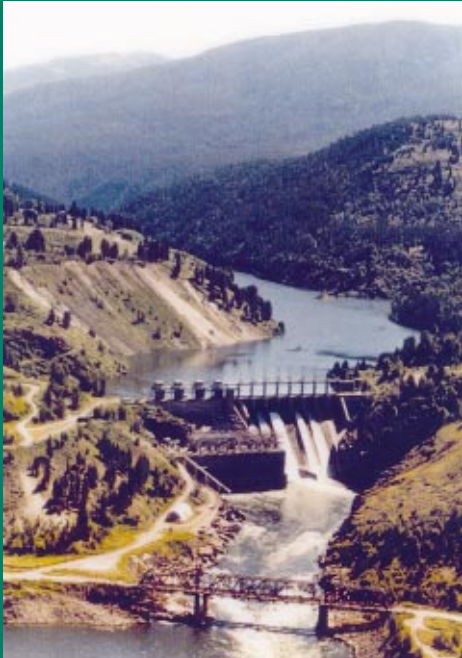


Guide for WATERPOWER PROJECTS



COVER PHOTOS:

Upper right:

Falls on Akolkolex River near Revelstoke, British Columbia

Lower right:

Penstock for Sechelt Creek Waterpower Project on the Salmon Inlet,
British Columbia

Lower left:

Intake for Sechelt Creek Waterpower Project on the Salmon Inlet,
British Columbia

Above photos from files of Water Management Branch, Land and Water
British Columbia Inc.

Upper left:

Waterpower Project on the Pend d' Oreille River near the Canada –
USA border on the Columbia River, British Columbia

Photo courtesy of Teck Cominco Metals Ltd., Trail, British Columbia

Guide

for

WATERPOWER

PROJECTS

March 2003

ACKNOWLEDGMENTS

Land and Water British Columbia Inc. wishes to thank all those who commented on the draft Guide, including proponents for waterpower projects.

The notion of this document began almost fifteen years ago with the first request by BC Hydro to independent power producers for proposals to construct waterpower projects. While the details of a review of a project may change with time, the fundamentals remain the same. The challenge is always to be clear and comprehensive at once. The persistence of Richard Penner and Michelle Porter of Land and Water British Columbia Inc. in the preparation of the Guide and Donna Moreau of DoMo Communications for designing the document is appreciated.

TABLE OF CONTENTS

1	PREAMBLE
2	OVERVIEW OF PROCESS
4	OTHER LEGISLATIVE REQUIREMENTS
5	STEPS OF THE PROCESS
6	STEP 1 Submission of Application
12	STEP 2 Review of Application by LWBC
13	STEP 3 Preparation of Development Plan
16	STEP 4 Review of Development Plan by LWBC
17	STEP 5 Review of Project
22	STEP 6 Preparation of Summary Report
23	STEP 7 Decisions on Application
25	STEP 8 Construction of Project
26	STEP 9 Operation of Project
28	STEP 10 Monitoring of Project
29	GLOSSARY AND ACRONYMS
35	APPENDICES
	Appendix A Waterpower Project Application Completeness Checklist
	Appendix B Water Licence Application Drawing Standards
	Appendix C List of offices of Land and Water British Columbia Inc.
	Appendix D Template: Waterpower Project Development Plan
	Appendix E Template: Water Licence for Hypothetical Project
	Appendix F Water Applicant's Agency Resource Guide
	Appendix G Scope of Information and Reports to be Provided by the Independent Engineer
	Appendix H Scope of Information and Reports to be Provided by the Environmental Monitor

Forms and Supplementary Information

The forms and specific information for filing an application for a water licence and Crown land tenure are available on the Internet at http://lwbc.bc.ca/applying_for_land/waterpower.htm

or from the Land and Water BC Inc. Service Centers. Forms and information should be used in conjunction with this Guide.

Land and Water British Columbia Inc. is the government agency responsible for allocating Crown land and water for the benefit of British Columbians.

The environmentally-sound development of Crown land and water resources presents a significant opportunity for the Province to stimulate and diversify the economies of B.C.'s rural and coastal communities. In order to do that, LWBC focuses on sectors that have the most potential to achieve these goals, and waterpower projects have such potential.

A waterpower project requires a water licence under the *Water Act*, and tenure under the *Land Act* for any component of the project situated on Crown land. As part of LWBC's commitment to accelerate economic development in key sectors, the corporation is committed to reducing the regulatory burden and providing clients with a more streamlined process. Applications for a waterpower project will be processed through "one window" with the water licence and Crown land tenure applications adjudicated concurrently.

This guide is a framework for the information a proponent will need to provide in order to facilitate an application. A key part of any application for a waterpower project will be to assess its impacts. Projects that have wide-ranging impacts will require the involvement of many agencies in the process. LWBC will ask for input during the review of the project to ensure decisions are balanced. Agencies consulted could be communities and the general public; non-government organizations; and people already holding rights under the *Water Act* and *Land Act* that may be affected by the project. Aboriginal rights and title will be assessed in accordance with the *Provincial Policy for Consultation with First Nations (2002)*. Simpler projects may require only that the proponent work under the direction of LWBC to address general concerns about the project.

LWBC's commitment is to produce balanced decisions on applications through a transparent and fair process and reach that decision in a timely manner.

Definitions for residential, commercial and general categories are in section 15 of the Water Regulation.

The process for bringing a waterpower project into production consists of ten steps. *STEPs 1 to 7* set out the requirements for the submission, review and adjudication of an application. The requirements for the construction, start of operation and monitoring of the project are described in *STEPs 8, 9 and 10*.

This Guide is applicable to run-of-the-river projects as well as storage-supported projects. If the electricity from the project will be used in the commercial and general categories, the projects will be reviewed according to this Guide. Projects for the generation of electricity in the residential category are not captured.

OVERVIEW OF STEPS 1 – 10

STEP 1 – Submission of Application

A checklist for the information to be provided by the proponent is in Appendix A. The information should include the following:

- ▲ completed application forms for Crown land tenures and a water licence;
- ▲ maps and plans of the project;
- ▲ title certificates and legal plans;
- ▲ preliminary project definition;
- ▲ certificate of incorporation; and
- ▲ application fees.

STEP 2 – Review of Application by LWBC

This step is internal to LWBC, which will review the application for completeness. The proponent will be notified by LWBC if the application is complete, and the schedule for constructing the project will be discussed with the proponent. The schedule for completing the project will be discussed with the proponent.

Incomplete applications will be returned to the proponent with an explanation of the deficiencies.

STEP 3 – Preparation of Development Plan

The proponent is responsible for completing the Waterpower Project Development Plan, comprising the Project Definition and Impact Assessment. A template for the preparation of a Development Plan is in Appendix D.

STEP 4 – Review of Development Plan by LWBC

At this step LWBC will review the Development Plan for completeness. This will ensure that the best information will be made available for review under *STEP 5*.

If the information is incomplete, LWBC will discuss the deficiencies with the proponent for correction.

STEP 5 – Project Review

LWBC will ask local, provincial and federal government agencies, as well as non-government organizations and the general public for input on the project as appropriate. Persons whose water rights or land tenures may be affected by the project will be notified.

Aboriginal rights and title will be assessed in accordance with the *Provincial Policy for Consultation with First Nations (2002)*, and reasonable opportunities will be identified to accommodate aboriginal interests, mitigate infringement or negotiate a resolution.

