

# SMALL HYDROELECTRIC PERMITTING HANDBOOK

STATE OF OREGON PERMITTING PROCESSES



# Foreword

The face of hydropower is changing. Smaller projects with minimal environmental impacts, such as those within city water systems, irrigation channels, or at existing water reservoirs, are joining the energy mix in Oregon as part of a more sustainable future. These projects are bringing with them hydropower owners and developers who are new to the permitting and licensing processes.

Energy Trust recognizes the value and potential of Oregon's untapped hydropower resources and provides assistance to eligible project proponents to help move their ideas from concept to completion. Through our work, we see often the challenges that project developers face in attempting to secure the necessary hydropower permits from multiple federal and state agencies.

For first time developers, the complex permitting processes for hydropower projects can seem especially daunting. There are two guidebooks: one for federal permitting processes and one for Oregon permitting processes. These have been written for both new and experienced developers and are intended to serve as a roadmap to state and federal permitting requirements.

Securing the necessary permits for a hydropower project takes patience, time, and a positive, collaborative attitude towards working with state and federal officials. These guidebooks cannot change the level of complexity of the permitting processes, and they are no substitute for expert advice, but they can be used to create a set of reasonable expectations about what it will take to develop a project successfully.

Our hope is that these tools lead to an improved understanding of the permitting process and to thorough applications, which can be more quickly processed by the appropriate federal and state agencies.

Betsy Kauffman and Jed Jorgensen  
Energy Trust of Oregon  
June 2017

## Foreword to the 2017 Additions and Amendments

Oregon Administrative Rules (OAR) Chapter 690 Division 51 relating to hydro power regulation had not been updated since 1993. In March 2015, the Oregon Water Resources Commission directed staff to convene a Rules Advisory Committee (RAC) to review Division 51 and update it to reflect changes in statute since 1993. The RAC met several times in 2015 and proposed amendments to the Commission relating to the following topics:

- Financial reporting requirements
- Inflation factor for annual fees
- Standards to protect fish populations and habitats
- Final orders and contested case hearings
- Exceptions to propose final order and issuance of final order

The changes proposed by the RAC were adopted by the Commission at its meeting on November 19, 2015. Those adopted changes have been incorporated into this handbook and will be noted where appropriate.

# Acknowledgements

Energy Trust would like to thank Nicole Wobus and Jane Pater Salmon of Summit Blue Consulting for their superb work researching and preparing this set of hydroelectric permitting guidebooks.

Energy Trust would also like to thank the following individuals for their patience, advice, and support in developing and editing these documents:

Edward Abrams, Federal Energy Regulatory Commission; Robert Bell, Federal Energy Regulatory Commission; Mary Grainey, Oregon Water Resources Department; Ken Homolka, Oregon Department of Fish and Wildlife; Craig Kohanek, Oregon Water Resources Department; and Elizabeth Molloy, Federal Energy Regulatory Commission.

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# 1 INTRODUCTION

Development of a hydroelectric facility requires licensing at both the federal and state levels. For newcomers to the licensing process, it can seem overwhelming and difficult to navigate. To assist new developers in becoming familiar with the hydroelectric project licensing process, Energy Trust has prepared a set of guidebooks.

This guidebook provides small hydropower project developers with the information needed to determine which state-level licensing processes are applicable to their projects. The guidebook then provides step-by-step summaries of the processes involved with pursuing state-level licensing or permitting.

This guidebook addresses eligibility requirements for state-level licensing processes including the processes for “minor” and “major” projects, as well as the expedited process available to projects holding an existing certificated water right.

Each section of the guidebook provides the reader with a high-level summary of eligibility requirements, as well as a summary of important reference documents. Eligibility criteria are illustrated in flow charts and supplemented with brief explanations. Another important feature of the guidebook is its citations. By citing specific definitions and source documents, the reader can save time by going straight to the relevant materials to seek clarification on a particular point rather having to sift through many documents.

This guidebook is intended to provide an introductory overview of eligibility requirements. It is not a substitute for expert advice or official federal and state documents. Regulations can change frequently; project developers must consult with professionals to ensure compliance with current regulations. Those interested in developing hydroelectric facilities should consult federal and state documents for complete detail and obtain legal advice as necessary. Energy Trust does not assume responsibility for any damages or other liability whatsoever (including any consequential damages) as a result of using this guide.

## 2 OVERVIEW OF ELIGIBILITY FOR OREGON LICENSING PROCESSES

As noted earlier, hydroelectric project development requires licensing at both the federal and state levels. The Oregon Water Resources Department (WRD) has authority over hydroelectric project licensing in the state.<sup>1</sup> Water rights play a fundamental role in Oregon’s hydroelectric project process. Those with existing water rights, under certain conditions, can pursue an expedited process. For those lacking existing water rights, the process of obtaining a right is a central focus of the state process.

Key regulatory documents guiding hydroelectric projects in Oregon include the following:

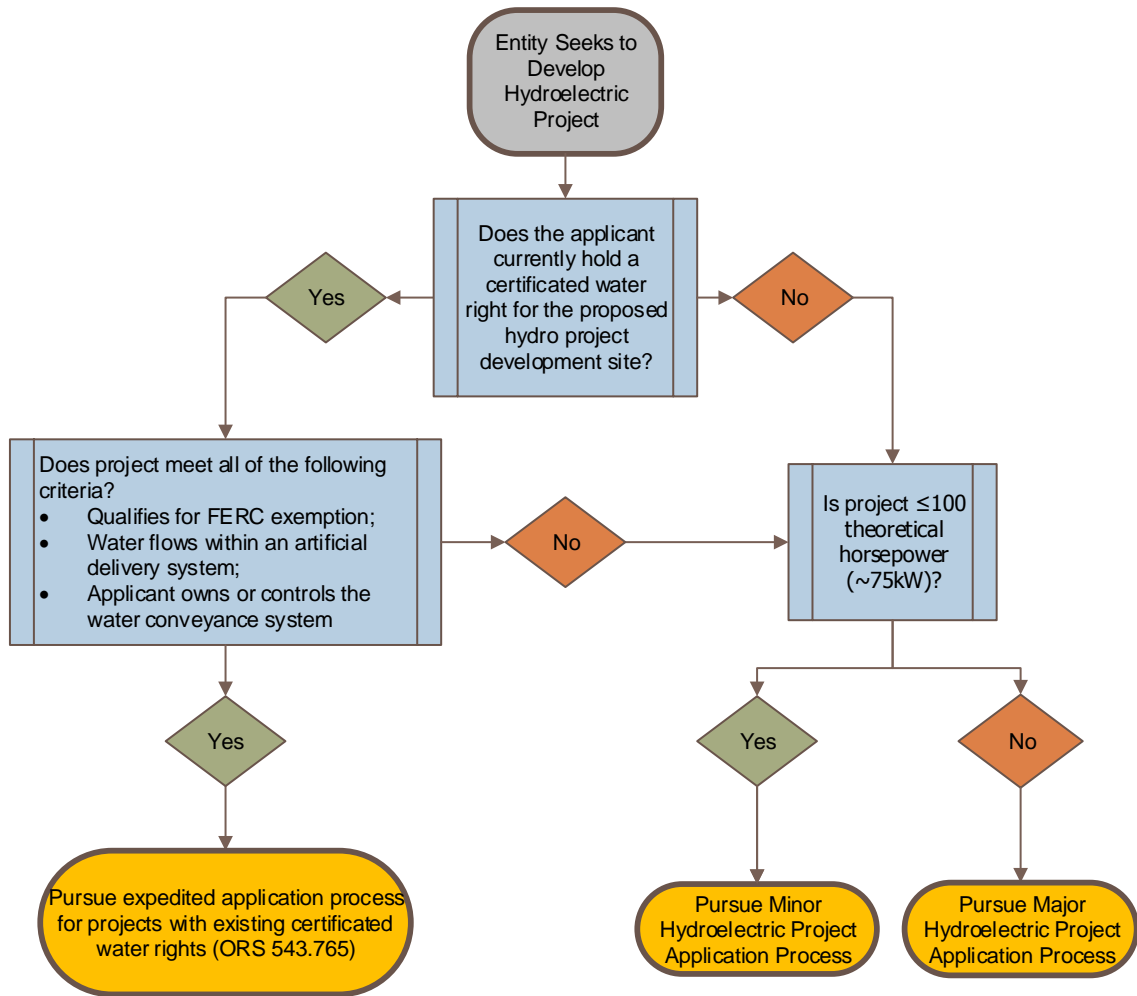
- Oregon Revised Statutes (ORS), [Chapter 543](#): Hydroelectric Projects
- ORS [Chapter 537](#): Appropriation of Water Generally
- [Oregon Administrative Rules 690-051](#): Water Resources Department, Division 51: Appropriation and Use of Water for Hydroelectric Power and Standards for Hydroelectric Applications
- The law governing the expedited application process for projects using an existing certificated water right is ORS [Chapter 543](#), Sections 543.760 and 543.765.

The primary factors determining which process applies to a given project in Oregon are: 1) whether the applicant already holds a water right for the proposed site, and 2) the power capacity of the project. An overview of eligibility requirements for the various state-level processes is illustrated in Figure 1. The sections following the diagram provide additional information that will assist in determining a project’s eligibility, and citations to direct readers to the appropriate source documents.

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<sup>1</sup> The Oregon Water Resources Department’s Administrative Rules (OAR 690-051-0010 (14) and (22)) specify that “licenses” are issued to non-municipal applicants, and “permits” are issued to municipal corporations. For the purposes of simplicity, the term “license” will be used throughout this document to refer to the approval process pursued by any applicant.

**Figure 1. Overview of Oregon Licensing Options**





## 2.1 Expedited Application to Develop Hydroelectric Project Using an Existing Certificated Water Right

The holder of an existing water right can pursue an expedited process by applying to the WRD for a certificate to use the water for hydroelectric purposes. This expedited option is available under ORS 543.765. To pursue this application process, an applicant must meet several criteria. The most fundamental criteria, as illustrated in Figure 1, include the following:

- Applicant holds an existing “certificated” or “decreed” ground water or surface water right issued for a purpose other than hydroelectric power generation;<sup>2</sup>
- Project qualifies for FERC exemption;<sup>3</sup>
- Water flows within an artificial delivery system;<sup>4</sup> and
- Applicant owns or controls the water conveyance system.<sup>5</sup>

Some additional conditions that apply, though not illustrated in Figure 1, include:

- Water at the site has been used over the past five years in accordance with the terms and conditions of the applicant’s existing water right;<sup>6</sup>
- Water use will not exceed the amount authorized in existing water right;<sup>7</sup> and
- Applicant does not plan to change the point of diversion of the existing water right.<sup>8</sup>

It is important that all seven of these criteria are met in order for the project to be eligible for the expedited state-level permitting process.

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<sup>2</sup> ORS 543.760 states that, as used in ORS 543.765, “water right” means, “a water use established by an adjudication under ORS Chapter 539 as evidenced by a court decree or a certificated ground water or surface water right that is issued for some use other than for hydroelectric power and that serves as the underlying water right for an application to use water for hydroelectric purposes.” Water rights that pre-date the Oregon Water Code’s inception on February 24, 1909, and that have been used continuously since then must be adjudicated to be eligible for hydroelectric development. The goal of the adjudication of these “vested” water rights is a “certificate” of each decreed right; this certificate is a prerequisite for any hydroelectric development. The adjudication process can be lengthy and involves a full public review process.

<sup>3</sup> If the applicant was not planning to interconnect the generator to the electric grid, or if the generator were to be interconnected to a non-interstate grid, it would not be necessary for the facility to qualify for a FERC exemption in order to pursue the expedited application process. Personal communication with Oregon Water Resources Department representative, May 2009.

<sup>4</sup> ORS 543.765 (1).

<sup>5</sup> ORS 543.765 (2) (e). The terms “artificial delivery system,” used above, and “water conveyance system,” used here, are alternative terms for “conduit.” Personal communication with Oregon Water Resources Department representative, May 2009.

<sup>6</sup> ORS 543.765 (2) (i).

<sup>7</sup> ORS 543.765 (2) (d).

<sup>8</sup> ORS 543.765 (5) (g).

