

# TRANSMISSION RIGHT-OF-WAY MANAGEMENT PLANS<sup>1</sup>

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**Abstract.** The need for, and the content of, Land Management Plans as developed by the Department of Transmission Environment, Ontario Hydro is discussed. These plans are seen as a means of keeping field forces informed and of dealing with lands occupied by transmission lines that require special treatment because of ecological, social problems, or because of special commitments made to property owners or concerned groups. The treatment of these lands cannot be dealt with by general specifications.

The idea of producing Transmission Right-of-Way Management Plans was first conceived during the mid 1970s because it was suspected that the Ontario Ministry of Environment (MOE) would require plans for the management of new rights-of-way. We also needed a vehicle to get information on how to deal with special treatment areas to our field forces. This information is necessary because special commitments have been made to various property owners in order to acquire rights-of-way and because of our concerns for certain environmentally sensitive areas.

One example that comes to mind is a West Virginia white butterfly habitat. The West Virginia white butterfly was placed on the Ontario Endangered Species list and one of the few habitats in Ontario was identified as lying on a 500 kV corridor that was under construction. The route was slightly altered to avoid most of it, but this area was identified as a special treatment area. Many other such land areas began to be identified and management agreements were reached with parties concerned as to how we were going to deal with them during maintenance operations. Some means of getting this type of information to the field staff responsible for right-of-way maintenance had to be devised, and the Right-of-Way Management Plan concept was born.

The term Right-of-Way Management Plan has evolved to Land Management Plan and allows plans for the management of lands other than rights-of-way that a transmission facility may be in-

olved with.

## Management Planning

In 1977, the Management Plans Working Group identified eight points that identified the need for management plans.

- (1) To ensure that Ontario Hydro lands are used wisely in keeping with good Corporate practices.
- (2) To carry through public and other commitments into maintenance practices.
- (3) To provide for the possibility of management plans being required by the Ontario Ministry of Environment (MOE).
- (4) To reduce conflicts with the adjacent landscape, land uses, and landowners.
- (5) To ensure that rights-of-way and sites are managed on the most economical long-term basis, consistent with safety and reliability.
- (6) To provide a central record of work history on the right-of-way as it affects maintenance.
- (7) To assist in the evaluation of multiple use proposals.
- (8) To protect and enhance the long-term environmental quality of the site or right-of-way.

**Objectives.** With these needs in mind, the Working Group decided that the purpose of land management planning should be to integrate Ontario Hydro and government policies with site conditions to develop and implement specific plans to ensure safety, reliability, minimal costs, a high standard of environmental quality, and to encourage socially desirable secondary uses. The following four objectives for a Land Management Plan were then produced.

- (1) To collect and maintain an inventory of pertinent information necessary for sound management decisions.
- (2) To compile and analyze inventoried data within the context of current social values and corporate objectives.

<sup>1</sup>Presented at the annual conference of the International Society of Arboriculture in Louisville, Kentucky in August 1982.

- (3) To recommend optimal resource management practices on a site specific basis.
- (4) To develop guidelines to assist regional and area personnel to implement the management plan recommendations.

### An ideal plan

Before describing a Land Management Plan, let us take a look at what we already have, what we need, and who the user is going to be.

**Have.** We have a trained work force that is capable of carrying out normal maintenance activities and supervising maintenance contracts efficiently.

We have work specifications governing normal right-of-way and site maintenance activities such as Line Clearing, Selective Vegetation Control, and Condition Patrols.

**Need.** What we need then are specifications governing maintenance activities for specific areas that are not considered standard on a transmission right-of-way or other related site.

**User.** One of the ultimate users of a Land Management Plan content will be the personnel responsible for doing the maintenance work. In other words, the foreman in charge of an Ontario Hydro Forestry Crew or a contract supervisor.

A Land Management Plan is an inventory of the lands identified in it and a specification dealing with areas that are not or cannot be dealt with by general specifications. A Land Management Plan will pinpoint and describe treatment of such things as: 1) ecologically sensitive areas, 2) sites of historical significance, 3) endangered species that may be encountered, 4) wildlife habitats, existing or potential, 5) graves, not necessarily cemeteries; an odd one is discovered now and then, 6) archeological sites, 7) vistas, 8) locations where special treatment agreements have been reached with property owners or controlling authorities, and 9) any location where a deviation from routine practices is required such as a location where herbicides cannot or should not be used.