STEP 6 – Preparation of Summary Report

The proponent will prepare the Summary Report, which condenses the Development Plan and states the conclusions on the assessment of the impacts made in *STEP 5*.

STEP 7 – Decision on Application

LWBC will review all information related to the waterpower project, and make a decision to grant or refuse the application under the *Water Act* and *Land Act*.

If the application is granted, the proponent will be offered tenure to the Crown land and provided a draft water licence. When the proponent accepts the offer, the land tenure and water licence will be signed and issued by LWBC.

STEP 8 – Construction of Project

The water licence will include conditions that require the licensee to submit criteria for the design of the project and plans for its construction. The licensee may be required to retain an independent engineer and an environmental monitor who will provide information and reports to LWBC. The information and reports will be used by LWBC to ensure that the construction is acceptable.

STEP 9 – Operation of Project

The parameters and procedures for the operation of the project will be in a report prepared by the licensee and submitted to LWBC, which will review and issue directions for the commencement of the operation of the project.

STEP 10 – Monitoring of Project

The proponent will be required to submit information on the quantity of electricity generated by the project and other information on the compliance with the water licence and land tenures.

Sometimes the proponent may be required to implement a monitoring program to confirm that a particular impact has been satisfactorily addressed.

OTHER LEGISLATIVE REQUIREMENTS

The proponent's investigation of a waterpower project should consider the requirements of all legislation in the context of the diversion of water and use of Crown land. Some of these requirements are discussed below.

Further information is available from the Environmental Assessment Office, or their internet site as follows:

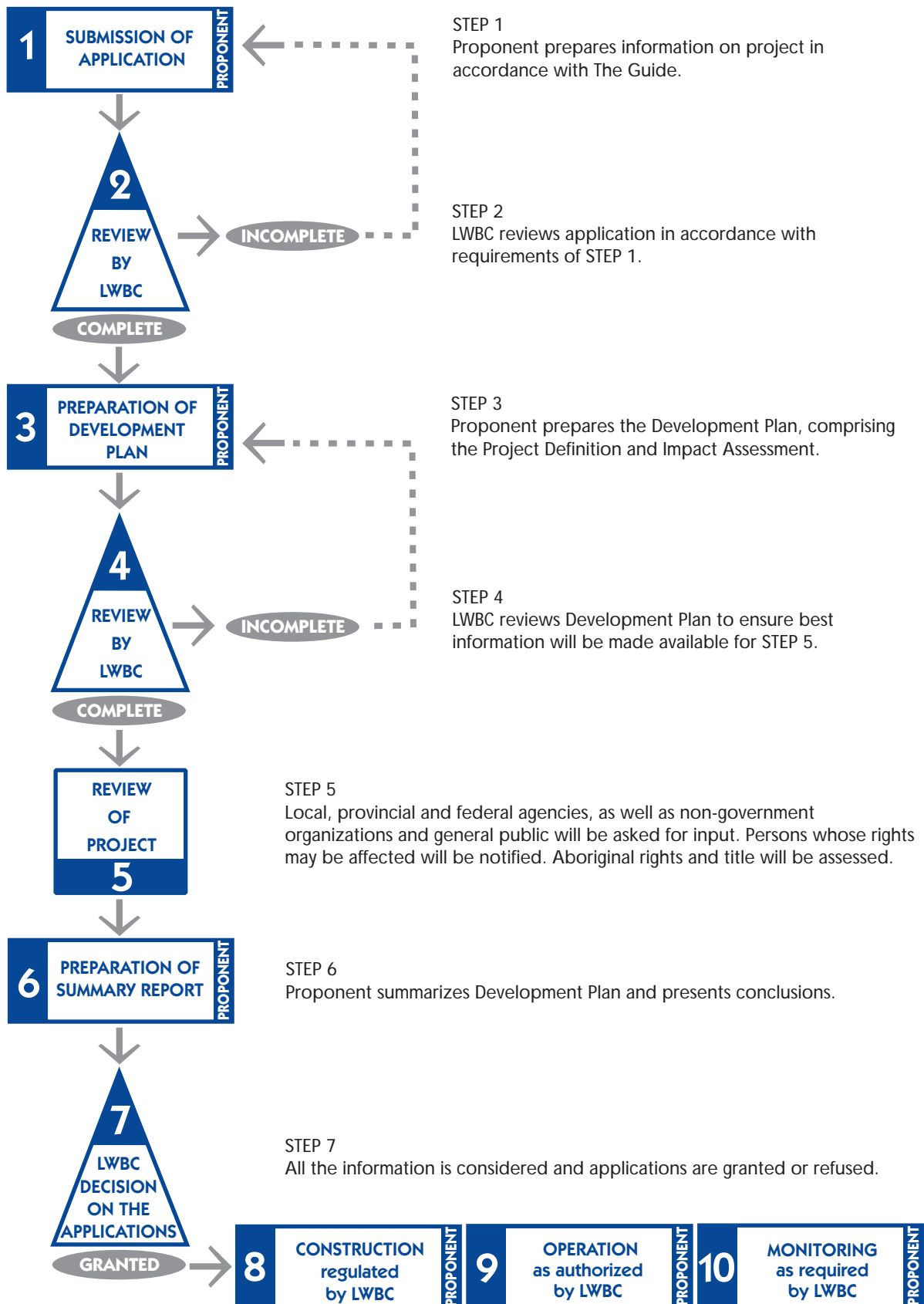
<http://www.eao.gov.bc.ca/>

Information on community watersheds is available from the Ministry of Sustainable Resource Management or their internet site as follows:

<http://srmwww.gov.bc.ca/wat/cws/cwshome.htm>

- ▲ A waterpower project that has a capacity greater than the threshold set for energy projects under the *Reviewable Projects Regulation*, or those otherwise designated by the Minister, is reviewable under the *Environmental Assessment Act (EAA)*. If a project is approved under the EAA, any licencing under the *Water Act* and *Land Act* is provided by LWBC.
- ▲ The *Water Protection Act* and the *Fish Protection Act* include provisions that may affect some projects.
- ▲ Reserves established under the *Water Act* and *Land Act* may affect the development of a waterpower project on certain streams and tracts of Crown land. Information on such reserves is available from LWBC.
- ▲ The stream for a waterpower project may be classified as a “community watershed” under the *Forest Practices Code of British Columbia Act* and this may impose conditions on the construction of the project.
- ▲ Ministry of Sustainable Resource Management should be contacted regarding land and resource plans for the area encompassing the stream on which the waterpower project is situated.
- ▲ Local government may require that the land required for the waterpower project be rezoned before the project can be constructed. When the review of an application is initiated, if rezoning is required, LWBC and local government should discuss the appropriate point in the LWBC process at which the applicant should formally initiate the rezoning process.
- ▲ The federal *Fisheries Act* and the *Navigable Water Protection Act* may require decisions that will initiate a review of the project under the *Canadian Environmental Assessment Act*. Such a review will be coordinated as much as possible with the review described in this Guide.

STEPS OF THE PROCESS



Combining STEPS 1 & 3

The minimum requirement for the submission of an application does not include an assessment of the impacts of the project. The studies that provide the information to assess the impacts are expensive and may take more than a year to complete. The assessment is usually completed as part of the preparation of the Development Plan under STEP 3, which gives the proponent the security of an application filed with LWBC while gathering additional information on the project.

For projects that do not have extensive impacts, the proponent may choose to complete the Development Plan and submit it in place of the Preliminary Project Definition. In this case, the submission will move to STEP 4 only if it first satisfies STEP 2.

