacity is a particular problem in this regard because the question is entirely subjective. What would be overcrowding to some people could well be quite acceptable to others. The best way to overcome this aspect of the problem is to conduct a planning process where participation of the client group is achieved. The social values of the people for whom the plan is being made can then be understood and implemented in the plan.

PRODUCTIVE CAPACITY

Productive capacity refers to the potential of an area to produce biological crops. In this context the terms productive potential and productive capacity may be considered synonymous. It is always necessary to qualify the term by indicating a focus such as timber or fish. Thus, we could say productive capacity for timber or productive capacity for fish.

When the foregoing terms are used without any modifiers it will be assumed that they refer to the "ultimate" or "total" potential for a planning

area. In some cases it may be necessary to calculate the "accessible" or the "developed potential". In each of these cases the figures generated will be lower than those for the (total) productive potential and the distinction between the two must be clearly stated and understood.

The Ontario Land Inventory and the Canada Land Inventory deal with a topic called land capability. Capability is defined as the natural ability of land to provide continuous opportunities for benefits under an assumed level of management. The subjects covered are agriculture, forestry, wildlife and recreation. Present access and land ownership are not considered.

In the case of agriculture, forestry and wildlife, the classes shown on the inventory maps are calibrated to growth figures. For example, class 2 forest land can produce 91-110 cubic feet per acre per year. Such capability maps may therefore be used as one means of calculating the productive capacity of a planning area for the topics covered by the inventory. It is important to understand that a variety of other means are also available.

Recreation capability is another topic treated by the land inventories. In this case however, the capability classes, except for cottaging, are not

calibrated to precise capacity figures. Rather the classes are only relative and local standards must be adopted for each planning area.

LEVEL OF MANAGEMENT AND INSTITUTIONAL CAPACITY

In making calculation of the productive capacity or the use-capacity of an area it is always necessary to make assumptions regarding the level or amount of management. For example, class 2 forest land that is well managed could produce up to 110 cubic feet of wood per year. However, this would only be possible under good management. Should the anticipated level of management be lower, then the productive capacity must also be lower.

Institutional capacity is similar to level of management in that it places limits on the productive capacity or use capacity that are below the actual total potential. Institutional capacity is easiest to illustrate in the case of recreation. For example, a recreation area could have a use-capacity of 1,000,000 users per year. However, the administrative unit controlling the area may only have facilities, staff and budget for 500,000 users. Therefore, the institutional capacity is well below the use-capacity.

Appendix 4

Degree of Residential Development

A development unit is any single family residence, cottage, lodge or motel unit¹ or any permanently located dwelling for a single family.

<u>Development Class</u>	<u>Development Units Per Square Kilometre</u>
1 — Very Dense	16+
2 — Dense	8-15
3 — Moderate	4 -7
4 — Sparse	1- 3
5 — None	0

¹ A lodge or motel unit is the part of the motel or lodge that would normally be occupied by one family, i.e., a lodge with 10 housekeeping cabins would count as 10 development units.

Appendix 5

Land Use Codes for Plan Maps

The Uses:

- S — Preservation
- R — General Recreation including public, cottages and commercial
- E — Resource Extraction
- A — Agriculture
- U — Urban
- I — Industrial, Transportation or Waste Disposal
- H — Rural Residential
- M — Mixed Uses

The above codes may be used in combination to show primary and secondary land use relationships. Primary use is shown by a capital letter and secondary use by a small letter. Single use is shown by a single capital letter.

A mixed use area where two uses have equal status may be shown by a pair of capital letters.

The term primary is used to convey the meaning of priority rather than intensity or abundance of use. Secondary means that a use is permitted so long as it does not conflict with the primary use of the area.