## 2.2 Minor and Major Application Processes

If a project does not qualify for the expedited process, it must go through either the Minor or Major Hydropower Project process. The WRD classifies hydroelectric projects as either “Minor” or “Major”, depending on the power output of the proposed project. Projects proposing to develop  $\leq 100$  theoretical horsepower (THP), or approximately 75 kW, are considered “Minor” projects, and projects proposing to develop  $> 100$  THP are considered “Major” projects.<sup>9</sup> The application process for a Minor project is less involved than the four-stage application process for a Major project. For example, minor projects do not need to apply for a preliminary permit.<sup>10</sup> The application process for a Major project is similar in length and complexity to the full FERC license application process.

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<sup>9</sup> OAR 690-051-0010 (15) and (16).

<sup>10</sup> OAR 690-051. The preliminary permit process is also waived for municipalities pursuing the Major project application process.

# 3 EXPEDITED APPLICATIONS

Water rights play a fundamental role in Oregon’s hydroelectric project process. For a proposed hydroelectric project seeking approval from the state, the main objective is to secure a water right specifying that the water from a particular source can be used for hydroelectric purposes.

If a water user intends to produce electrical energy **only** during the times water is used for another purpose, the user may be able to take advantage of an expedited process. Certificated or decreed water right holders may be able to add hydroelectric use to their existing, “perfected” water right. The expedited review is allowed after the water right holder has submitted an application to the Federal Energy Regulatory Commission for an exemption from license.

This expedited process, which became available in 2007, is now codified in ORS 543.765.<sup>11</sup> The law specifies what is required for an application to use water for hydroelectric purposes under an existing water right. Once it is determined that a project meets the criteria necessary to qualify for Oregon’s expedited process, it is appropriate to use this section of the guidebook.

This section of the guidebook is designed to assist developers of eligible projects by describing the actions the developer needs to take in order to pursue the expedited process. This guidebook is not a substitute for expert advice or official state documentation of the process and related regulations. Regulations can change frequently. Project developers must consult with professionals to ensure compliance with current regulations. Those interested in developing hydroelectric facilities should consult official state documents (including those listed below) for complete details, and obtain legal advice as necessary. Energy Trust does not assume responsibility for any damages or other liability whatsoever (including any consequential damages) as a result of using this guide.

The key regulatory document guiding the expedited process for projects holding an existing water right is [\*Oregon Revised Statutes \(ORS\), Chapter 543: Hydroelectric Projects\*](#). Section 543.765 of Chapter 543 includes the detailed language governing the expedited process. Developers of hydroelectric projects are encouraged to obtain a copy of this document as it includes official language and details about the process.

Additional regulatory documents that govern hydroelectric projects in Oregon may be of interest to readers as well. While not specifically related to the expedited process detailed in this guidebook, these documents provide context for the role that water rights play in hydroelectric projects at the state level. These documents include:

- [\*ORS Chapter 537: Appropriation of Water Generally\*](#)
- [\*Oregon Administrative Rules 690-051: Water Resources Department, Division 51: Appropriation and Use of Water for Hydroelectric Power and Standards for Hydroelectric Applications\*](#)

The Oregon Water Resources Department (WRD) has authority over hydroelectric project licensing in the state. Developers are encouraged to contact the WRD to confirm eligibility for the expedited application, and with any additional questions related to the process. WRD’s Craig Kohanek (503-986-0823) specializes in hydroelectric projects.

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<sup>11</sup> See ORS 543.765 Available: [https://www.oregonlegislature.gov/bills\\_laws/ors/ors543.html](https://www.oregonlegislature.gov/bills_laws/ors/ors543.html)

## 4 EXPEDITED APPLICATION PROCESS

The steps involved in Oregon’s expedited hydroelectric project process are simpler and fewer in number than those required for Oregon’s other hydroelectric project processes. The expedited process is intended for projects with relatively few environmental impacts, and for which FERC or another authorized federal agency has already approved resource protection measures.<sup>12</sup> In the case of federally affiliated irrigation districts, the US Bureau of Reclamation has authority for approval rather than FERC.

Projects participating in the expedited state-level process must obtain a licensing exemption from FERC or another authorized federal agency prior to applying at the state level. A project may also qualify for the expedited Oregon process if it meets all the criteria for a FERC exemption, but it is not under FERC’s jurisdiction (i.e., if the applicant was not planning to connect the generator to the interstate electrical grid).

Participants will engage in discussions with resource agencies (“consultations”) prior to submitting their application to FERC or other authorized federal agency; FERC or another authorized agency will determine whether studies will be conducted, and will review any environmental assessment documents. The State review process includes only one 30-day comment period, in contrast to the multiple, and sometimes lengthy, public review periods associated with a new water right.

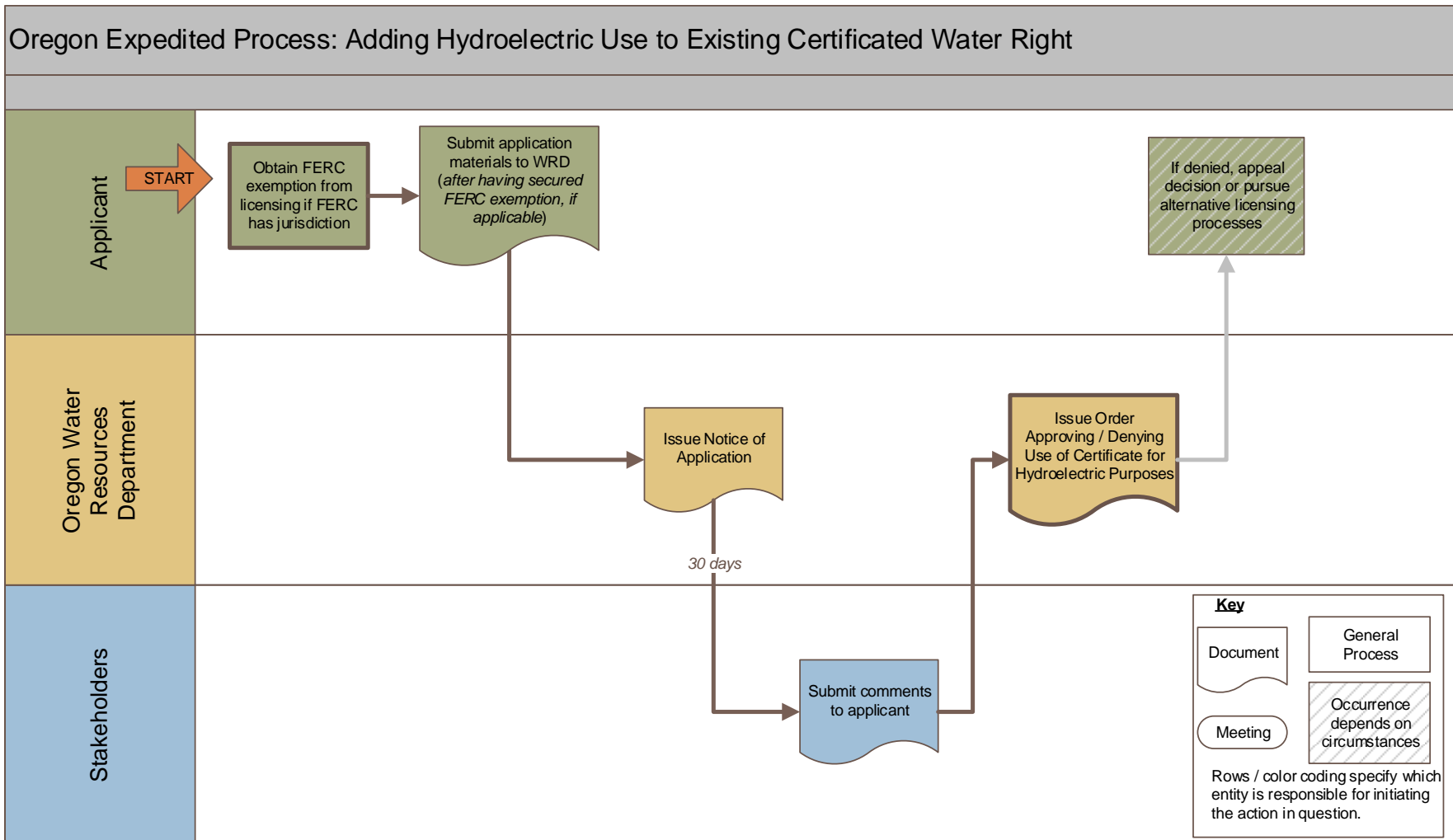
FERC or other authorized federal agency application materials, as well as the order from the agency approving the exemption, must accompany the expedited hydroelectric project development application submitted to WRD for projects under FERC or other federal agency jurisdiction.<sup>13</sup> The steps in the expedited application process are discussed below, and an overview of the process is provided in Figure 2.

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<sup>12</sup> Resource protection measures would be specified in the terms and conditions included in a FERC Order approving an exemption from licensing. The terms and conditions would include those submitted by federal and state resource agencies. These agencies would have reviewed the project and evaluated its environmental impacts during the consultation process that occurred as part of the process of obtaining a FERC exemption.

<sup>13</sup> See ORS 543.765(13), and the application form for the expedited approval process, “Application to Develop Hydroelectric Use as Part of an Existing Certificated Water Right.” The FERC exemption or other federal agency approval order is required as Exhibit D to the application.

**Figure 2. Expedited Application Process Overview**



## **1. Applicant Submits Application Materials**

WRD provides a specific form for the expedited process. Applicants are required to submit the completed form, along with supplemental materials including FERC exemption application materials, statements confirming that the project meets eligibility requirements, a map or drawing, and an application fee.

Required application materials are described in detail in the next section of this guidebook.

## **2. WRD Issues Notice of Application**

The WRD will provide notice to both the State Department of Fish and Wildlife and the public that it has received the application.

## **3. Members of Public Comment on Application**

A 30-day comment period starts on the date WRD issues the notice of application.

## **4. WRD Issues Order Approving or Denying Use of Certificate for Hydroelectric Purposes**

WRD will review the application materials and public comments to confirm that the proposed project is consistent with the public interest. WRD will consider a variety of factors when making this determination.<sup>14</sup> Specifically, it will consider whether development of the project would have any of the following impacts:

- Compromise the ability of the public to use the water for other important purposes such as irrigation, municipal water supply, public recreation, etc.;
- Hinder the ability to maximize the economic development potential of the waters involved;
- Compromise the state's ability to control waters for beneficial purposes such as drainage, sanitation, and flood control;
- Conflict with vested, or partially vested, rights to Oregon's waters; and
- Conflict with Oregon's water resources policy.<sup>15</sup>

If WRD confirms that the proposed project will not be detrimental to the public interest, the Director will issue a final order approving the application. At that time, the Director will provide notice of the decision to the applicant as well as to each entity that submitted written comments or protests, or requested notice of the final order.

WRD will issue a final order denying the application if it determines that the project is detrimental to the public interest. This determination can be based either on its own independent findings or on comments submitted by others.

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<sup>14</sup> ORS 537.170 (8).

<sup>15</sup> Other considerations, related to those listed here, are made as well.

## **5. If Denied Approval, Applicant May Appeal Final Order or Pursue Standard Licensing Process**

If denied approval, an applicant can appeal WRD's order. The appeals process would need to follow the procedures set forth in Oregon's "Administrative Procedures Act."<sup>16</sup>

If the applicant chooses not to appeal WRD's decision, it can file an application with WRD to pursue Oregon's standard licensing process for hydroelectric facilities. If an applicant files for a preliminary permit under the standard licensing process within a year of being denied approval under the expedited application process, the applicant will receive a \$500 credit toward the application fees associated with the standard licensing process.

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<sup>16</sup> ORS Chapter 183.

# 5 EXPEDITED APPLICATION REQUIREMENTS

Applicants pursuing the expedited process must submit a complete application form along with several required attachments. This section describes these required components of the application submittal. Procedural aspects are discussed first. This is followed by a discussion of the content of the application. A copy of the official WRD [application form](#) for the expedited application process can be obtained from the WRD website.