The Application Package is also available on the following internet site:
http://www.lwbc.bc.ca/water/app_package/

The submission of an application for a waterpower project is the proponent's opportunity to officially provide LWBC with information required under the *Water Act* and *Land Act*. Most applications will require the proponent to work with qualified professionals to ensure that the information in the submission is complete and to the satisfaction of LWBC.

INFORMATION REQUIREMENTS

An application for a waterpower project must include the following information:

- ▲ completed application forms for Crown land tenures and a water licence;
- ▲ maps and plans of the project;
- ▲ title certificates and legal plans;
- ▲ preliminary project definition;
- ▲ certificate of incorporation; and
- ▲ application fees.

Application Forms

An Application Package that includes forms and directions for completing an application for a water licence and Crown land tenure is available from any LWBC office. The locations of these offices are listed in Appendix C.

The Application Package should be used to complement this Guide, however the directions in this Guide prevail over the instructions in the package. Some differences between the package and this Guide are worth noting and are as follows:

- ▲ The checklist in Appendix A of this Guide must be used in addition to the checklist in the package.
- ▲ The Drawing Standards in the package are also applicable to submissions for waterpower projects except as amended in this Guide.
- ▲ The package requires the preparation of a "Water Development Plan", which requirement is separated in this Guide into two parts:
 - The first part is the Preliminary Project Definition, which is discussed further along in *STEP 1*.
 - The second part is the preparation of the Waterpower Project Development Plan, which is discussed in *STEP 3*. A template for the Development Plan is in Appendix D.

Forms and schedules required

Schedule 2 should be completed if a licence for storage purpose is required.

The forms from the Application Package to be included with the submission are as follows:

- ▲ Application form for Crown Land and Water Licence.
- ▲ Appendix A – Application for Crown Land – *Land Act*.
- ▲ Appendix B – Application for Water Licence – *Water Act*.
- ▲ Economic Benefits Questionnaire for Development of Crown Land and Water.
- ▲ Schedule 2 – Dam & Reservoir Information.
- ▲ Schedule 3 – Power Information.

Maps and Plans of the Project

Maps and plans are a highly effective tool for presenting information on certain aspects of a project. Standards to ensure the best use of this tool are included in the Application Package discussed above. These standards are included in Appendix B, and are applicable to a waterpower project. The maps and plans to be submitted are discussed below.

General Location Map

The general location of the project should be shown on a map at a scale of 1:250000 to 1:50000. This map indicates the location of the project in British Columbia, nearby towns and communities, and public transportation routes that lead to the vicinity of the project. The location of the project should be indicated by a pointer.

Topographic Map

The topographic map shows the physical features of the area in which the project is to be constructed. The scale of the map should be between 1:50000 to 1:20000. Preferred size of the map is 11x17 or smaller, and more than one sheet may be used. However, the size and number of the sheets should be adjusted to best show the required information, which is as follows:

- ▲ all streams and tributaries that will be affected by the project;
- ▲ all points of diversion including intakes and dams;
- ▲ the boundaries of the watershed above all points of diversion;
- ▲ the sites of all dams for the storage of water;
- ▲ the components of the project including the following:
 - water conveyance structures such as canals, tunnels, pipelines, and penstock;
 - powerhouse and switchyard;
 - transmission line from the switchyard to point on the provincial power grid, connection with a utilities distribution system, or place of use;

- All existing roads and trails in the vicinity of the project and access roads to be constructed.
- Sites related to the construction and operation of the project, which may include offices, housing for workers, vehicle parking, lay down areas, and gravel removal areas.

The information on the topographic map may be shown schematically with a legend to distinguish elements. The direction to North should be shown. A title block should indicate who prepared the map and the source of the information.

Plans of the Works

The plans of the works should be at a scale between 1:20000 and 1:5000. The preferred size for these plans is 11x17 and more than one sheet may be used.

All the components of the project shown on the topographic map are to be shown in greater detail on the plans of the works. The detail should reflect the investigation completed by the proponent in conjunction with qualified professionals. The plans of the works should include the following:

- ▲ The general arrangement of the intake, and water conveyance structures such as tunnels, pipelines and penstock.
- ▲ Typical cross section and profile of the dams proposed for the storage of water, the type of spillway, and the materials to be used in the construction of the dam.
- ▲ The total and active volumes of the storage reservoirs.
- ▲ The areas above the natural boundaries of the stream to be flooded by any of the structures.
- ▲ The configuration of the powerhouse, the tailrace channel and the switchyard.
- ▲ The areas required for staging construction and excavation of materials to be used in the construction of the works.
- ▲ The areas required for the temporary and permanent buildings related to the construction and operation of the works, including sites for communication equipment.
- ▲ The active and inactive roads and trails in the vicinity of the project, access roads to be constructed, and parts of active and inactive roads to be improved.
- ▲ The route and size of the transmission line, and the manner of construction, e.g. buried, wooden pole.
- ▲ The boundaries of all parcels of private and Crown land in the vicinity of all the works.

Crown land needed for project

The Crown land application area containing the project improvements should be indicated with a polygon-shape outlined in red with dimensions (metres) and area (hectares). The boundary of the polygon-shaped application area should be:

- ▲ generous enough to accommodate changes required in the transition from the conceptual arrangement of the works to their final design; but
- ▲ specific enough to include only the lands reasonably required for the project.

Title Certificates and Legal Plans

All parcels of land on which the project will be built must be identified with the following documents, which are to be included with the submission of the application.

- ▲ The State of Title Certificates from the Land Title Office.
- ▲ The survey plans and charges described in the titles.

A legal description of all adjacent lands that will be affected by the project is to be provided.

Preliminary Project Definition

The preliminary project definition is a concise description of the scope of the project and should include the following:

- ▲ executive summary;
- ▲ proponent identification;
- ▲ project description;
- ▲ capacity of project;
- ▲ linkages with other projects;
- ▲ market for electricity from project; and
- ▲ schedule for completion of project.

Executive Summary – The summary should be one page or less.

Proponent Identification – This section should expand the information on the first page of the application form. The company name and incorporation number are to be provided along with a description of corporate structure in terms of the people who will be involved in the review of the project. Consultants that have been retained by the proponent to assist in the review should also be identified. The person who is to be contacted for any additional information and meetings must be identified.

Identify a contact person

Project Description – The description of all the characteristics and location of each component of the project should complement the maps and plans in the submission of the application. Directions for accessing the site of each component are to be provided.

The physical features of all Crown land needed for each component of the project should be described. Ground and air photographs of the proposed sites are very helpful for understanding the project.

The status of active and inactive roads to be used to access the components of the project should be described. Indicate the extent of any construction required to upgrade existing roads. Describe the new roads to be constructed.

Trails in the vicinity of the project should be described.

Describe the route of the transmission line from the switchyard to the provincial grid or place of use if the power is to be used by the proponent or a person that is not a utility.

If the connection of the transmission line is to the provincial grid, indicate if a substation will need to be constructed or upgraded.

Capacity of Project – Indicate the arrangement of turbines and generators and the maximum power capacity of each unit. The maximum quantity of water to be diverted by the units should be described. An estimate of the maximum and average annual generation of electricity, and monthly distribution of average annual generation of electricity should be provided.

Investigation and data

The extent of the investigation and quantity of data on which the project is based should be described. For example, is the availability of water based on long-term records on the stream, or a cursory analysis of a few years of stream flow measurements on a nearby stream? Projects with insufficient data will be more difficult to assess.