Land Management Plans should also: 1) encompass the long range aspects of right-of-way management and be more than just a maintenance specification package, 2) provide a good, understandable description of the physical

characteristics of the land they deal with, 3) have a required review date, 4) be capable of being updated, and 5) be useful for work programming.

### Format

A standard format for management plans is followed with minor deviations as required depending on the particular plan and the concerns dealt with by it.

A table of contents itemizes the content of the document. This is followed by a figures list, a list of tables, and a list of support data that forms part of, but is not included in, the actual document. The latter may identify support information such as photomosaics, topographic maps, etc.

*Introduction.* The introduction is a short, descriptive statement of what the plan covers. Following the introduction, is a section dealing with:

*The land analysis.* This section itemizes:

1. the *Facility* — this is a description of the transmission line that occupies the land and is followed by a description of:
2. the *Legal Status* of the property, that is, how much is owned by Ontario Hydro, how much is taken under easement, and the ownership, granted leases, and licenses for secondary use, etc.
3. Also included is a section describing the *Biophysical Resources* which provides information dealing with the: geology, physiology, soils, hydrology, flora, fauna, and areas of environmental or social concern are also identified here and recommendations for treatment included.

Following the Right-of-Way Analysis is a section called: *Land Use* which provides a description of land uses adjacent to the right-of-way and may include secondary uses of the right-of-way not previously described under the heading of *Legal Status*. These uses may be: encroachment by adjacent properties in the form of parking, unauthorized garden plots, trail bike activities, or passive secondary uses such as pedestrian pathways.

The next item of a Management Plan is generally a section on: *Management Analysis*. This section deals mainly with routine maintenance activities and identifies responsibilities for the treatment of

specific areas whether by Ontario Hydro or other users. Also included are recommendations and restrictions concerning right-of-way screens, waterways, drainage systems, vegetation controls, and outlines known future developments.

All of the foregoing finally leads to the section on: *Management Areas*. This section of the management plan is the "meat" of the document for the personnel responsible for the ongoing maintenance of the right-of-way.

The total right-of-way is divided into sections of various sizes depending on the particular concerns and may vary from one span minimum up to ten spans maximum for computerization purposes. The detailed land inventory is used to determine individual numbered management areas.

Each management area identifies its location and details the land use, legal status, and access. It includes a description of the biophysical and social characteristics of the land dealt with. It identifies any constraints present such as screens, drainage systems, environmentally sensitive areas, agricultural lands, and erodible slopes. These also provide detailed management practices if other than routine maintenance practices are to be applied.

**Producing a management plan.** Considerable effort by many disciplines is required to produce a plan.

- (1) A project team is assembled from within the Department of Transmission Environment and includes a member from the region concerned. A project team generally will have a minimum of three members, but may have five, the team leader being a member of the Environmental Resources Section.
- (2) A right-of-way inventory is done by Environmental Resources Section and the initial document produced which includes maintenance recommendations.
- (3) The draft is then reviewed by the Project Team and revised as necessary. The Manage-

ment Plan is then produced and approved by the Project Team.

- (4) The Plan is then submitted to the Region Transmission Environment Superintendent for implementation.

*Implementation.* The implementation of Land Management Plans is administered by Land Management Programs Section, Department of Transmission Environment. The Plan is considered ready for implementation during the first complete budget year, but specific parts of a Plan may be implemented during the current budget year if it is desirable.

*Monitoring.* Land Management Programs Section monitors the maintenance programs within the regions and in doing so, ensures the management of the specific areas identified in the Land Management Plans.

*Updating.* Land Management Plans will be reviewed at five-year intervals and updated where necessary. When necessary, changes can be made yearly on a site specific basis.

**Consequences of not having land management plans.** We foresee the possibility of agreements and commitments that have been made with property owners, conservation groups, and government agencies being violated or in some cases, ignored as being one of the consequences of not having Land Management Plans. We also see the possibility of being accused of poor stewardship of the lands we control if we cannot document the treatment methods of specific sites that happen to be located on our corridors, particularly, if our standard specifications do not apply to them.

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