## 5.1 Procedural Requirements

Procedural requirements associated with the expedited process are minimal. The requirements include the following:

1. Applicants must complete all sections of the application form.
2. A \$500 application fee must accompany the application. This fee must be paid by check payable to the Oregon Water Resources Department.
3. The application must be submitted along with a map and all the other required attachments that are specified in the application form (Exhibits A through G, addressed in Section 9 of the application form).
4. The complete packet of application materials should be submitted to

Oregon Water Resources Department  
725 summer Street NE, Suite A  
Salem, OR 97301-1271

Applicants are encouraged to discuss the proposed project with hydroelectric staff at the WRD prior to submitting an application. This communication should help ensure that the applicant's project is in fact eligible for the expedited process, and that all required elements of the application materials are included in the initial submittal. See contact information provided in Section 3 of this guidebook.

## 5.2 Application Content

The application form has nine sections, each of which is described below.

### 1. Applicant Information

The applicant provides contact information and, if applicable, the name of the company or municipality with which it is affiliated.

### 2. Conduit Control

Control over the conduit on which the proposed hydroelectric facility will be located is a key component of the eligibility criteria for pursuing the expedited process. This section of the application is intended to confirm, upfront, that the applicant owns the conduit on which the hydroelectric facility will be located, or has control over water flow through the conduit.



If the applicant will rely on a public entity other than itself to provide water to the proposed hydroelectric facility, a statement from that entity confirming these plans must be included along with the application. That statement would need to be labeled “Exhibit F,” as specified in Section 9 of the application form. Section 9 of the form outlines all the Exhibits that must accompany the application.

### **3. Water Use**

This section of the application gathers a variety of information pertaining to the water that will supply the hydroelectric facility. It includes three parts:

#### **a. Proposed Source and Amount of Water**

- The applicant must provide the certificate number of the existing water right associated with the proposed project. If a certificate has not yet been issued by WRD, but a court decree has been issued, the applicant would need to provide a reference to the court decree.<sup>17</sup>
- The applicant will need to complete a table specifying all sources of water that will supply each powerhouse associated with the hydroelectric facility. The amount of water supplied by each source should be specified in cubic feet-per-second.

#### **b. Power Development**

The applicant specifies:

- The number of feet of gross head that will be utilized; and
- The theoretical horsepower (THP) that will be developed.<sup>18</sup>

#### **c. Location**

The applicant specifies the precise location of the point of diversion and power plant, identifying the quarter-quarter Section, Township, and Range, based on the U.S. Public Lands Survey System. An explanation of how this system should be used to locate major project features is included in the application form, and copied below in Figure 3.

- The applicant identifies the point where the water will be discharged after passing through the power plant. This would include identifying the type of discharge location (i.e., canal, pipe, well, creek, river, lake, reservoir, etc.), and naming or otherwise identifying that location.
- In addition to completing this section of the form with the required information, applicants must identify the point of diversion, power plant, and discharge locations on a map. The map must adhere to the specifications provided in the application form. These specifications are described below in the section titled “Map Requirements.”

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<sup>17</sup> For discussion of certificated water rights and the processes of obtaining new rights or adjudicating vested rights, see Oregon Water Resources Department. 2013. *Water Rights in Oregon: An Introduction to Oregon’s Water Laws*. p. 25. Available at: <https://www.oregon.gov/owrd/PUBS/docs/aquabook.pdf>

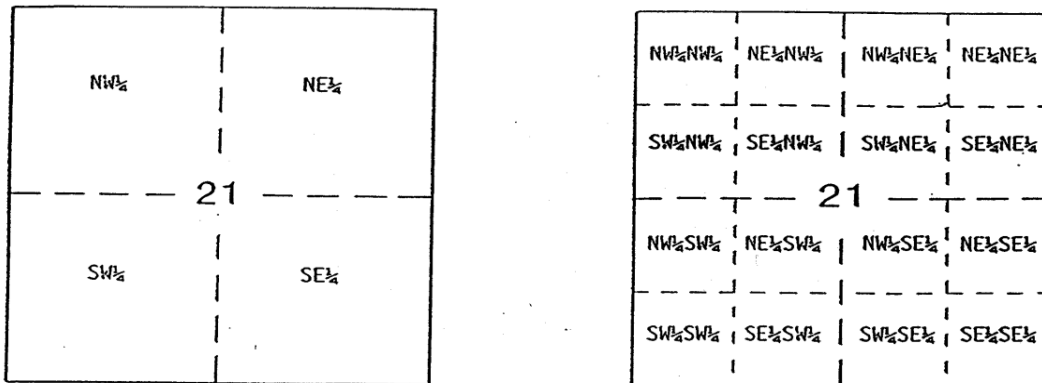
<sup>18</sup> The head is the difference in elevation between the intake of the pipeline and the return discharge to the stream. THP is calculated by multiplying the quantity of water to be diverted in cubic feet per second by the vertical head in feet and dividing the product by 8.8.

**Figure 3. System for Describing Location of Project Features<sup>19</sup>**

Land descriptions used to locate various project features are based on Section, Township, and Range. A Township is divided into 36 Sections, as shown below:

	6	5	4	3	2	1
	7	8	9	10	11	12
Township 2 South	18	17	16	15	14	13
	19	20	21	22	23	24
	30	29	28	27	26	25
	31	32	33	34	35	36
	Range 2 West					

When describing a particular location, Sections are further divided into quarter sections (160 acre portions), and sixteenth sections (40 acre portions), as shown below:



For example, the 40 acre portion shown in black on the diagram above right would be described as follows:

"The SW $\frac{1}{4}$  of the NE $\frac{1}{4}$  of Section 21, Township 2 South, Range 2 West, W.M."

A SAMPLE PROJECT MAP IS SHOWN ON THE REVERSE SIDE OF THIS PAGE

<sup>19</sup> Oregon Water Resources Department. *Application to Develop Hydroelectric Use as Part of an Existing Certified Water Right*. Available at: [http://www.oregon.gov/owrd/PUBS/docs/forms/Additional\\_use\\_hydroelectric\\_form\\_2014.pdf](http://www.oregon.gov/owrd/PUBS/docs/forms/Additional_use_hydroelectric_form_2014.pdf)

## 4. Water Management

The applicant specifies the method it will use to monitor the diversion to ensure the volume of water use is within the limits of the water right, and that no water is being wasted. Potential methods include weir, meter, or periodic sampling.

The applicant must also describe the measuring devices that will be used, and the frequency of data collection.

## 5. FERC Compliance

If the proposed project falls under FERC jurisdiction, it must obtain a FERC Conduit Exemption prior to submitting an application through Oregon's expedited approval process. A copy of the exemption application and the order granting the exemption must be submitted as Exhibits C and D of the application (specified in Section 9 of the application form). These materials provide WRD with valuable information about the resource protection measures that will be put in place at the project site, such as fish screens, bypass flows, and fish passage.

FERC has jurisdiction over any project that will connect to a power grid with interstate linkages, or is located on navigable waters.<sup>20</sup> Therefore, most projects pursuing the expedited approval process will require a FERC exemption.

For projects that are not under FERC jurisdiction, the applicant must explain why they are exempt by including remarks in Section 5 of the application form.

## 6. Remarks

This section of the form provides space for the applicant to clarify any information provided elsewhere in the application. The applicant must clearly identify which component of the application they are addressing in their remarks.

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<sup>20</sup> As specified in the Federal Power Act, Section 4(e), FERC also has jurisdiction over projects located on any U.S. government dam, or any projects using surplus water from a U.S. government dam. "Navigable waters" (for which the Commission has jurisdiction under the Commerce Clause) are defined to include "streams or other bodies of water over which Congress has jurisdiction to regulate commerce among foreign nations and among the States" (16 U.S.C. 796). See Digest of Federal Resource Laws of Interest to the U.S. Fish and Wildlife Service, <http://www.fws.gov/laws/lawsdigest/FEDPOWR.HTML>

## 7. Map Requirements

The applicant, as the holder of a certificated water right, will likely have a “final proof map” documenting that the water is being used in a manner consistent with any terms and conditions associated with the water right.<sup>21</sup> If so, a copy of that map should be used when preparing the map required for submittal along with the hydroelectric project development application. If a final proof map is not available, a platted and recorded subdivision map (an official map showing surveyed lots), a deed description survey map, or a county assessor tax lot map can be submitted with the application.

The version of the map submitted with the application should show the location of:

- 1) The *existing* dam or diversion point from the stream;
- 2) Any *proposed* diversions from the existing canal or pipeline;
- 3) The proposed powerhouse(s); and
- 4) Any other existing and proposed components of the project such as canals, ditches, pipelines, flumes, and/or penstocks.

The map should clearly indicate the township, range, section, and quarter-quarter section of each of the items listed above. See Figure 2, earlier in this document, for an explanation of this system of land identification. A sample map that fulfills WRD’s requirements for the application form is shown in Figure 4.

The map submitted with the application must adhere to the following specifications, listed in an appendix to the application form:

- Maps must be of permanent quality and drawn clearly in ink on good quality paper.
- Maps larger than 11x17 inches must be drawn on tracing vellum or Mylar. The applicant should consult OWRD to determine the number of copies that should be submitted.
- Maps must be drawn to a standard, even scale of not less than 4 inches = 1 mile. Small area maps may be more easily drawn to a larger scale, such as 1 inch = 400 feet. The scale must be indicated on the map.

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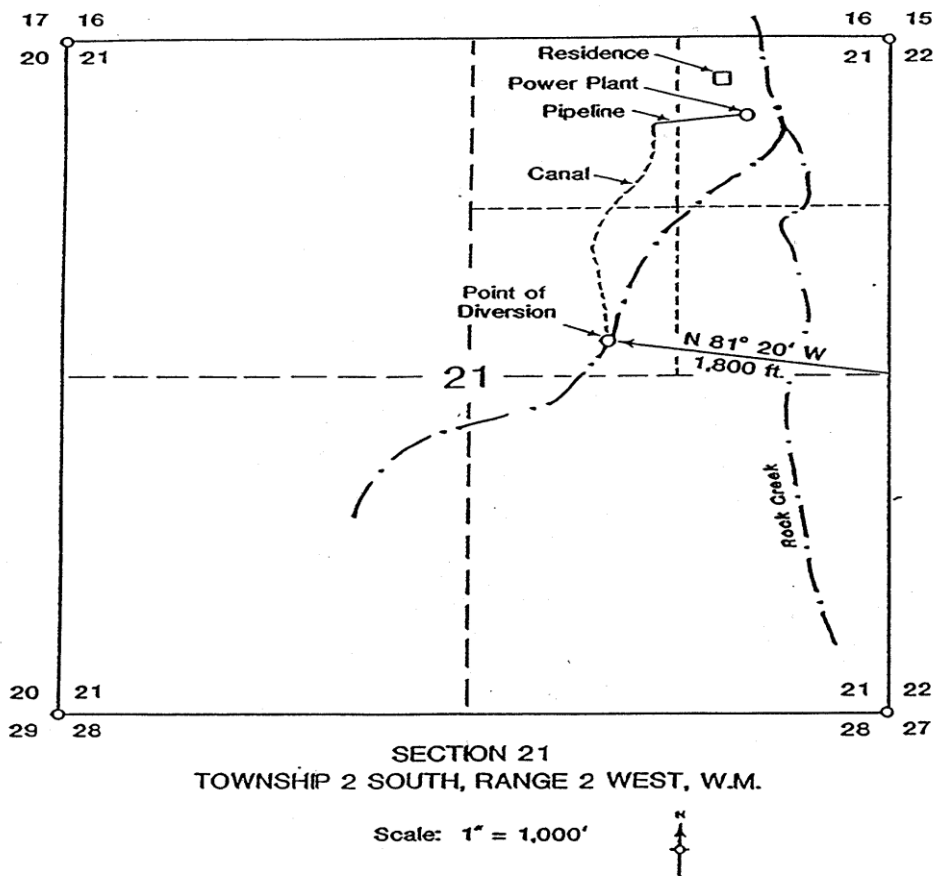
<sup>21</sup> Oregon Water Resources Department. 2013. *Water Rights in Oregon: An Introduction to Oregon’s Water Laws*. Available at: <https://www.oregon.gov/owrd/PUBS/docs/aquabook.pdf>

Figure 4. Sample Map<sup>22</sup>

## EXHIBIT A

### MAP TO ACCOMPANY APPLICATION FOR HYDROELECTRIC LICENSE

A.C. Smith  
January, 1988



SAMPLE

<sup>22</sup> Oregon Water Resources Department. *Application to Develop Hydroelectric Use as Part of an Existing Certificated Water Right*. Available at: [http://www.oregon.gov/owrd/PUBS/docs/forms/Additional\\_use\\_hydroelectric\\_form\\_2014.pdf](http://www.oregon.gov/owrd/PUBS/docs/forms/Additional_use_hydroelectric_form_2014.pdf)

## 8. Signature

This section of the application form lists a set of terms that the applicant must agree to in order to proceed. These terms include the following:

- Applicant owns the land that the point of diversion, conduit, and powerhouse will be located on, or applicant has a recorded easement or written authorization permitting access.
- Applicant will be billed annually based on the theoretical horsepower produced by the hydroelectric project. Failure to pay this invoice by the prescribed date may result in cancellation of the hydroelectric water right certificate.
- Use of water for hydroelectric purposes will not exceed the rate, duty, season, and any other limitations of the existing certificated water right.
- Water may be used for hydroelectric use, only if the same water is being used for its original purpose as described in the certificate attached to the application.
- If development of the hydroelectric use is not according to the terms of the certificate, the certificate may be canceled.
- Applicant has provided all required exhibits specified in the application form.