The data does not need to be included with the Preliminary Project Definition; however, it will be required with the Development Plan submitted in *STEP 3*.

Linkages with Other Projects – Describe any components that the project has in common with other projects, e.g. access roads, transmission lines, substation for connection to provincial grid, etc. The other projects may be in operation, or proposed in an application submitted to LWBC.

Market for Electricity from Project – The proposed market for the electricity should be described, e.g. for sale to BC Hydro, for use by owner in the extraction or processing of natural resources, for export, for distribution to end user, etc.

This information will help determine the category of power use for fees and rentals and the interests of other agencies, such as the BC Utilities Commission. The proponent should indicate whether an energy purchase agreement is under negotiation, and the stage of those negotiations.

To obtain BC Hydro contact numbers and the green criteria see:
<http://www.bchydro.com>

For answers to general BC Hydro IPP (Waterpower) questions e-mail:
green.ipp@bchydro.com

Schedule for Completion of Project – A schedule for the review and construction of the project must be provided. This schedule is the proponent's estimate of the time required to complete *STEP 3* to *STEP 8*, inclusive. The estimate should include time for obtaining other permits and approvals for the construction of the project.

Certificate of Incorporation

If the proponent is a company, a copy of the certificate of incorporation must be submitted.

Application Fees

The fee for an application for a water licence and a Crown land tenure must be paid at the time the application is submitted. Separate cheques or money orders are required for a Crown land tenure and a water licence. Cheques or money orders are to be made payable to Land and Water British Columbia Inc.

Application Package has fee schedules.

Complete application is required

Information submitted by a proponent for a waterpower project will be reviewed by LWBC in relation to the requirements set out in *STEP 1*.

If LWBC deems the application to be complete, the applicant will be notified in writing and LWBC will discuss with the proponent the schedule for completing the project. The proponent will be provided with the name of the contact person in LWBC.

Not a decision

Notification by LWBC that an application is complete is not an indication that the application will be either refused or granted in *STEP 7*.

Incomplete application will be returned

An incomplete application will be returned and the proponent will be informed of the deficiencies to be corrected before re-submitting the application.

Combining STEPS 1 & 3

The studies that provide the information to assess the impacts of the project are expensive and may take more than a year to complete. The preparation of the Development Plan in a separate STEP gives the proponent the security of an application filed with LWBC while gathering additional information on the project. However, the proponent may choose to combine this STEP with STEP 1.

The purpose of the Development Plan prepared by the proponent is to provide LWBC with the information that fully defines the project and identifies the impacts from the construction and operation of the project. This information forms the basis for the adjudication of the applications under the *Water Act* and *Land Act*.

Appendix D indicates the type of information to be provided in the Development Plan and a template for its preparation.

The Development Plan consists of two sections: the Project Definition and the Impact Assessment.

Project Definition

The first section of the Development Plan provides the definition of the project in terms of location and physical characteristics. The general arrangement of the project should not be significantly different than indicated in the Preliminary Project Definition submitted in *STEP 1*. The capacity of the project and the quantity of water to be diverted can be increased if supported by additional information, e.g. a better analysis of the availability of water. Also, the location of the works, e.g. the alignment of the penstock, can be adjusted provided that the location remains within the area of Crown land indicated in the application submitted under *STEP 1*.

A Project Definition that substantially changes the project as described in the Preliminary Project Definition provided in the application may require the proponent to return to *STEP 1 – Submission of Application* and submit a new application.

Impact Assessment

The second section of the Development Plan is the Impact Assessment. This section of the report should identify all impacts of the construction and operation of the project.

During the preparation of the second section, the proponent may wish to contact other parties regarding the impacts of the project. At this step of the process, the other parties may provide specific information in their possession or provide general advice regarding their interest.

LWBC recognizes that any information provided by other parties during *STEP 3* is to help the proponent prepare a complete Development Plan. LWBC also recognizes that the information may be provided without a full appreciation of the extent of the project. Under *STEP 5* the other parties will have an opportunity to provide input that reflects their interest in the context of a fully defined project. Other parties that may be interested in the project are discussed on the following page.

Discussion with other parties

Information provided by other parties at this STEP may be preliminary.

Agencies – Appendix F provides information about agencies that may have a mandate that will affect the construction and operation of a waterpower project. Some of these agencies may have standards or guidelines that could assist the proponent in the preparation of the Development Plan.

LWBC may attend initial meeting.

First Nations – The proponent may also wish to enter into discussion with First Nations whose traditional territory encompasses the project. The proponent should advise LWBC if meetings are arranged with First Nations. Depending on the nature of the project, LWBC may want to attend the initial meeting.

Interested Parties – Some projects may impinge on the use by others of the stream and the land affected by the project. Such persons could include licensees under the *Water Act*, riparian owners, private landowners, and holders of tenure to Crown land. Various special interest groups may also be a source of information regarding the potential impacts of the project.

Public Consultation – The Development Plan should identify any issue that requires public consultation and include a communication plan for such a consultation.

For many projects public consultation may not be appropriate at *STEP 3*. If matters are identified at this STEP that indicate public consultation is appropriate, the proponent should prepare a communication plan and discuss with LWBC before proceeding.

Discussions to be documented.

All discussions with other parties during the preparation of the Development Plan should be documented by the proponent. The documentation does not need to be submitted with the Development Plan, but it should be retained by the proponent.

An impact that requires extensive data for evaluation should be discussed with LWBC for direction before proceeding. LWBC may be able to coordinate the development of terms of reference for the data collection that satisfies the interested agency.

Alternatively, LWBC may agree to the submission of the Development Plan with draft terms of reference for completing the assessment of some impacts, where the proponent can show input from others will expedite the review of the project. This may be appropriate for projects with extensive impacts that overlap into the jurisdiction of more than one agency, or the impacts are of public interest.

The draft terms of reference prepared by the proponent will be finalised with input from agencies in *STEP 5 – Project Review*, and this is discussed further in this STEP.

STEP 3

A complex Development Plan should be discussed with LWBC before completing.

For projects that have extensive mitigation and compensation measures, the proponent may want to review a draft Development Plan with LWBC to ensure that it provides the information necessary to address issues specific to the *Water Act* and the *Land Act* and the information for assessing the impacts is complete.

When the proponent has reasonably defined the project and has collected sufficient information to reasonably assess the impacts from the construction and operation of the waterpower project, the Development Plan may be submitted to LWBC.

The Development Plan will be reviewed by LWBC for completeness.

Not a decision

The Project Definition section has to have sufficient information to determine the basic conditions for the water licence and land tenure that may be issued for the project. The Impact Assessment section will be reviewed to ensure that the information for assessing impacts is reasonably complete.

This review is not a determination of the adequacy of the mitigation and compensation proposals, nor is it a decision about the granting of the applications under the *Water Act* and *Land Act*.

The review by LWBC at *STEP 4* will ensure that the best information will be made available to other parties for input under *STEP 5 – Review of Project*.

When LWBC is satisfied that the Development Plan is complete, the proponent will be notified in writing of the next step.

If the information in the Development Plan is not satisfactory to LWBC, the deficiencies will be discussed with the proponent for correction.

STEP 5 REVIEW OF PROJECT

LWBC receives input from agencies, interested parties, the public and First Nations.

The review of the project under *STEP 5* gives agencies, interested parties, the public and First Nations an opportunity to provide LWBC with information to determine the following:

- ▲ the impacts of the project and the appropriate mitigation and compensation measures to address the impacts;
- ▲ the potential effect of the project on the rights people may have under the *Water Act* and *Land Act*; and
- ▲ the potential for infringement on aboriginal rights or title over land and water resources.