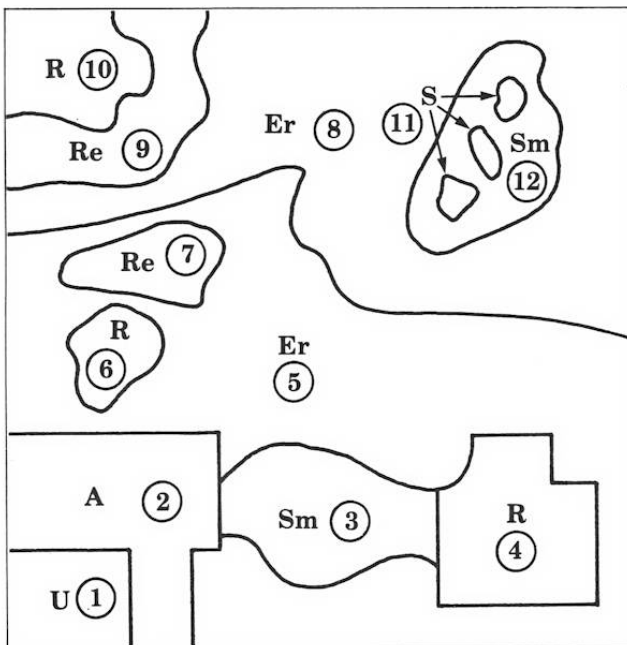
Appendix 6

Example of a Conceptual Plan Map and a Land Use Plan Map

Conceptual Plan Map



Land Use Plan Map



Area Land Use Policy Form

AREA NO. _____

I. Description:

Extent _____

Area: Crown ____ Patent ____ Water ____

Present use and development _____

Present degree of residential development ____

Sensitive areas _____

Problems and issues _____

II. Area Land Use Policy:*

1. General purpose _____

2. Permitted uses (indicate primary and secondary if applicable) _____

3. Restrictions _____

4. Further comments _____

Land Use Code _____

* For patent land this indicates the Ministry's intentions concerning land use.

Area Land Use Policy Details		AREA No. _____	
Activities and Developments	Permitted		Restrictions and Targets if applicable
	Yes	No	
Mining -Crown			
-Patent			
Forestry -Crown			
-Patent			
Trapping -Crown			
-Patent			
Commercial Fishing			
Angling			
Hunting			
Crown Land Recreation			
Cottages -Crown			
-Patent			
Remote Cottages			
Comm. -Crown			
Lodges -Patent			
Outpost Camps			
Parks			
Roads			
Access Points			
Other (Specify)			

Appendix 7

Methods for Public Participation

WORKSHOPS AND SEMINARS

Workshops and seminars are small group discussions which can result in excellent two-way communication. Depending on who is involved, the workshop approach can be of moderate to high value to the planning process. This technique is most valuable if those attending the workshops are well informed, respected and represent a cross-section of the interest in the planning area.

INTEREST GROUPS

In this method the planners meet with various interest groups in the area to discuss the planning issues. Two-way communication is possible in this approach, but there is no opportunity for opposing views to be heard. If the planners recognize the bias of the particular group, this method can be moderately effective.

ADVISORY COMMITTEES

Advisory committees have been a most useful means of achieving public participation. If respected knowledgeable people are selected for the committee and if the terms of reference are sufficiently clear, then this approach may be rated quite high. On the other hand, a poorly selected committee with vague terms of reference can be a disaster.

PERSONAL CONTACT

A very important method is through the personal day to day contacts of the planning team. Some planners are able to communicate well and are also good listeners. Where this is true and where planning areas and numbers of people are small, no other special means of public participation may be required.

The personal contact method is a very potent form of participation. However, its scope is limited when a planning area contains large numbers of people.

KEY PEOPLE

Key people of a planning area are knowledgeable, respected by the general public and have the power to influence decisions in their area. They are also called influentials, power actors or respected persons. R.C. Powers has described a practical procedure for recognizing the power actors in a community (see list of references).

Many people have questioned the use of key

people in the planning process because of the elitist nature of the approach. Recognizing this, it is important to balance it with other techniques in an open process. It is clear, however, that if key people are not involved in the process, the resultant plan will likely fail.

STOREFRONT DISPLAY OR OPEN HOUSE

This method is gaining in popularity because of its informality. Essentially, it involves the display of information about a plan in a street level building within a planning area. People are permitted access to the building at their leisure, and are encouraged to respond with their thoughts and concerns. This method could be rated as moderately effective, although it does require that people enter the planners' arena rather than the reverse.

PUBLIC HEARINGS AND MEETINGS

This is the most frequently used method of participation, and in many instances one of the least effective. Hearings are usually formal sessions where the planning agency listens to briefs submitted by interest groups. Public meetings are also usually quite formal affairs where the public listens to a presentation by the planning agency. Response to the presentation may be permitted but it is usually rather formal and limited.

While the two methods differ slightly, the results are usually similar due to the lack of adequate two-way communication.

SURVEYS AND QUESTIONNAIRES

This is a relatively inexpensive method of determining public views but it is generally rated low because of the relative rigidity of the questionnaire, and the possibility of interviewer bias. In most cases this approach involves one-way communication only. It is usually a straightforward process to analyse the output of surveys in terms of the planning issues.