The form provides a place for the applicant's signature. By signing the form, the applicant confirms that all information included in the application is true and correct to the best of his/her knowledge.

## 9. Exhibits

Up to seven exhibits must be submitted along with the application form, depending on the circumstances of the proposed project. Several of the Exhibits have already been referenced earlier in this guidebook. The required exhibits include:

- **Exhibit A:** A map that adheres to the specifications described earlier (Section 7 of the application form). If a final proof map exists for the certificated water right, a copy of that map should be used.
- **Exhibit B:** A copy of the certificate or decree for the water right associated with the proposed hydroelectric project. If no certificate or decree has been issued, the project is not eligible to apply for this expedited process.

- **Exhibit C:** Either a copy of the FERC exemption application (if the proposed project is under FERC jurisdiction), or a description of the proposed project from the point(s) of diversion to where the water re-enters the stream. The reader should be able to draw a basic picture of the project based on the narrative statement. Features described in the statement should include:
  - Points of diversion;
  - Dams and associated structures;
  - Storage features;
  - Diverting or forebay reservoirs connected to any storage features;
  - Conduits or pipes;
  - Powerhouses;
  - Water wheels;
  - Primary lines transmitting power to the point of junction with a distributing system, or with any interconnected primary system;
  - Miscellaneous works and structures used in connection with any part of the Project;
  - Rights of way; and
  - Lands, flowage rights and all other properties, rights and structures necessary or appropriate in the use, operation and maintenance of the Project.
  
- **Exhibit D:** A copy of the FERC order granting an exemption from licensing (if the proposed project is under FERC jurisdiction). This exhibit is important because it includes a description of the resource protection measures required by the Oregon Department of Fish and Wildlife, such as fish screening, bypass devices, and fish passage measures.
  
- **Exhibit E:** Evidence that during at least one of the past five years, water has been used in a manner consistent with the terms and conditions of the applicant’s certificated water right. This exhibit is important because, in order to remain valid, a water right must be used at least once every five years. This could involve hiring a Certified Water Right Examiner<sup>23</sup> to survey the use and provide an official report stating that the water has been used according the terms and conditions of its permit. Alternatively, it could come in the form of electric bills if water is pumped using a dedicated electric service, photographs, etc.
  
- **Exhibit F:** This exhibit is only required if the applicant does not own or control the conduit upon which the proposed hydroelectric facility would be located. The applicant must include a statement from the public entity that controls the conduit confirming plans to deliver water for use by the proposed hydroelectric project.
  
- **Exhibit G:** A [land use form](#), signed by the local planning official, certifying that the structures associated with the project are allowed. The land use form is available at the WRD’s office in Salem, and on WRD’s website.

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<sup>23</sup> Obtaining a water use report from a Certified Water Right Examiner is what is required of a permit holder to “prove” their water use when obtaining a certificate. A Certified Water Right Examiner is a registered, professional surveyor, geologist, or engineer who has passed a test given by the Oregon State Board of Examiners for Engineering and Land Surveying. For a list of CWREs, call the WRD at 503-986-0900 or your local watermaster.

## **6 EXPEDITED APPLICATION CONCLUSION**

The expedited process for hydroelectric development is relatively simple, because it accounts for the fact that the sites in question will have already been through a more rigorous review process. Furthermore, to be eligible for the expedited process, the proposed hydroelectric projects are relatively small scale and, therefore, should have limited environmental impacts. WRD estimates that a thoroughly completed application could take as little as a few months to process. As stated earlier, WRD representatives are available to discuss the specifics of the proposed project. Potential applicants are encouraged to communicate with a WRD representative before submitting an application.



# 7 OREGON MINOR HYDROELECTRIC PROJECTS

If a proposed project is  $\leq 100$  theoretical horsepower and the applicant will produce power during times that water is not used under an existing water right, it is categorized as a “minor” project for the purposes of state-level project licensing.

Due to the small scale of minor projects, they are likely to have fewer impacts on water and other environmental resources. As a result, the process of obtaining a license for a minor project is much simpler than for major projects.

Once it is determined that a project qualifies to participate in the minor project process, it is appropriate to use this section of the guidebook. A separate guidebook is available to assist developers in obtaining development approval at the Federal level.

This section of guidebook is designed to assist developers of eligible projects by mapping out the process through a flow diagram, and providing a step-by-step description of the actions the developer will need to take in order to pursue the minor project process. It supplements a separate [instruction guide](#) for minor project applications prepared by the Oregon Water Resources Department (WRD), the agency with authority over state-level hydroelectric projects.

This guidebook is not a substitute for expert advice or official state documentation of the process and related regulations. Regulations may change. Project developers must consult with professionals to ensure compliance with current regulations. Those interested in developing hydroelectric facilities should consult official state documents (including those listed below) for complete details, and obtain legal advice as necessary. Energy Trust does not assume responsibility for any damages or other liability whatsoever (including any consequential damages) as a result of using this guide.

Key regulatory documents guiding hydroelectric project approval in Oregon include the following:

- [\*Oregon Revised Statutes \(ORS\). Chapter 543: Hydroelectric Projects\*](#)
- [\*ORS Chapter 537: Appropriation of Water Generally\*](#)
- [\*Oregon Administrative Rules \(OAR\) 690-051: Water Resources Department, Division 51: Appropriation and Use of Water for Hydroelectric Power and Standards for Hydroelectric Applications\*](#)

Developers of hydroelectric projects are encouraged to obtain copies of these documents. They include official language and details that provide valuable context for hydroelectric projects.

As noted earlier, WRD has authority over hydroelectric project licensing in the State. Developers are encouraged to contact the WRD with any additional questions related to the process. WRD’s Craig Kohanek (503-986-0823) specializes in hydroelectric projects.

Section 8 of this document provides an overview of the process for minor hydroelectric projects. Section 9 provides a step-by-step description of the process. A discussion of the application materials necessary for submittal is provided in Section 10.

## 8 OREGON MINOR PROJECT PROCESS OVERVIEW

Water rights play a fundamental role in Oregon’s hydroelectric project process. For a proposed hydroelectric project seeking approval from the state, the main objective is to secure a water right specifying that the water from a particular source can be used for hydroelectric purposes. This license or permit grants the recipient a water right.<sup>24</sup> The water right is subject to Oregon’s water laws. Most notably, this means that when a water shortage occurs, those who were first to obtain water rights on a particular stream will be the last to be shut off.<sup>25</sup>

As noted earlier, the process for minor projects is simpler than for major projects. In contrast to larger projects, no preliminary permit is required for minor projects. In addition, the applicant does not need to conduct detailed studies about the project’s environmental and other resource impacts. Finally, the process for gathering public input is shorter and less complex than for larger projects. However, minor projects must still meet natural resource standards to be authorized.

[WRD](#) has authority over and acts as the entry point for Oregon’s multi-agency hydroelectric facility process. The group of state agencies responsible for reviewing hydroelectric applications is known as the Hydroelectric Application Review Team (HART).

Figure 5 illustrates the process for a minor project. After considering the project’s resource impacts, the applicant submits an application along with required maps, fees, and evidence of local-level project approval. This is followed by a public comment period, then preparation by WRD of a proposed final order. Further comments and objections may be filed as protests to be considered before WRD either approves or denies the application. Further comments and objections are considered before WRD either approves or denies the application. If the application is approved, WRD will issue a time-limited water right. These steps are discussed in more detail in Section 9.

In addition to the State-level process, the developer may also need to obtain Federal approval for development by securing either a license or an exemption from licensing from the Federal Energy Regulatory Commission (FERC). The Energy Trust offers separate guidebooks to assist developers with navigating the processes of obtaining exemptions from FERC licensing, and FERC provides its own guidebooks to the licensing process.<sup>26</sup>

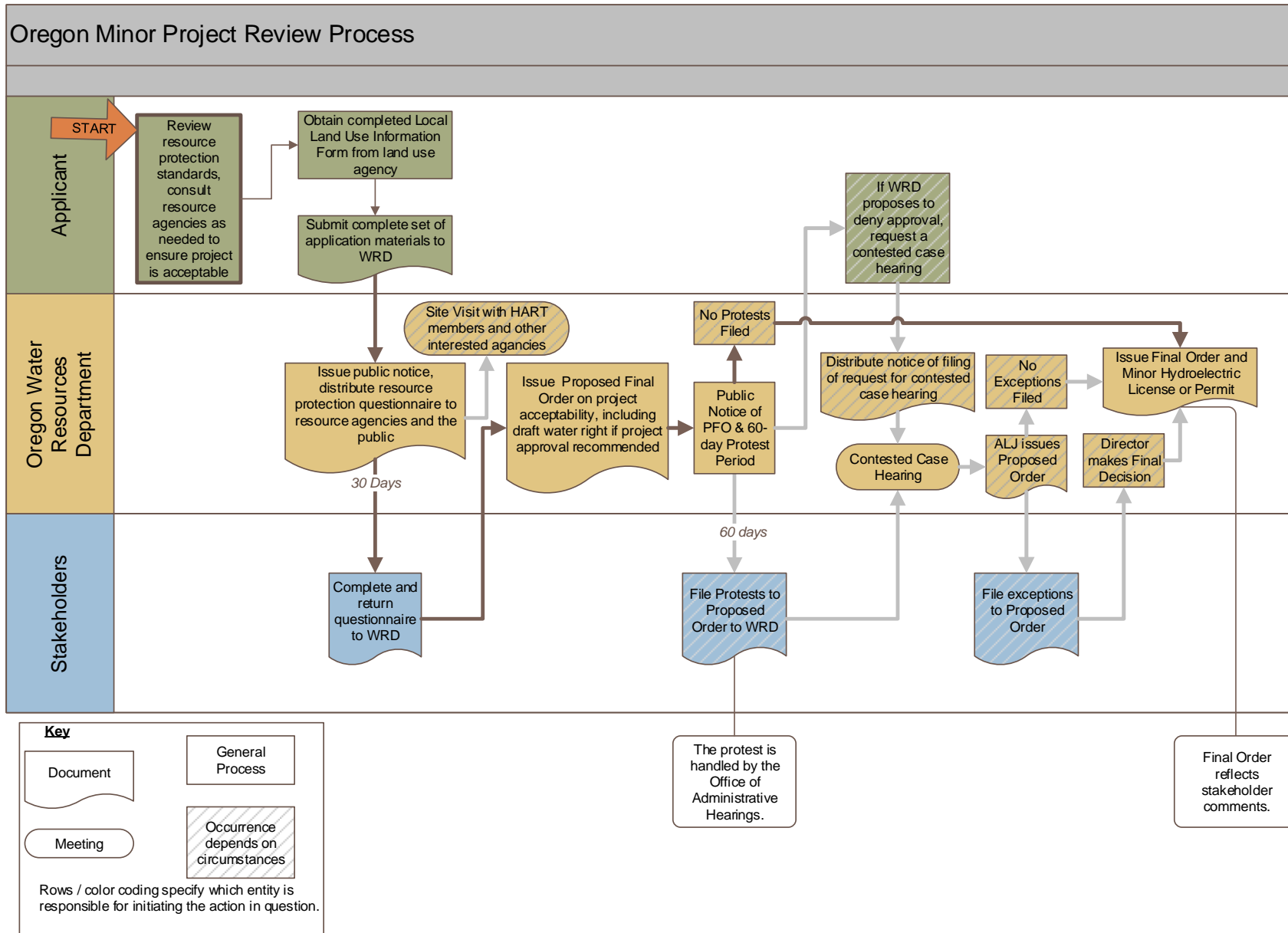
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<sup>24</sup> The Oregon Water Resources Department’s Administrative Rules (OAR 690-051-0010(14) and (22)) specifies that “licenses” are issued to non-municipal applicants, and “permits” are issued to municipal corporations. For the purposes of simplicity, the term “license” will be used throughout this document to refer to the approval process pursued by any applicant.