PROCESS FOR REVIEW

The mechanisms for seeking input from agencies and the public on impacts, determining the effect on rights and identifying the potential infringement on First Nations are each different. Furthermore, the use of any of these mechanisms may be different from one project to another.

Below is a discussion of various mechanisms available to LWBC to complete the review of a project. While the review will always begin with the distribution of information, the review may continue with several mechanisms in parallel. For example, the working committees may be resolving some issues, and at the same time the proponent may work directly with an interested party to resolve another. While this is taking place the proponent may also be sponsoring an Open House. LWBC will use all appropriate mechanisms to define the process best suited for a particular project, and discussion of the various mechanisms follows.

Several review mechanisms may be used in parallel.

Start of Review

The review of the project will always begin with the distribution of the information completed to the satisfaction of LWBC under *STEPs 2 and 4*. The information will be distributed to agencies, First Nations and interested parties who will be asked to comment. LWBC will discuss the comments that are provided with the proponent and determine how the review should proceed. LWBC will advise all parties of the process to be followed.

Distribution of information and request for comments.

LWBC determines how to proceed.

General Meeting

Comments that indicate the impacts of the project are extensive may require a general meeting of all interested parties. The parties that received the Development Plan and any other interested parties that are identified from the comments would be invited to attend. LWBC would host the meeting. The proponent would be asked to present the project at the meeting and answer questions. One general meeting should be sufficient for most projects. However, additional general meetings will be held if warranted by the extent and complexity of the impacts.

LWBC hosts meeting.

STEP 5

LWBC establishes and leads small committees to work on specific issues.

Working Committees

The general meeting may be followed by LWBC establishing small committees that would each work through a specific issue to assess the impact and propose an appropriate mitigation and compensation measure. Committees would only be established if the scope of the impact indicates that discussion and exchange of ideas would expedite the resolution of the matter. LWBC will be the lead on these committees and the proponent would be asked to attend as appropriate. Two or three meetings are expected to be sufficient to fully explore even the most complex issue.

LWBC may proceed directly from the receipt of written comments on the Development Plan to the establishment of small committees. Again, such committees would be established only if the scope of impact requires this forum for a timely resolution.

LWBC instructs proponent to discuss directly with interested parties.

Direct Resolution

The comments on the information distributed to start the review may indicate to LWBC that the matters can be resolved by the proponent through direct discussions with the interested parties. In this case, LWBC would ask that this discussion proceed.

LWBC selects reviewers.

Selected Reviewers

Generally, the parties who will be asked to provide input to the assessment of the impacts of the project are the agencies identified in Appendix F. These agencies have jurisdiction regarding the public interest in various aspects of the project. However, some parties that have an interest in a specific issue, or have specific expertise in assessing an impact may be selected to provide input to LWBC.

LWBC sends letter requesting input as well as information from Step 1 to interested parties. Proponent will provide copies of Development Plan as directed by LWBC.

Enclosed with the letter requesting input from interested parties will be the application forms and other information submitted by the proponent at *STEP 1 – Submission of Application*. The letter will also be sent to the proponent, who will be asked to provide each of the selected reviewers with a copy of the Development Plan that is acknowledged by LWBC as complete at the end of *STEP 4*.

Agencies Input

The agencies will be asked to provide input on the assessment of impacts of the project as follows:

- ▲ Does this application impact your agency's legislated responsibilities?
- ▲ Does the Development Plan propose sufficient measures to both mitigate and compensate the impacts for which your agency is responsible?
- ▲ What other, if any, mitigation measures would address your concerns?

STEP 5

LWBC sends letter requesting specific input as well as information from Step 1 to specific interest parties.

- ▲ Is additional information required to fully describe the impacts for which your agency is responsible?
- ▲ Will the proponent require an approval or permit from your agency?
- ▲ Will compliance monitoring be required by your agency?

Parties with Specific Interest

Parties, other than agencies, who have a specific interest in the project will be provided information about the project and asked to provide specific input according to the parties interest. Such parties could include societies with purposes that may be affected by the project.

Public Consultation

The objective of public consultation is to inform the public about the nature of the project and give the public an opportunity to provide information for consideration in the assessment of the impacts of the project.

Open House – A form of public consultation is through an “Open House”. The proponent would present information about the project and its impacts at a public location in the vicinity of the project. The public would be invited by the proponent to attend to view the information and get further clarification on matters of interest.

LWBC may attend as an observer.

LWBC and agencies will often attend an Open House as observers. Sometimes LWBC or the agencies will be asked to discuss the process or a specific aspect of the project.

LWBC reviews issues raised at Open House and determines if further action is required.

The proponent will be required to identify the persons that attend and to report to LWBC on the issues raised at the Open House. These issues will be reviewed by LWBC to determine if further public consultation is required.

LWBC usually attends.

Workshop – If there is a narrow public interest on specific matters, the proponent may hold a series of workshops to explore these matters. LWBC and the appropriate agencies would usually attend the workshop. The proponent would report out to LWBC on the workshop.

Inquiry – Occasionally the public interest in values impacted by a project may be so extensive that a formal inquiry into the impacts is necessary for the proper adjudication of the matter. LWBC would provide direction for such an inquiry. Evidence at an inquiry would be given under oath, and witnesses may be cross-examined. Parties may be represented by legal counsel.

STEP 5

LWBC notifies water licensees, riparian owners, and holders of land tenures of proposed project.

LWBC discusses issues with objectors.

LWBC arranges site inspection with proponent.

LWBC sends information to First Nations.

First Nations provides input on impacts.

LWBC asks for input to prepare terms of reference for additional studies.

Rights of People

People who hold water licences or applications for water licences on streams impacted by the project will be provided the information on the project and given the opportunity to indicate the way the project may affect the rights under their licences. Owners of riparian lands on the impacted stream and owners of lands affected by the works of the project will be given the same opportunity.

Holders of tenures under the *Land Act* will also be given an opportunity to indicate how their rights may be affected by the project.

Objections that are filed by people with rights under the *Water Act* and *Land Act* may be given to the proponent for comment and resolution if possible.

LWBC will also discuss the issues with people who file an objection, as the decision on the application for the project must address the objections.

Site Inspection

The review of the project will require an inspection of the site. This will be arranged by LWBC with the proponent and may include other parties with jurisdictional responsibility. Usually the site inspection is made early on in the review of the project, as it provides a context for the comments. Some projects may require more than one inspection.

The proponent may be required to provide transportation to the site.

First Nations

The information sent to First Nations at *STEP 5* initiates the process for LWBC's assessment of First Nations' interests. Aboriginal rights and title will be assessed in accordance with the *Provincial Policy for Consultation with First Nations (2002)*. In accordance with this policy LWBC will identify reasonable opportunities to accommodate aboriginal interests, mitigate infringement or negotiate a resolution.

In addition First Nations will have the opportunity to provide input on the impacts of the project.

Addendum Report

The review of some projects will identify impacts that cannot be assessed on the basis of the information provided by the proponent. The proponent may also have submitted incomplete information on some issues because the collection of the data to assess the impact requires direction from parties with an interest in the project and LWBC.

When the assessment of an impact needs more information, LWBC will ask the parties interested in the impact for input on the preparation of the terms of reference for the additional studies. The

terms of reference will include the collection of data and the analysis of the data to define the impact. The proponent will submit a report on the matter as an addendum to the Development Plan completed to the satisfaction of LWBC in *STEP 4*.