NEWS MEDIA

The use of newspapers, radio and television for public participation is rated low because of the one-way nature of the communication. This may be partially alleviated by providing for public feedback through letters, but this restricts response to relatively few people who are motivated and capable of replying in this manner. It is important to point out, however, that the news media are extremely useful for advising the public of a planning program, the planning issues, and of the various opportunities for them to participate.

Appendix 8

Recommended Readings

A. GENERAL PLANNING

1. Hills, G.A. 1961. "The Ecological Basis For Land Use Planning: Research report number 46, Ministry of Natural Resources, Queens Park, Toronto.
2. McHarg, I.L. 1969. "Design with Nature". The American Museum of Natural History Doubleday/Natural History Press Doubleday & Company Inc., Garden City, New York.

B. CAPABILITY AND CAPACITY

1. Clark, C. 1977. "Prescribing Carrying Capacity Standards for Wildland Areas: Bridging the Gap between Policy and Management"- presented at a symposium on wildlands, University of Waterloo, March, 1977. Copies of paper available from Ministry of Natural Resources, Land Use Coordination Branch, Queens Park, Toronto.
2. Godin, V.B. and Leonard, R.E. 1977. "Design Capacity for Back Country Recreation Management Planning". Journal of Soil and Water Conservation, July -August 1977, Vol. 32, No. 4.
3. Godschalk, D.R. and Parker F.H., 1975. "Carrying Capacity: A Key to Environmental Planning". Journal of Soil and Water Conservation July - August, 1975, Volume 30, No. 4.
4. Hills, G.A. 1959. "A Ready Reference to the Description of the Lands of Ontario and its Productivity", Ministry of Natural Resources, Queens Park, Toronto.

5. Lands and Waters Groups, Surveys and Mapping Branch, Ontario Centre for Remote Sensing 1977. "A Ready Reference Ontario Land Inventory, Ministry of Natural Resources, Queens Park, Toronto.

C. PUBLIC PARTICIPATION

1. Arnstein, S.R. 1969. "A Ladder of Citizen Participation". American Institute of Planners Journal, July 1969, Volume 35.
2. Breglia, F.J. 1973. "Public Participation in Planning, Policy and Programme". Ministry of Culture and Recreation, Toronto.
3. Powers, R.C. 1965. "Identifying the Community Power Structure". North Central Regional Extension Publication No. 19, Iowa State University of Science and Technology Co-operative Extension Service, Ames, Iowa.
4. Wagar, A.J. & Folkman, W.S., 1974. "Public Participation In Forest Management Decisions", Journal of Forestry, July, 1974, Volume 72, No. 7.
5. Dale Duane 1978. "How To Make Citizen Involvement Work - Strategies for Developing Clout". C.I.T.P., 138 Hasbrouck, University of Massachusetts, Amherst MA, 01003.

D. WATER

1. Guidelines for Watershed Management Planning for Conservation Authorities, Ministry of Natural Resources 1979 (draft).
2. Environment Canada. Monograph on Comprehensive River Basin Planning, Ottawa, Information Canada 1975.

Appendix 9

The Policy Regarding Land Use Planning Nomenclature

The following recommendation was contained in SE.054 (1979 11 19):

RECOMMENDATION

The Policy & Priorities Committee Minutes of 1979 09 25 gave direction that a term for the product of the land use planning program acceptable to the ADM's and Executive Coordinators be provided. At the above-mentioned meeting Mr. Foster indicated that "Land Use Strategy" would be an acceptable term for use in Southern Ontario. Subsequent to that meeting Mr. Ringham indicated Northern Ontario's unwillingness to revert from the term "Land Use Plan" as it had been in continual and widespread use in the north since 1972.

In the light of the above, LUCB recommends the following nomenclature be approved:

LAND USE PLANNING The term to be used when describing the Ministry process which culminates in one of the documents described below, or the Ministry program under which these documents are prepared.

DISTRICT LAND USE PLAN The name to be applied to the product of the Ministry district land use planning process in Northern Ontario.

DISTRICT LAND USE STRATEGY The name to be applied to the USE STRATEGY product of the Ministry district land use planning process in Southern Ontario.

STRATEGIC LAND USE PLAN The name to be applied to the product of the Ministry regional land use planning process in Northern Ontario.

COORDINATED PROGRAM STRATEGY The name to be applied to the product of the Ministry land use planning process at the Southern Ontario level.

ONTARIO STRATEGIC LAND USE PLAN The name to be applied to the product of the Ministry land use planning process at the provincial level.

Upon approval, the above will be issued as a policy directive and the appropriate changes made to the Guidelines to Land Use Planning.

This recommendation was approved on 1980-1-10 By Dr. J.K. Reynolds, Deputy Minister of Natural Resources.