<sup>25</sup> For discussion of Oregon water law and the process of obtaining water rights in general, see Oregon Water Resources Department, 2008. *Water Rights in Oregon: An Introduction to Oregon’s Water Laws*. Available at: <http://www.oregon.gov/owrd/PUBS/docs/aquabook.pdf>. Also see ORS Chapter 543.

<sup>26</sup> FERC offers two handbooks. One is the Handbook for Hydroelectric Project Licensing and 5 MW Exemptions from Licensing. The other is the Hydroelectric Project Handbook for Filings Other than Licenses and Exemptions. Both are available at <http://www.ferc.gov/industries/hydropower/gen-info/handbooks.asp>.

**Figure 5. Minor Project Process Overview**



# 9 OREGON MINOR PROJECT STEP-BY-STEP PROCESS DESCRIPTION

This section is a step-by-step description of the process of obtaining a license for a minor project from the state of Oregon. Steps described here are based on information provided in WRD’s instruction guide for minor project applications, as well as the Oregon Administrative Rules (OAR) that govern WRD’s process of reviewing hydroelectric projects.<sup>27</sup> Though not discussed here, an applicant must also obtain approval for project development at the Federal level if the proposed project is under FERC jurisdiction.<sup>28</sup>

## 1. Review Resource Protection Standards

A number of [resource protection standards](#) must be satisfied in order to obtain project approval.<sup>29</sup> These standards are included as Appendix A of this section of the guidebook. The applicant should consult with the Oregon Department of Fish and Wildlife<sup>30</sup> or the Department of Environmental Quality to: 1) discuss the proposed project; 2) determine whether there are potential impacts to fish, wildlife, or water quality anywhere within the project area; and 3) discuss specific measures to mitigate impacts. After an applicant files an application, these and other state and federal resource agencies will be asked to complete a questionnaire stating whether the project meets all of the resource protection standards.

Discussions with the local biologist from the Oregon Department of Fish and Wildlife and other resource agencies early in the development process will help determine whether the project is ultimately likely to be approved. In addition, informing resource agencies about the project early on may expedite these agencies’ reviews of the project after the application is submitted to WRD.

Another factor to consider at this early stage is that a project cannot be approved if the proposed location is a designated resource area, unless the applicant has a valid lease from the agency managing the resource area. These designated resource areas include areas such as federally-established wild and scenic rivers, state parks, and natural heritage areas. A full list is provided in the OAR.<sup>31</sup>

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<sup>27</sup> OAR 690-051-0090.

<sup>28</sup> A project is under FERC jurisdiction if it meets any one of the following conditions: 1) is located on navigable waters of the U.S.; 2) occupies a U.S. government dam; 3) utilizes surplus water or water power from a U.S. dam; and/or 4) is located on a stream over which Congress has Commerce Clause jurisdiction, and the project affects the interests of interstate or foreign commerce. Projects that interconnect with an interstate electric grid are considered to affect interstate commerce.

<sup>29</sup> These standards are set forth in OAR 690-051-160 through 690-051-0260 (amended November 2015).

[http://arcweb.sos.state.or.us/pages/rules/oars\\_600/oar\\_690/690\\_051.html](http://arcweb.sos.state.or.us/pages/rules/oars_600/oar_690/690_051.html)

<sup>30</sup> The applicant should request to speak with ODFW’s Hydropower Coordinator for the area where the project is proposed.

<sup>31</sup> As noted in OAR 690-051-0090, designated resource areas are described in OAR 690-051-0030.

## **2. Obtain Project Approval from Local Land Use Agency**

Hydroelectric projects must secure development approval at the local city or county level, and evidence of this approval must be submitted along with the application to WRD. WRD requires local planning officials to complete a [Land Use Information Form](#) as part of the application for a hydroelectric water right. If the project is located within one municipality, only city officials are required to complete the form. If the project is located entirely on county lands, a county planning official must complete the form. If the project spans multiple cities and/or county boundaries, all entities in the project's property boundary must complete the form. Other local permitting requirements vary widely. Check with local city or county governments for more information.

## **3. Submit a Completed Application**

A minor project application form must be completed and submitted along with required maps, attachments, and a check for \$500, the first installment of the application fee. The second installment of \$500 is due prior to the license being issued. All attachments should be labeled as Exhibit A, Exhibit B, etc. The land use form described in the previous step is part of the application form.

When an applicant files a preliminary permit, license or an exemption from licensing, or a notice of intent to construct a qualifying conduit hydropower facility with the Federal Energy Regulatory Commission (FERC) or other authorized federal agency, the applicant shall at the same time apply to the Water Resources Department and submit to the Department a complete copy of any application filed with FERC or any similar application to other federal agencies responsible for authorizing the project. See more detail in Section 10

The elements of the application form, and the procedures associated with submitting the form, are discussed in Section 10 of this guidebook. A copy of the official WRD [application form](#) is available on WRD's website and is included as Appendix B in this section of the guidebook.

If an application is found to be incomplete, WRD may return it to the applicant to provide the missing information. The Director may require additional information from the applicant at any time.

#### **4. WRD Issues Public Notice of Application and Resource Protection Questionnaire**

Once the application is filed and found to be complete, an application file number will be assigned and WRD will issue a public notice stating that the application has been received and that a 30-day comment period will follow. The notice includes basic information about the project such as the assigned application file number, the applicant's contact information, and the size and location of the project.

The notice is sent to the local county planning department, any property owners within 300 feet of the powerhouse, and any affected Indian tribes. It is also published in WRD's weekly publication.

At the same time that it issues the public notice, WRD sends a questionnaire to state and federal agencies, which complete and return the questionnaires to WRD. In the questionnaire, the agencies are asked to confirm whether or not the project satisfies each of the resource protection standards referenced in Step 1. WRD sends the questionnaire to the following list of federal and state agencies:

- Bureau of Land Management,
- Bureau of Indian Affairs,
- Bureau of Reclamation,
- Department of Geological and Mineral Industries,
- Division of State Lands,
- Local County / City,
- Legislative Commission on Indian Services,
- National Marine Fisheries Service,
- National Park Service,
- Northwest Power and Conservation Council,
- Oregon Department of Agriculture,
- Oregon Department of Environmental Quality,
- Oregon Department of Fish and Wildlife,
- Oregon Department of Forestry,
- Oregon Parks and Recreation Department,
- Oregon Water Resources Department,
- U.S. Army Corps of Engineers,
- U.S. Fish and Wildlife Service,
- U.S. Forest Service, and
- U.S. Geological Survey.

## **5. Stakeholders Submit Comments on Application**

As noted above, WRD's issuance of the public notice initiates a 30-day comment period. Agencies that received the questionnaire have the opportunity to complete and return the form to WRD within this comment period. Lack of a response is considered to convey approval. Members of the public are welcome to submit comments during this time as well.

## **6. Consultation**

All applicants shall consult with appropriate government entities before an application for a License or Permit is filed. Evidence of the consultation shall be filed with the License or Permit application. At a minimum, applicants shall consult with the Water Resources Department and affected local governments and the agencies listed on page 25.

WRD will arrange for a site visit as part of the consultation process, advising and including other interested agencies who wish to attend.

(The site visit is mentioned in OAR 690-051-095.)

## **7. WRD Prepares and Issues Proposed Final Order**

Approximately one to two months following the 30-day comment period and the site visit, WRD reviews any comments received regarding the application and prepares a proposed final order (PFO). During this time, a site visit is scheduled and conducted with various members of the state agencies that comprise the HART. WRD's evaluation of the project will consider matters such as the basin plan, instream flow requirements, potential conflict with existing water rights, and the resource protection standards the project must meet to be approved. WRD prepares a PFO with findings to address whether the proposed project, together with any recommended measures to protect or enhance the natural resources of the State, is consistent with the minimum standards required by the rules. Part of the determination is whether the project would impair or be detrimental to the public interest. (See requirements in Appendix A).

WRD's PFO will state whether it proposes to approve or deny the applicant the requested water right. If WRD recommends approval, a draft water right will accompany the PFO.

The PFO and draft water right are sent to the applicant, as well as any members of the public who provided comments on the application and to all reviewing agencies.

## **8. Stakeholders Submit Comments on PFO**

A 60-day comment and objection period follows WRD's issuance of the PFO.

Comments or objections to the material in the PFO must state the facts on which they are based.

## **9. Protests Submitted**

Protests may be filed with the WRD and must state specifically the facts which support any allegation that a final order approving the project should not be issued. A fee is required for filing a protest from other than the applicant. WRD will evaluate any protests filed to determine if significant issues are raised.

If there are no significant issues raised, a final order can then be issued.

## **10. Resolving Protest and Issuing Results**

If the WRD Director determines there are significant issues, a contested case hearing will be scheduled. In some cases, there may be exceptions filed to the outcome of the hearing, either by a party or by the applicant. The Director will make the final determination. The final order would provide any provisions or restrictions to be included in the order. The balance of the fee (\$500) is payable before the final approval is issued.<sup>32</sup>

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<sup>32</sup> OAR 690-051-0130.



# 10 OREGON MINOR PROJECT APPLICATION REQUIREMENTS

Applicants pursuing the minor project process must submit a complete application form along with several required attachments. This section describes these required components of the application submittal. Procedural aspects are discussed first. This is followed by a discussion of the content of the application. A copy of the official WRD [application form](#) is available at WRD's website and is included as Appendix B of this section of the guidebook.

## 10.1 Procedural Requirements

Procedural requirements associated with the application process for a minor project are minimal. The requirements include the following:

1. Applicants must complete all sections of the application form.
2. A \$500 check must accompany the application. This is the first installment of the \$1,000 application fee. The second \$500 is due prior to issuance of the license.<sup>33</sup> This fee must be paid by check payable to the Oregon Water Resources Department.
3. The application must be submitted along with a map and all the other required attachments that are specified in the application form (Exhibits A through G, addressed in Section 11 of the application form).
4. The complete packet of application materials should be submitted to:

Oregon Water Resources Department  
725 Summer Street NE, Suite A Salem,  
OR 97301-1271  
Attention: Hydroelectric Division

5. If approved, the applicant must submit the remaining \$500 of the application fee to WRD after receiving notice of approval. (See step 9 in Section 9.)

Applicants are encouraged to discuss the proposed project with hydroelectric staff at WRD prior to submitting an application. This communication should help ensure that the applicant's project is a strong candidate for approval and that all required elements of the application materials are included in the initial submittal. See contact information provided in Section 7 of this guidebook.

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<sup>33</sup> A surcharge of 30 percent may be required if anadromous fish (salmon or steelhead) or threatened or endangered species are present, per ORS 543.280.

## 10.2 Application Content

The application form has eleven sections, each of which is described below.

### 1. Applicant Information

The applicant provides contact information and, if applicable, the name of the company or municipality with which it is affiliated.

### 2. Property Ownership

The applicant is asked to indicate whether or not it owns all of the land where it proposes to divert, transport and use water. This includes roads, rights of way and canals or ditches.

If the applicant does not own all of the land related to the project, they must indicate that they have a recorded easement or written authorization permitting access. WRD cannot issue a water right if the applicant does not have written authorization to use all property where the applicant would divert, transport or use water for the proposed project.