The addendum report will be distributed for comments as described above for the Development Plan.

Closure of Review

The review of the project is closed when LWBC is satisfied that sufficient information is available to address all the impacts associated with the project. Generally this stage is easily determined by the proponent if parties involved in the review indicate that their concerns have been addressed.

LWBC will also consider the review of the project is closed when additional information will not better define an impact or clarify the mitigation and compensation measure for an impact.

A proponent may request a closure from LWBC if an issue cannot be resolved to the satisfaction of the proponent and a party that has an interest in the project.

LWBC determines that concerns have been addressed satisfactorily.

The information from *STEP 5 – Review of Project* will be compiled by the proponent into a Summary Report. The format for this report will be the same as the template for the Development Plan.

The Summary Report condenses the information in the Development Plan and summarizes the information from the assessment of the impacts in *STEP 5 – Review of Project*. Conclusions on the assessment of impacts and the proposed mitigation and compensation measures should be clearly stated.

Drawings need to be included.

The Summary Report should include drawings that show the general arrangement of the components of the project in relation to legal lot boundaries, and the boundaries of Crown land required for the project. The size of these drawings should be 8 1/2x11, 11x14 or 11x17.

Proponent consults with agencies, interested parties and First Nations.

The proponent will consult with agencies, interested parties and First Nations in the preparation of the Summary Report to ensure that their perspective is fairly represented. The proponent must indicate in the report if these parties are in agreement with the mitigation and compensation measures identified in the Summary Report.

Occasionally the proponent may be unwilling to accept the mitigation or compensation measure for an impact as proposed in *STEP 5 – Review of Project*. The Summary Report may reflect the mitigation and compensation proposed by the proponent. However the recommendations of the party affected by the impact must be clearly stated.

LWBC will review all the information pertaining to the waterpower project. A Summary Report that indicates the proponent and parties that have an interest in the waterpower project are in agreement on the proposed mitigation and compensation measures will simplify the decision on the application. The proposed mitigation and compensation measures and the impact the project may have on the existing water and land rights will be considered with regard to the authority provided under the *Water Act* and *Land Act*. The potential infringement of aboriginal rights and title over water and land resources must be considered in the decision. A decision to issue a water licence and Crown land tenures for the waterpower project will include the appropriate terms and conditions.

If the proponent and the parties are not in agreement with the mitigation and compensation measures for the impacts of the waterpower project, the decision-maker will need to consider all the information related to the impacts and determine if the application should be granted. A decision to grant the application will include terms and conditions that are appropriate.

GRANTED APPLICATIONS

Crown Land Offer

LWBC sends proponent an offer letter.

If LWBC is satisfied that the project should proceed, the proponent will be provided an offer letter with the tenure documents for the Crown land on which the project will be located. The letter will also set out any additional requirements such as security, or liability insurance. If the offer is accepted, the proponent should sign and send the documents with the additional requirements to LWBC, and it will complete the transaction for the use of Crown land by the proponent.

Draft Water Licence

A draft water licence for a hypothetical waterpower project is in Appendix E.

Enclosed with the offer for tenure to the Crown land for the project will be a draft water licence that defines the conditions for the use of water as determined from the review of the project. The proponent will be asked to advise LWBC if there are any factual errors in the licence.

Final Documents

LWBC issues land tenures and water licence.

When the proponent returns the signed Crown land offer, LWBC will issue the land tenures and water licence to the proponent.

Notification of Decision

LWBC notifies all parties.

LWBC will notify all interested parties of the decision on the application.

STEP 7

Information on the appeal process is available on the internet at:
<http://www.eab.gov.bc.ca/>

Water rentals are set out in the Water Regulation, which can be viewed at:
http://www.qp.gov.bc.ca/statreg/reg/W/Water/204_88.htm

Crown land rental rates for the various project components of the project can be viewed at:
http://lwbc.bc.ca/about_bcal/policy/

Appeal to Environmental Appeal Board

The process under the *Land Act* is complete when the tenure is issued for the project.

Under the *Water Act* the person who receives the licence, an owner whose land is physically affected by the project, and a licensee, riparian owner or applicant for a licence have the right to appeal the issuance of the water licence. The appeal is to the Environmental Appeal Board, and must be filed within 30 days of the decision.

Lease, Statutory Right-of-Way

When the project is built, the proponent has the option to survey the improvements and request an LWBC lease or statutory right-of-way that can be registered in the Land Title Office. The proponent may also wish to purchase the powerhouse site, which can be discussed with LWBC staff.

Annual Rentals

Proponents with approved projects will be required to pay an annual rent for the water licence and land tenures.

<p>The Engineer</p> <p>Information to be submitted to the Engineer</p> <p>The Design Engineer</p> <p>The Construction Engineer</p> <p>Prepare an EMP</p> <p>Leave to commence</p>	<p>The Engineer under the <i>Water Act</i> (the “Engineer”) has the authority to regulate the construction of works, and the proponent may be required to satisfy a number of conditions before construction starts. The water licence for the project will set out these conditions, which may include the following:</p> <ul style="list-style-type: none"> ▲ submit to the satisfaction of the Engineer, the following: <ul style="list-style-type: none"> • plans that show the general arrangement of the works; • criteria for the design of the works; • criteria for the operation of the works; • a schedule for the construction of the works; and • plans for the construction of the works, which plans are signed and sealed by a professional engineer registered in the province of British Columbia (the “Design Engineer”); ▲ retain a professional engineer registered in the province of British Columbia (the “Construction Engineer”) to supervise the construction of the works; ▲ prepare, to the satisfaction of the Engineer, an environmental management plan (“the EMP”) for the management and mitigation of construction impacts; ▲ obtain leave to commence construction, in writing, from the Engineer.
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Templates for the documents that set out the information and reports to be provided by the Independent Engineer and the Environmental Monitor are in Appendices G and H.

The Independent Engineer

The Environmental Monitor

Persons to be Retained by Proponent

For some projects, the proponent may be required to retain professional persons who are independent from the proponent. The independent persons may include the following:

- ▲ a professional engineer (the “Independent Engineer”) registered in the province of British Columbia who will provide information and reports on the design and construction of the works to the Engineer; and
- ▲ a person with the appropriate professional qualifications to monitor the construction of the works and provide information and reports on the compliance of the construction with the EMP.

Every waterpower project has common elements, but the details of each are unique. Before proceeding with the construction of the works, the proponent should meet with LWBC to discuss the conditions in the water licence and the expectations of any independent persons to be retained by the proponent.

Simple operating conditions

Conditions may be imposed on the operation of a waterpower project to mitigate its effects. These conditions will be determined during *STEP 5* and, if they are simple, the conditions may be set out in the water licence for the project.

Extensive or complex operating conditions

Operating conditions determined during *STEP 5* that are extensive or complex may need to be implemented through a separate order under the *Water Act* to regulate the diversion, rate of diversion, storage and use of water for a waterpower project. The separation of the directive to operate the facility in a particular way from the licence that sets out the rights of a person to divert and use water has two advantages. First, it provides flexibility to alter the operating conditions if appropriate, and second, it allows the construction of the project to proceed if some additional studies are required to refine the operating conditions.

The process for defining the conditions and authorizing the operation of the works would be set out in the water licence as discussed below.

COMMENCING OPERATION

Before commencing the operation of the works, the licensee would be required to do the following:

Proponent submits report on parameters and procedures for operation.

- ▲ Submit a report for acceptance by the Regional Water Manager under the *Water Act* on the parameters and procedures for the operation of the authorized works. The parameters and procedures must be based on the Summary Report prepared by the proponent in *STEP 6* of this Guide, and on any changes made in the decision by the Regional Water Manager under *STEP 7* to the conclusions on the mitigation and compensation measures proposed in the Summary Report.

Obtain leave to commence.

- ▲ Obtain leave to commence operation, in writing, from the Regional Water Manager under the *Water Act*.

Report briefly describes physical aspects of project, hydrologic conditions and values considered.

The report on the parameters and procedures provides a brief description of the physical aspects of the project, the hydrologic conditions on the stream and values considered in the operation of the facility. The report provides the basis for the order regarding the operation of the facility. This is important if an issue arises many years later regarding the operation of the facility. The report is also a baseline for evaluating any changes that the licensee may propose in the future.

Baseline for evaluating future change.

REGULATION OF WORKS

The authority to regulate the diversion, rate of diversion, storage, and use of water is provided in section 39 of the *Water Act*. This authority is general to the protection of the rights of licensees, riparian owners and landowners affected by the works. The use of this authority to regulate works to protect other values requires a specific clause in the licence that will require the licensee to operate the works in accordance with:

- ▲ Procedures ordered under the *Water Act*, including any order for the regulation of the diversion, rate of diversion, storage and use of water. The licence will specify the values to be protected, for example, fish and fish habitat.
- ▲ Any amendment of the procedures ordered by the Engineer.

The review of the project under *STEP 5* is expected to fully identify all impacts of a project that are to be mitigated through operating measures, and the parameters for such operation. After the procedures have been ordered, any change to the parameters for a particular operation will require the consent of the licensee. The stipulation that the procedures may be amended provides the licensee with flexibility to propose operational changes, provided that the mitigation of impacts is not altered. It also allows LWBC to respond to conditions that affect public safety and events that are not anticipated in the procedures. The authority to amend the procedures does not extend to permanently reducing the right to divert and use water for the purpose set out in the licence.

Proponent has flexibility to propose operational changes and LWBC is able to respond to changing conditions or unforeseen events.

STEP 10 MONITORING OF PROJECT

LWBC determines form for submitting information describing amount of electricity generated and compliance with conditions for mitigating impacts.

Condition to monitor an impact.

The licensee must monitor the operation of the project for the amount of electricity that is generated, and compliance with conditions for mitigating impacts. The form for submitting this information will be determined when the project commences operation. The amount of electricity generated by the facility is used to calculate the annual water rentals. The information provided on compliance of conditions ensures that the licensee and LWBC have the same information for responding to any inquiry.

The licence may contain a condition that requires monitoring of an impact to confirm that the assessment under *STEP 5 – Review of Project* was valid. Such a condition is appropriate where an impact is understood well enough that its impact will not stop the project, but further information is required to fully define the mitigation or compensation of the impact.

The conditions that set up the monitoring program may be as follows:

- ▲ Prepare a monitoring program suitable to determine the impacts on the specific value to be monitored, e.g. fish, wildlife, recreation, etc., which monitoring program has to be accepted by the Regional Water Manager.
- ▲ Implement the monitoring program to the satisfaction of the Regional Water Manager.
- ▲ Continue the program for (a required number) of years following the commencement of operation of the works or to the satisfaction of the Regional Water Manager.
- ▲ On the completion of the monitoring program, prepare a report that identifies the nature of the impact on the specific value and implement the appropriate mitigation and/or compensation to the satisfaction of the Regional Water Manager.

GLOSSARY AND ACRONYMS

Please note: The definitions and explanations provided in this Glossary are only for the clarification of the information in this Guide. If there is a conflict between these definitions and explanations and the *Water Act* and *Land Act*, the meanings in the *Water Act* and *Land Act* prevail.

Applicant	A person who has met the conditions of <i>STEP 2</i> of this Guide.
Application	The documentation filed under the <i>Water Act</i> and <i>Land Act</i> in accordance with <i>STEP 1</i> of this Guide.
Approve	In reference to an application for tenure to Crown land means to issue the appropriate tenure for the use of the Crown land from the application. <i>See "Grant"</i> .
Compensation	A measure to make suitable amends for an impact of a water power project, which impact cannot be practically mitigated. For example, a compensation measure for an impact on fish habitat may include the construction of comparable habitat at another location on the stream on which to project is situated.
Comptroller	Defined in the <i>Water Act</i> to mean: a person employed by the government or a government corporation and designated in writing by the minister as the Comptroller of Water Rights and includes any persons designated in writing by the minister as acting, deputy or assistant comptrollers. <i>Clarification:</i> The Comptroller has all the authority of a Regional Water Manager and Engineer, and will adjudicate applications under the <i>Water Act</i> for some waterpower projects.
Construction Engineer	A professional engineer who is retained by the holder of a water licence to supervise the construction of the works.
Dam	Defined in the <i>Dam Safety Regulation</i> to mean: (a) a barrier constructed across a stream, or (b) a barrier constructed off stream and supplied by diversion of water from a stream, for the purpose of enabling the storage or diversion of water, and includes all works which are incidental to or necessary for the barrier. <i>Clarification:</i> In section 2 of the <i>Dam Safety Regulation</i> further conditions are placed on a dam, as defined above, before the dam is subject to the regulation.
Design Engineer	A professional engineer who is retained by the holder of a water licence to supervise the preparation of plans showing the design and layout of the project and plans suitable for the construction of the project.

Disallow	In reference to an application for Crown land means to decline the application and not issue a Crown land tenure. <i>See "Refuse"</i> .
EMP	Environmental Management Plan
Engineer	Defined in the <i>Water Act</i> to mean: a professional engineer employed by the government or a government corporation and designated in writing by the comptroller as an engineer and includes a Regional Water Manager.
Environmental Management Plan	A document prepared by the holder of a water licence that sets out the manner in which the waterpower project must be constructed to mitigate the activities of construction on the environment.
Environmental Monitor	A person with the appropriate professional qualifications who is retained by the holder of a water licence to monitor the construction of the works and provide information and reports to LWBC on the compliance of the construction of the waterpower project with the EMP.
Flooding at an Intake	Land above the natural boundary of the stream that is inundated at an intake or dam, and if it is Crown land, a tenure is required for the flooding of that land .
Generating Station	A term used to describe the dam, powerhouse, tailrace and switchyard of a waterpower project, provided the dam is close coupled to the power house; and to describe the powerhouse, tailrace and switchyard of a Generating System.
Generating System	A term used to describe all components of a project where the intake is separated from the powerhouse by penstock. The term includes any dam that stores water in support of the generation of electricity, provided that the dam is not close coupled to the powerhouse.
Grant	In reference to the adjudication of an application for a water licence means to issue a licence from the application. <i>Clarification:</i> In the Guide "Grant" is used to mean "Approve" in reference to an application for Crown land.
Impact	The adverse effect of a waterpower project on environmental and social values in the vicinity of a waterpower project, and the adverse effect on persons who hold rights under the <i>Water Act</i> and <i>Land Act</i> .
Impoundment at an Intake	The volume of water impounded by an intake. <i>Clarification:</i> Flow in a stream at an intake may not be impounded at one time for the purpose of increasing power benefits at a later time. Such use of water

meets the definition of "storage purpose" and requires a licence, and the structure is defined as a "Dam" instead of an "Intake".