### 3. Water Use

This section of the application gathers a variety of information pertaining to the water that will supply the hydroelectric facility. It includes three parts:

#### a. Proposed Source and Amount of Water

The applicant completes a table specifying all sources of water and amounts that will supply the hydroelectric facility.

#### b. Period of Use

The applicant indicates the starting date and month and ending date and month when water is proposed to be used.

#### c. Power Development

The applicant specifies:

- i. The number of feet of gross head that will be utilized; and
- ii. The theoretical horsepower (THP) that will be developed.<sup>34</sup>

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<sup>34</sup> The head is the difference in elevation between the intake of the pipeline and the return discharge to the stream. THP is calculated by multiplying the quantity of water to be diverted in cubic feet per second by the vertical head in feet and dividing the product by 8.8.

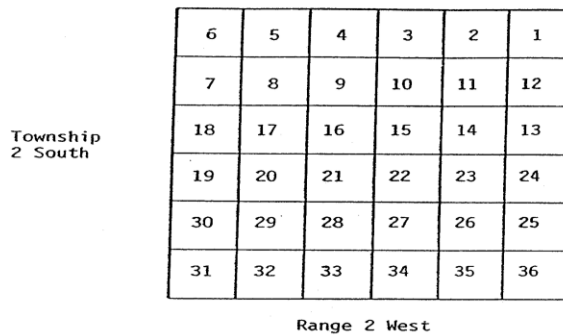
**d. Location**

The applicant specifies the precise location of the point of diversion and power plant, identifying the quarter-quarter Section, Township, and Range, based on the U.S. Public Lands Survey System. An explanation of how this system should be used to locate major project features is included in the application form and copied below in Figure 6.

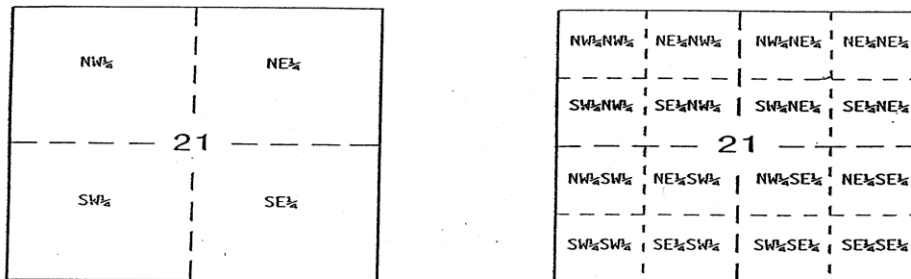
- i. The applicant reports the precise point to which water will be discharged after passing through the power plant.
- ii. In addition to completing this section of the form with the required information, applicants must identify the point of diversion and power plant on a map. The map must adhere to the specifications provided in the application form. These specifications are described below in the section titled "Map Requirements."

**Figure 6. System for Describing Location of Project Features<sup>35</sup>**

Land descriptions used to locate various project features are based on Section, Township, and Range. A Township is divided into 36 Sections, as shown below:



When describing a particular location, Sections are further divided into quarter sections (160 acre portions), and sixteenth sections (40 acre portions), as shown below:



For example, the 40 acre portion shown in black on the diagram above right would be described as follows:

"The SW $\frac{1}{4}$  of the NE $\frac{1}{4}$  of Section 21, Township 2 South, Range 2 West, W.M."

A SAMPLE PROJECT MAP IS SHOWN ON THE REVERSE SIDE OF THIS PAGE

<sup>35</sup> Oregon Water Resources Department. [Application to Develop a Minor Hydro Electric Project](#)

## **4. Project Facilities**

The applicant provides information on:

- Dam type, dimensions (height and crest width of downstream slope) and construction materials;
- Storage reservoir location and dimensions and storage capacity;
- Canal dimensions (length, slope, base / top widths); and
- Water wheel and generator type.

## **5. Water Management**

The applicant specifies the method it will use to monitor the diversion to ensure the volume of water use is within the limits of the water right, and that no water is being wasted. Potential methods include weir, meter, or periodic sampling. The applicant must also describe any plans it has for minimum bypass flow.

## **6. Resource Protection**

The state requires careful control of activities that may affect the waterway or streamside area. In this section, the applicant describes the practices it plans to undertake to protect water resources. The application form requires the applicant to note whether it will engage in any of four specific methods for water protection. These four methods are:

- Diversion will be screened to prevent uptake of fish and other aquatic life.
- Excavation or clearing of banks will be kept to a minimum to protect riparian or streamside areas.
- Operating equipment in a body of water will be managed and timed to prevent damage to aquatic life.
- Water quality will be protected by preventing erosion and run-off of waste or chemical products.

The applicant is also asked to describe its specific plans related to each method.

## **7. Finances and Schedule**

The applicant provides the following information:

- Estimated project cost;
- Description of the proposed use or market for the power to be developed;
- Time schedule for completing the project after a water right is issued; and
- Estimated life of the project and proposed method for decommissioning the project at the end of its life.

## 8. Neighbors

The applicant provides a names and contact information for all individuals who own property within 300 feet of the proposed powerhouse.

## 9. Remarks

This section of the form provides space for the applicant to clarify any information provided elsewhere in the application. The applicant must clearly identify which component of the application they are addressing in their remarks.

## 10. Map Requirements

The applicant must provide a map showing the location of the water source and area(s) of use. The map used in the application can be a platted and recorded subdivision map (an official map showing surveyed lots), a deed description survey map, or a county assessor tax lot map.

The map must show the location of the following specific project elements:

- 1) The dam or diversion point from the stream, described by distance from a corner; and
- 2) Main canals, ditches, pipelines, flumes, or powerhouses.

The map should clearly indicate the township, range, section, and quarter-quarter section of each of the items listed above. See Figure 2, earlier in this document, for an explanation of this system of land identification. A sample map that fulfills WRD's requirements for the application form is shown in Figure 7.

The map must adhere to the following specifications:

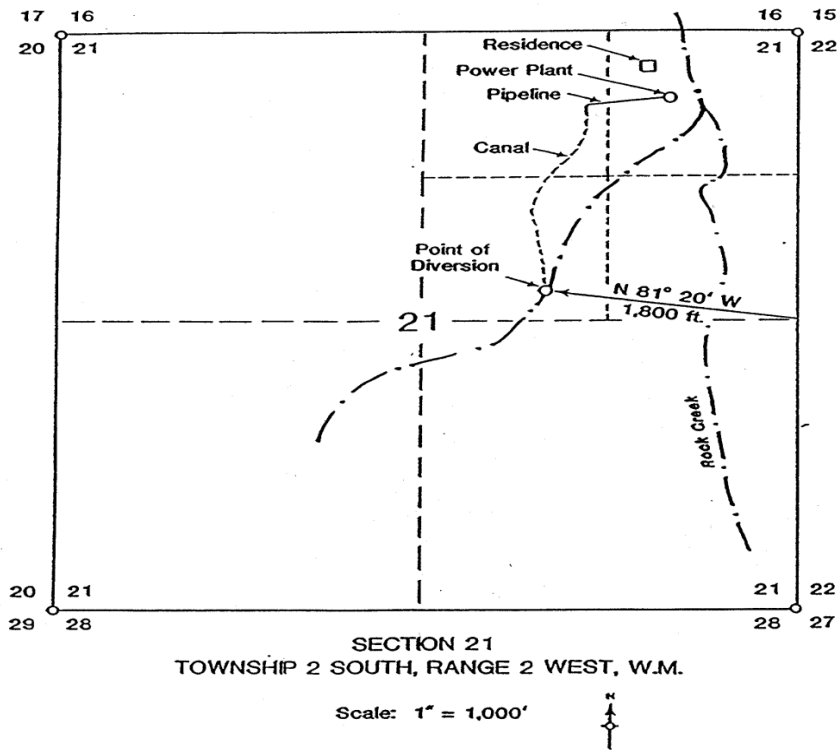
- Maps must be of permanent quality and drawn clearly in ink on good quality paper.
- Maps larger than 11x17 inches must be drawn on tracing vellum or Mylar. The applicant should consult WRD to determine the number of copies that should be submitted.
- Maps must be drawn to a standard, even scale of not less than 4 inches = 1 mile. Small area maps may be more easily drawn to a larger scale, such as 1 inch = 400 feet. The scale must be indicated on the map.

Map requirements are described in Section 3 of WRD's [\*Instruction Guide for Minor Hydroelectric Applications\*](#).

Figure 7. Sample Map<sup>36</sup>

EXHIBIT A  
MAP TO ACCOMPANY APPLICATION FOR  
HYDROELECTRIC LICENSE

A.C. Smith  
January, 1988



SAMPLE

<sup>36</sup> Oregon Water Resources Department. *Application to Develop Hydroelectric Use as Part of an Existing Certified Water Right*. Available at: [http://www.oregon.gov/owrd/PUBS/docs/forms/Additional\\_use\\_hydroelectric\\_form\\_2014.pdf](http://www.oregon.gov/owrd/PUBS/docs/forms/Additional_use_hydroelectric_form_2014.pdf)

## 11. Signature

This section of the application form lists a set of terms that the applicant must agree to in order to proceed. These terms include the following:

- Applicant asks to use water specifically as described in the application.
- Evaluation of the application will be based on information provided.
- Applicant cannot legally use water until WRD issues a water right.
- If applicant is granted a water right, it will not waste water.
- If development is not according to the terms of the water right, the water right can be canceled.
- Water use must be compatible with local comprehensive land use plans.
- Even if WRD issues a water right to the applicant, the applicant may have to stop using water to allow senior water right holders, instream water rights or minimum bypass flows to get water to which they are entitled.

The form provides a place for the applicant's signature. By signing the form, the applicant confirms that all information included in the application is true and correct to the best of his/her knowledge.

## 12. Exhibits

Several exhibits must be submitted along with the application form. Some of the exhibits have already been referenced earlier in this guidebook. The required exhibits include:

- **Exhibit A:** A narrative statement describing the proposed project from the point(s) of diversion to the water return area. The reader should be able to draw a basic picture of the project based on the narrative statement. Features described in the statement should include:
  - Points of diversion,
  - Dams and associated structures,
  - Storage features,
  - Diverting or forebay reservoirs connected to any storage features,
  - Conduits or pipes,
  - Powerhouses,
  - Water wheels,
  - Primary lines transmitting power to the point of junction with a distributing system, or with any interconnected primary system,
  - Miscellaneous works and structures used in connection with any part of the Project,
  - Rights of way, and
  - Lands, flowage rights and all other properties, rights and structures necessary or appropriate in the use, operation and maintenance of the Project.
- **Exhibit B:** A project map that adheres to the specifications described earlier (Section 9 of the application form).
- **Exhibit C:** Tax Assessor's map showing all property lines within 300 feet of the proposed powerhouse.
- **Exhibit D:** A land use form, signed by the local planning official, certifying that the structures associated with the project are allowed. The [land use form](#) is available at the WRD's office in Salem, and on WRD's website.



# **11 OREGON MINOR PROJECT CONCLUSION**

The minor project process for hydroelectric development is relatively simple in recognition of the fact that the projects in question are small and will have relatively few environmental impacts. WRD estimates that a thoroughly completed application will take between four and six months to process. As stated earlier, WRD representatives are available to discuss the specifics of the proposed project. Potential applicants are encouraged to communicate with a WRD representative before submitting an application.

## **Appendix A: Resource Protection Standards<sup>37</sup>**

### **II. RESOURCE PROTECTION STANDARDS**

In order to approve your application, OWRD must find that your project would meet each of these standards.

#### **A. NOTICE ON FILING (See OAR 690-051-0030)**

1. Is the project located in any of the following areas? If so, consent from the managing agency will be necessary.
  - A. National parks
  - B. National monuments
  - C. Wilderness areas established by federal law
  - D. Bureau of Land Management areas of critical environmental concern established under federal law
  - E. Wild and scenic rivers established by federal law
  - F. Estuarine sanctuaries established under Public Law 92-583
  - G. Federal research natural areas established under federal regulation
  - H. State parks and waysides
  - I. Scenic waterways designated under ORS Chapter 390
  - J. State wildlife refuges
  - K. State dedicated natural heritage areas established under ORS Chapter 273.