Improvements

Any physical structure on Crown land intended to enhance its value or utility or to adapt it for new or further purpose, for example, attaching permanent or semi-permanent buildings, structures, machinery or fixtures to the land.

Independent Engineer

A professional engineer who is retained by the holder of a water licence to provide information and reports to LWBC on the design and construction of the works.

Intake

An intake is any structure that takes the water from a stream and puts it into another structure that conveys the water to the place of use. The intake may impound water to create energy for the purpose of driving the water into the penstock or other conveyance structure. If the structure stores water in addition to taking water from the stream, the structure is defined as a dam. An intake may be a barrier constructed across a stream, but may not meet the other conditions necessary to be governed by the *Dam Safety Regulation*.

Interested Parties

A private individual or a group of private individuals that have a specific interest that may be impacted by the waterpower project. Examples may be a holder of a water licence, riparian owners and a society formed under the *Societies Act*.

Land and Water British Columbia Inc.

Land and Water British Columbia Inc. is incorporated under the *Company Act of British Columbia*. As a Crown corporation, LWBC operates as an agent of government to carry out activities such as issuing land tenures for Crown land and licences for the use of Crown water resources.

Licence under the *Water Act*

Defined in the *Water Act* to mean: a licence issued under this or a former *Act*. *Clarification:* A licence entitles its holder to do the following in a manner provided in the licence:

- divert and use beneficially, for the purpose and during, or within the time stipulated, the quantity of water specified in the licence;
- store water;
- construct, maintain and operate the works authorized under the licence and necessary for the proper diversion, storage, carriage, distribution and use of the water or the power produced from it;
- alter or improve a stream or channel for any purpose; and
- construct fences, screens and fish or game guards across streams for the purpose of conserving fish or wildlife.

LWBC	Land and Water British Columbia Inc.
Minister	Under the <i>Land Act</i> , the minister is responsible for the administration of all Crown land except land specifically under the administration of another minister, branch or agency of government. The minister responsible for the <i>Land Act</i> is the Minister of Sustainable Resource Management. LWBC has authorities under the <i>Land Act</i> as delegated by the minister.
Mitigation	A specification, step or procedure taken in the design or operation of a waterpower project to make milder or lessen the severity of an impact by the project.
Parties with an Interest in the Waterpower Project	Interested parties, government agencies, local government, and the public that have identified an interest that may be impacted by the waterpower project. First Nations may be an interested party or a party with an interest, but such interests are distinct from any aboriginal rights and title to the land and water resource in the vicinity of the waterpower project.
Place of use	<p>In reference to the diversion and use of water, the place of use is the land to which the water licence is attached. For a waterpower project, the place of use of the water is the land on which the powerhouse is situated.</p> <p>In reference to the conveyance of electricity, the place of use is the location that is owned by the proponent where the electricity is used; or the point at which the proponents works for the conveyance of electricity connect to works owned by someone other than the proponent.</p>
Project	Waterpower project
Proponent	An applicant or holder of a water licence and Crown land tenures for a waterpower project.
Refuse	In reference to the adjudication of an application for a water licence means to decline the application and not issue a water licence. <i>Clarification:</i> In the Guide "Refuse" also means "Disallow" in reference to an application for Crown land.
Regional Land and Water Manager	A position in the Service Centers and some Field Offices of LWBC that supervises staff. Usually the person in the position is designated a Regional Water Manager and has authority to issue tenures under the <i>Land Act</i> .

Regional Water Manager	Defined in the <i>Water Act</i> to mean: a person employed by the government or a government corporation and designated in writing by the minister as a regional water manager and includes a person designated in writing by the minister as an acting or assistant regional water manager. <i>Clarification:</i> The Regional Water Manager has the authority to adjudicate the application for a licence under the <i>Water Act</i> for a waterpower project. The Regional Water Manager will adjudicate most water licence applications for waterpower projects. Where the Guide indicates Regional Water Manager, the Comptroller is included.
Run-of-the-River Project	A waterpower project on a stream that does not have the flow regulated a reservoir authorized by a water licence; or a waterpower project that is on a stream that does have the flow regulated by a reservoir, but the regulation is not specifically for the beneficial use of water at the waterpower project.
Storage Purpose	Defined in the <i>Water Act</i> to mean: The collection, impounding and conservation of water. <i>Clarification:</i> Usually a licence for storage purpose will support, or be appurtenant to, a licence that authorizes the diversion of water for a purpose such as power.
Storage-Supported Project	A waterpower project that makes beneficial use of stream flow regulated by a reservoir authorized by a water licence. A waterpower project that is downstream of a storage-supported project and the downstream project benefits from the regulated flow for the storage supported project, then the downstream project is also a storage supported project.
Store	Defined in the <i>Water Act</i> as: in relation to water, means collect, impound and conserve.
Tenures under the <i>Land Act</i>	<p>A temporary permit normally authorizes:</p> <ul style="list-style-type: none"> • short-term use of six months to two years; and • low impact use such site investigation, which require no construction or improvements. <p>The permit gives the holder non-exclusive use to Crown land for the duration of the permit.</p> <p>A licence allows:</p> <ul style="list-style-type: none"> • carrying out of specified activities; • some improvements to the land such as trails and/or the right to construct buildings; and <p>a licence gives the holder non-exclusive access to the land. A licence cannot be registered against the land title and does not require a survey.</p>

A **lease** gives the tenure-holder the exclusive right to use a parcel of Crown land for a specific purpose. Leases are issued where:

- substantial improvements or investments are made in and on the land for permanent facilities; and/or
- it is necessary to define specific boundaries of an activity to minimize potential conflict with other operations.

A lease can be registered against the title of land and requires a survey of the area by the applicant prior to the issuance of a lease.

A **statutory right-of-way** is normally used to authorize linear uses of Crown land, such as pipelines, transmission lines, cables for telecommunications, etc. A right-of-way can be registered against the title of land and applicants are required to complete a survey of the area prior to the issuance of the statutory right-of-way.

Water Licence

Licence under the *Water Act*.

Waterpower Project

The totality of components that is necessary for the production of electricity at a site and the conveyance of the electricity to a place of use.

Works

Defined in the *Water Act* to mean:

- (a) anything capable of or used for
 - (i) diverting, storing, measuring, conserving, conveying, retarding, confining or using water,
 - (ii) producing, measuring, transmitting or using electricity, or
 - (iii) collecting, conveying or disposing of sewage or garbage or preventing or extinguishing fires;
- (b) booms and piles placed in a stream;
- (c) obstructions placed in or removed from streams or the banks or beds of streams; and
- (d) changes in and about a stream, and includes access roads to any of them.

- Appendix A Waterpower Project Application Completeness Checklist
- Appendix B Water Licence Application Drawing Standards
- Appendix C List of offices of Land and Water British Columbia Inc.
- Appendix D Template: Waterpower Project Development Plan
- Appendix E Draft Water Licence for Hypothetical Project
- Appendix F Water Applicant's Agency Resource Guide
- Appendix G Scope of Information and Reports
to be Provided by the Independent Engineer
- Appendix H Scope of Information and Reports
to be Provided by the Environmental Monitor

Please note:

The information in the Appendices is valid at the time of publication. However, information such as the location of the offices of LWBC may change, or experience with the review of waterpower projects may improve such documents as Template: Waterpower Project Development Plan. From time to time the documents in the Appendices will be revised.

Contact Land and Water British Columbia Inc. or visit the internet site for Land and Water British Columbia Inc. for the current version of these documents at:
<http://www.lwbc.bc.ca/>