#### **B. WATER RESOURCES (See OAR 690-051-0190)**

2. Is there water available to provide for reasonable operation of the proposed project?
3. Does the proposed use preclude or interfere with any existing rights or permits for the use of water?
4. Is the proposed use consistent with the applicable State Water Resources Policies in OAR Chapter 690, Divisions 400, 410 and the Basin Program in OAR Chapter 690, Divisions 500 through 520 (see item III below) or, in the absence of a policy, is the proposed use consistent with the policies set forth in ORS 536.300 through 536.350?
5. Is the project consistent with achieving maximum economic development of the waters involved?
6. Is the project consistent with making the fullest practical use of the stream's hydroelectric potential in the project vicinity?

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<sup>37</sup> Resource protection standards are described in Section II of WRD's [Instruction Guide for Minor Hydroelectric Applications](#).

7. Will the project constitute wasteful, uneconomic, impracticable or unreasonable use of the waters involved?
8. Is the project, including mitigation and enhancement measures, consistent with conserving the highest use of the waters of the state for all beneficial purposes?
9. Is the project consistent with controlling the waters of the state for all beneficial purposes, including, drainage, sanitation and flood control?
10. Construction and operation of the proposed project shall comply with water quality standards established in OAR Chapter 340, Division 41.

**C. FISH RESOURCES (See OAR 690-051-0200)**

11. Will anadromous salmon and steelhead resources and habitats be preserved?
12. Will project facilities and operations provide for upstream and downstream passage of fish through the project vicinity as required by Oregon Department of Fish and Wildlife (ODFW) under ORS 509.580 to 509.585? Is there a fish passage agreement, waiver or exemption from ODFW?
13. Will water intakes be screened to prevent juvenile fish from being entrained through turbines as may be required by ODFW under ORS 498.301 to 498.321? Is there a fish screening agreement or waiver from ODFW?
14. Will discharge tubes be designed to avoid attracting fish into turbines at the tailrace?
15. Will ramping rates be controlled to avoid stranding fish by sudden changes in stream levels?
16. Will water be allowed to bypass the diversion to provide for continuous wetted habitat for aquatic species?
17. Have project facilities and operation been designed to mitigate, to the greatest extent practicable, adverse impacts upon spawning, rearing or other habitat areas necessary to maintain the levels and existing diversity of fish species?
18. Will unavoidable adverse impacts on fish or to fish management programs be mitigated?
19. Are project construction, timing, and procedures designed to minimize fishery impacts from instream construction work and premature or unnecessary land clearing and disturbances?
20. Are all fishery protective measures scheduled to be fully functional when the project commences operations?

21. Is the proposed project consistent with ODFW management programs in force on the effective date of these rules?
22. Is any part of the project located on a river or stream reach used by wild game fish, or that would adversely affect wild game fish?
23. If the answer to question 18 is YES, the project shall include acceptable mitigation measures which:
  - A. Are located in the project vicinity.
  - B. Are in effect at the time of adverse impact or start of project operation, whichever comes first.
  - C. Will prevent a net loss to individual species of wild game fish.
  - D. Will prevent conversion of a wild game fish population and fishery to a hatchery dependent resource.
  - E. Are consistent with ODFW management plans and programs in force on the effective date of these rules.
  - F. Employ workable and generally accepted methods and techniques of mitigation best suited to the affected fish resource(s).
24. If proposed at an undeveloped site, is it reasonably foreseeable that the location, design, construction or operation of the project may result in mortality or injury to an individual anadromous salmon or steelhead, or loss of any salmon or steelhead habitat?
25. Modification of an existing facility or project on a stream reach used by anadromous salmon or steelhead or providing anadromous salmon or steelhead habitat shall include acceptable measures that:
  - A. Are reasonably certain to restore, enhance or improve existing salmon and steelhead populations in the affected river.
  - B. Comply with wild game fish standards in paragraphs (5)(a)(C) and (D) of OAR 690-051-0200 if the affected salmon or steelhead populations contain wild fish.
  - C. Are consistent with ODFW Fishery management plans and programs in force on the effective date of these rules.
  - D. Employ workable and generally accepted methods and techniques best suited to the fish resources affected by the proposed project.
  - E. Are in effect at the time of adverse impact or start of project operation, whichever comes first.

26. If within the Columbia River Basin, will the project comply with the fish protection, mitigation and enhancement requirements of the Northwest Power and Conservation Council's (NPCC) Columbia River Basin Fish and Wildlife Program?

**D. WILDLIFE (See OAR 690-051-0210)**

27. Will the location, design, construction or operation of the proposed project jeopardize the continued existence of animal species that have been:
- A. Designated, or officially proposed by the US Fish and Wildlife Service (USF&WS) or the National Marine Fisheries Service (NMFS) as threatened or endangered pursuant to the Endangered Species Act of 1973; or
  - B. Identified by the Oregon Fish and Wildlife Commission as threatened or endangered in Oregon.
28. Will the location, design, construction and operation of project facilities minimize adverse impacts on wildlife habitat, nesting and wintering grounds, and wildlife migratory routes?
29. Will project construction methods and scheduling minimize disruption of wildlife and avoid premature or unnecessary land clearing in the project vicinity?
30. Will unavoidable adverse impacts on wildlife or wildlife habitat be mitigated in the project vicinity by acceptable methods such as replacement of vegetation, regulation of reservoir levels, creation of aquatic habitat, improvements in wildlife carrying capacity in the project vicinity or acquisition of land or management rights?
31. Will the project be consistent with applicable ODFW management programs in force on the effective date of these rules?
32. If within the Columbia River Basin, will the project be consistent with the provisions of the NPCC's Columbia River Basin Fish and Wildlife Program and the Northwest Conservation and Electric Power Plan?

**E. PLANT LIFE (See OAR 690-051-0220)**

33. Will the location, design, construction or operation of the proposed project jeopardize the continued existence of plant species that are:
- A. Designated or officially proposed by the US Fish and Wildlife Service (USF&WS) as threatened or endangered pursuant to the Endangered Species Act of 1973; or

- B. Identified by the Oregon Department of Agriculture as endangered, threatened or candidate species in Oregon.

**F. RECREATION (See OAR 690-051-0230)**

- 34. Will project facilities be designed, located and operated to substantially avoid visible or audible intrusion on the natural setting integral to existing recreational facilities, activities or opportunities?
- 35. Will the proposed project reduce the abundance or variety of recreational facilities or opportunities available in the project vicinity?
- 36. Will unavoidable adverse impacts on non-water-dependent recreation facilities, activities or opportunities be mitigated in the project vicinity by providing acceptable replacement facilities or opportunities of the same or similar nature and abundance?
- 37. Will the project have significant adverse impacts on any unique, unusual or distinct natural feature that provides the focus or attraction for non-water-dependent recreational facilities or activities?
- 38. Will unavoidable adverse impacts on any water-dependent recreational opportunity be mitigated with acceptable replacement by or enhancement or another water-dependent recreational opportunity available in the project vicinity?
- 39. Will the proposed project cause the loss of or significant adverse impact to any water-dependent recreational opportunities of statewide significance?
- 40. Will adverse impacts on any specific elements, such as flow regime, length of reach, access, season of use, degree of difficulty, of a water-dependent recreational opportunity of statewide significance, be offset by acceptable enhancement to other element(s) of the same water-dependent recreational opportunity in the project vicinity?

**G. HISTORIC, CULTURAL, AND ARCHAEOLOGICAL RESOURCES (See OAR 690-051-0240)**

- 41. Will the project result in significant adverse impact(s) on any historic district, site, building, structure, or object included in or eligible for inclusion in the National Register of Historic Places?
- 42. Will the project comply with state laws to protect Indian graves (ORS 97.740 - 97.760), historical materials (ORS 273 .705 - 273.711) and archaeological objects and sites (ORS 358.905 - 358.955)?
- 43. Will unavoidable adverse impacts on historic, cultural and archaeological resources be mitigated in accordance with generally accepted professional standards?

44. Will archaeological data of significance associated with a site not eligible for inclusion in the National Register of Historic Places be recovered in accordance with generally accepted professional standards?
45. Have you consulted with the State Historic Preservation Office, the State Legislative Commission on Indian Services and appropriate tribes about Indian historic and cultural resources in the project vicinity?

#### **H. LAND RESOURCES (See OAR 690-051-0250)**

46. Will adverse impacts on high value or important farmlands or agricultural land as identified in OAR Chapter 660, Division 33, be avoided, minimized or offset by acceptable mitigation?
47. Will adverse impacts on prime forestlands as defined by the city or county and by the Oregon Forestry Department be avoided, minimized, or offset by acceptable mitigation?
48. Will adverse impacts on wetlands as defined by OAR 141-085-0010(20) or identified by the Oregon Department of State Lands be avoided, minimized, or offset by acceptable mitigation?
49. Will project facilities be designed and located to avoid or minimize adverse impacts on:
  - A. Outstanding scenic and aesthetic views and sights inventoried in city and county comprehensive plans as required by Statewide Planning Goal 5.
  - B. Scenic and aesthetic resources identified by state or federal agencies as outstanding, significant or deserving special protection including natural areas designated under ORS 273.563 to 273.591.
50. Will project facilities be designed and located to blend with adjacent features?
51. Will mechanical noise caused by the project comply with applicable noise standards in OAR Chapter 340, Division 35?
52. Will the location, design, construction or operation of the project:
  - A. Disturb fragile or unstable soil?
  - B. Cause soil erosion which would impair other water uses?
53. Will project facilities located in geologically unstable areas be designed with appropriate safeguards?
54. Will project facilities located in areas subject to naturally occurring conditions or hazards, such as flooding or ice formation be designed to withstand damage to project

facilities and allow reasonable access for project maintenance or operation under such conditions?

**I. LAND USE (See OAR 690-051-0260)**

55. The Director or Commission shall meet requirements established in OAR 690-005-0045 (Standards for Goal Compliance and compatibility with Acknowledged Comprehensive Plans) in evaluating, or taking action on, a Permit or License for hydroelectric use. In the event of a land use dispute, as defined in OAR 690-005-0015 (Definitions), the Department shall follow resolution procedures provided in OAR 690-005-0040 (Resolution of Land Use Disputes).



**Appendix B: Minor Project Application Form**



Oregon Water Resources Department  
 725 Summer Street NE, Suite A  
 Salem Oregon 97301-1271  
 (503) 986-0900  
 www.wrd.state.or.us

**Application to Develop a Minor  
 Hydroelectric Project  
 (Less than 100 theoretical horsepower)**

*Please type or print in dark ink. If your application is found to be incomplete or inaccurate, we will return it to you. If any requested information does not apply, please insert "n/a". Please read and refer to the instructions guide when completing your application. A summary of review criteria and procedures that are applicable to minor hydroelectric projects is available at [www.wrd.state.or.us](http://www.wrd.state.or.us) Thank you.*

**1. APPLICANT INFORMATION**

Applicants: \_\_\_\_\_  
First Last

Organization: \_\_\_\_\_  
First Last

Mailing Address: \_\_\_\_\_  
City State Zip

Phone: \_\_\_\_\_  
Home Work Other

\*Fax: \_\_\_\_\_ E-mail address: \_\_\_\_\_

*\*Optional Information*

**2. PROPERTY OWNERSHIP**

Do you own all the land where you propose to divert, transport, and use water? This includes diversion location and place of use; roads; rights-of-way; and canals or ditches.

- Yes (*Skip to section 3 "Water Use"*)
- No Please check the appropriate box below.
  - I have a recorded easement or written authorization permitting access.
  - I do not currently have written authorization or easement permitting access. **Note: A water right cannot be issued without written authorization or easement provided to the Department.**

List the names and mailing addresses of all affected landowners.

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

*Attach a separate sheet if needed.*

### 3. WATER USE

**A. Proposed Source and Amount of Water**

Provide the commonly used name of the water body from which water will be diverted, and the name of the stream or lake it flows into. If unnamed, say so. If the source will be a reservoir, list reservoir name and/or permit number:

Provide the amount of water you propose to use from each source, for each use, in cubic feet-per-second (CFS) or gallons per minute (GPM). If the proposed use is from storage, provide the amount in acre-feet (AF):

(1 cubic foot per second = 448.8 gallons per minute    1 acre-foot = 43,560 cubic feet)

Source	Tributary to	Amount (AF, CFS, GPM)

**B. Period of Use**

Indicate the time of year when you propose to use water:

\_\_\_\_\_

**C. Power Development**

The project will utilize \_\_\_\_\_ (number of feet) of gross head to develop \_\_\_\_\_ (number) theoretical horsepower (THP).

*THP is calculated by multiplying the quantity of water to be diverted in cubic feet per second by the vertical head in feet and dividing the product by 8.8). The head is the difference in elevation between the intake of the pipeline and the return discharge to the stream.*

**D. Location**

The point of diversion is located within the \_\_\_\_\_ 1/4 of the \_\_\_\_\_ 1/4 of Section \_\_\_\_\_, Township \_\_\_\_\_, Range \_\_\_\_\_, W.M.,  
 The power plant is located within the \_\_\_\_\_ 1/4 of the \_\_\_\_\_ 1/4 of Section \_\_\_\_\_, Township \_\_\_\_\_, Range \_\_\_\_\_, W.M., in \_\_\_\_\_ County.

After passing through the power plant, the water utilized will be returned to \_\_\_\_\_ (stream) in the \_\_\_\_\_ 1/4 of the \_\_\_\_\_ 1/4 of Section \_\_\_\_\_, Township \_\_\_\_\_, Range \_\_\_\_\_, W.M.

**E. Project Facilities**

(IF APPLICABLE) The diversion dam will have a height of \_\_\_\_\_ feet, a crest width of \_\_\_\_\_ feet, an upstream slope of \_\_\_\_\_ feet horizontal to one foot vertical, and a downstream slope of \_\_\_\_\_ feet horizontal to one foot vertical.

Describe the type of dam and the material with which it will be constructed:

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

(IF APPLICABLE) The storage reservoir will be located on \_\_\_\_\_ (body of water), tributary to \_\_\_\_\_ (body of water) in Section \_\_\_\_\_, Township \_\_\_\_\_, Range \_\_\_\_\_, W.M. When full the reservoir will have a surface area of \_\_\_\_\_ acres and a total storage volume of \_\_\_\_\_ acre-feet.

(IF APPLICABLE) The canal will have a length of \_\_\_\_\_ feet, a slope of \_\_\_\_\_ feet horizontal /feet vertical, a base width of \_\_\_\_\_ feet, and a top width of \_\_\_\_\_ feet.

(IF APPLICABLE) The pipeline will have a length of \_\_\_\_\_ feet, a diameter of \_\_\_\_\_ inches, and the difference in elevation between the intake and discharge will be \_\_\_\_\_ feet. The type of pipe used is \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_.

Describe the type of water wheel and generator that will be used: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_.

#### 4. WATER MANAGEMENT

##### **A. Monitoring**

How will you monitor your diversion to be sure you are within the limits of your water right and you are not wasting water?

- Weir                       Meter                       Periodic Sampling

Have you planned for a minimum bypass flow?

- Describe  
\_\_\_\_\_  
\_\_\_\_\_.

#### 5. RESOURCE PROTECTION

In granting permission to use water from a stream or lake, the state requires, careful control of activities that may affect the waterway or streamside area. Please indicate any of the practices you plan to undertake to protect water resources.

- Diversion will be screened to prevent uptake of fish and other aquatic life.

Describe planned actions:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_.

Excavation or clearing of banks will be kept to a minimum to protect riparian or streamside areas. Describe planned actions: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Operating equipment in a water body will be managed and timed to prevent damage to aquatic life.

Describe: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Water quality will be protected by preventing erosion and run-off of waste or chemical products.

Describe: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

## 6. FINANCES AND SCHEDULE

The estimated cost of the project is \$ \_\_\_\_\_.

The proposed use or market for the power to be developed is: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

The time schedule for completing the project after a water right is issued is \_\_\_\_\_

\_\_\_\_\_.

The estimated life of this project is \_\_\_\_\_ years. Upon a decision to terminate project operations, the project must be decommissioned under applicable Oregon laws. Upon project termination, the proposed method of removal is \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_.

**7. NEIGHBORS**

The following individuals own property within 300 feet of the proposed powerhouse:  
(include names, physical addresses, and mailing addresses)

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**8. REMARKS**

*If you would like to clarify any information you have provided in the application, please do so here and reference the specific application question you are addressing.*

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**9. MAP REQUIREMENTS**

The Department cannot process your application without accurate information showing the source of water and location of water use. You must include a map with this application form that clearly indicates the township, range, section, and quarter-quarter section of the proposed diversion location and powerhouse. See the map guidelines sheet for detailed map specifications.

## 10. SIGNATURE

By my signature below I confirm that I understand:

- I am asking to use water specifically as described in this application.
- Evaluation of this application will be based on information provided.
- I cannot legally use water until the Water Resources Department issues a water right to me.
- If I get a water right, I must not waste water.
- If development of the water use is not according to the terms of the water right, the water right can be canceled.
- The water use must be compatible with local comprehensive land use plans.
- Even if the Department issues a water right to me, I may have to stop using water to allow senior water right holders, instream water rights or minimum bypass flows to get water they are entitled to, and

I affirm that all information provided in this application is true and correct to the best of my knowledge.

---

Signature of applicant

Date

---

Signature of applicant

Date

## 11. EXHIBITS

The following Exhibits must be included as a part of this application:

- Exhibit A** Narrative Statement describing the proposed project from the point(s) of diversion to the water return area.
- Exhibit B** Project Map (See Guide for Minor Hydroelectric Applications)
- Exhibit C** Tax Assessors map showing all property lines within 300 feet of the proposed powerhouse.
- Exhibit D** Attach land use form. Land use form must be signed by the local planning official, certifying that the use and structures associated with this project are allowed. The land use form is available from the OWRD Salem office or OWRD web site, <http://www1.wrd.state.or.us/pdfs/landuseform.pdf>

# 12 OREGON MAJOR HYDROELECTRIC PROJECTS

If a proposed project is > 100 theoretical horsepower and the applicant will produce power during times that water is not used under an existing water right, it is categorized as a “major” project.

Because major projects can be large in scale, they have the potential to cause significant impacts to water and other environmental resources. As a result, the process of obtaining approval to construct a major project involves a number of steps and is subject to an extensive public review process.

Once it is determined that a project qualifies to participate in the major project process, it is appropriate to use this section of the guidebook. A separate guidebook is available to assist developers in obtaining approval for project development at the federal level.

This section of the guidebook is designed to assist developers of eligible projects by mapping out the application process through a flow diagram, and providing a step-by-step description of the actions the developer will need to take in order to pursue the major project process. This guidebook is not a substitute for expert advice or official state documentation of the process and related regulations. Regulations may change. Project developers must consult with professionals to ensure compliance with current regulations. Those interested in developing hydroelectric facilities should consult official state documents (including those listed below) for complete details, and obtain legal advice as necessary. Energy Trust does not assume responsibility for any damages or other liability whatsoever (including any consequential damages) as a result of using this guide.

The Oregon Water Resources Department ([WRD](#)) has authority over and acts as the entry point for Oregon’s multi-agency hydroelectric facility process. The group of state agencies responsible for reviewing hydroelectric applications is known as the Hydroelectric Application Review Team (HART).<sup>38</sup>

Key regulatory documents guiding hydroelectric projects in Oregon include the following:

- [\*Oregon Revised Statutes \(ORS\). Chapter 543: Hydroelectric Projects\*](#)
- [\*ORS Chapter 537: Appropriation of Water Generally\*](#)
- [\*Oregon Administrative Rules \(OAR\) 690-051: Water Resources Department, Division 51: Appropriation and Use of Water for Hydroelectric Power and Standards for Hydroelectric Applications\*](#)

These documents focus on the process that is unique to hydroelectric projects in ORS 543. Developers of hydroelectric projects are encouraged to obtain copies of these documents. They include official language and details that provide valuable context for hydroelectric project development.

WRD’s Administrative Rules specify that “licenses” are issued to private entities, and “permits” are issued to public entities (i.e., municipalities and irrigation districts). While the rules use the term “license” to refer to the object of the process for private entities, in practice, the term used to refer to the object of the process for private entities is “time-limited certificate.”

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<sup>38</sup> See OAR 690-051-0010.

WRD has authority over hydroelectric projects in the state. A seven-member Water Resources Commission is responsible for decision-making at WRD, and the WRD is headed by a Director. To reflect specific regulatory requirements and procedures, references to the Commission and Director appear throughout this document. Developers are encouraged to contact Craig Kohanek (503-986-0823) at WRD with questions related to the hydroelectric project process.

Section 13 of this document provides an overview of the process for major hydroelectric projects. Section 14 provides a step-by-step description of the process. A discussion of the procedural and content requirements associated with application submittal is provided in Section 15.

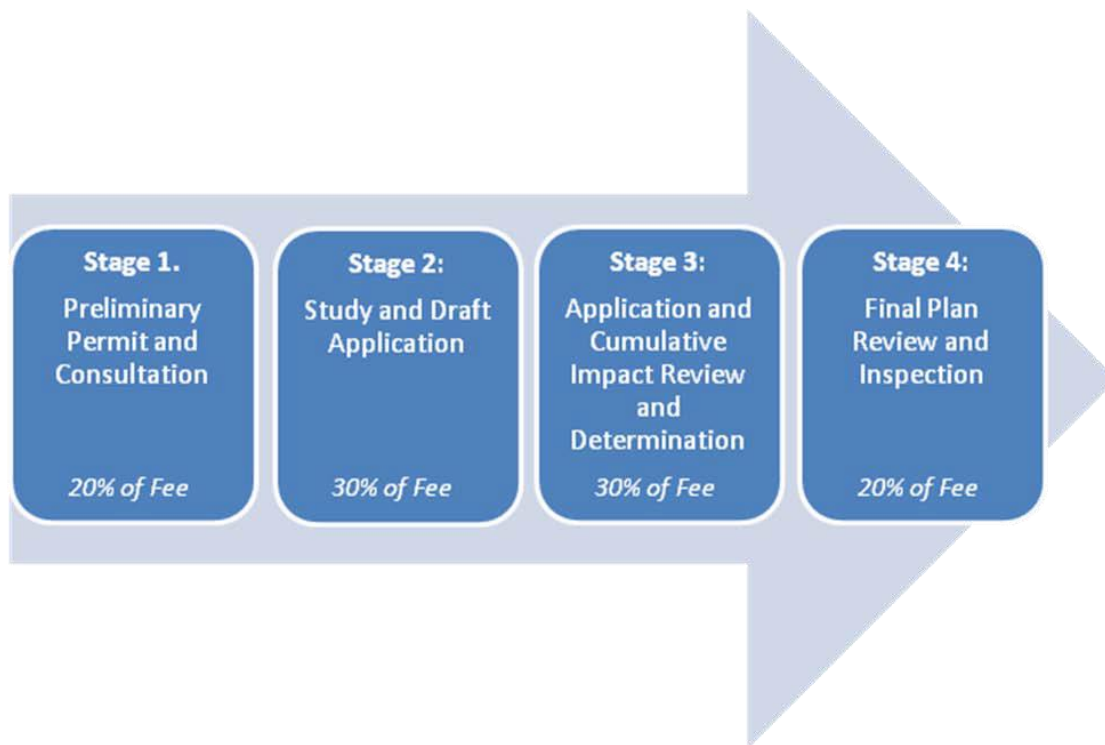


# 13 OREGON MAJOR PROJECT PROCESS OVERVIEW

For most proposed hydroelectric projects seeking approval from the state, the objective is to secure a time-limited certificate or permit from WRD.<sup>39</sup>

The process of requesting a hydroelectric water right is broken into four stages of review. A portion of the overall licensing fee must be paid at the beginning of each stage. The four stages and the fees associated with each are summarized in Figure 8. A more detailed illustration of the steps involved in each of the four stages of the major project process is provided in Figure 9 and Figure 10. These figures present the timeframes associated with certain steps, as well as the party responsible for completing each task.<sup>40</sup> A step-by-step explanation of the major project process is provided in Section 14.

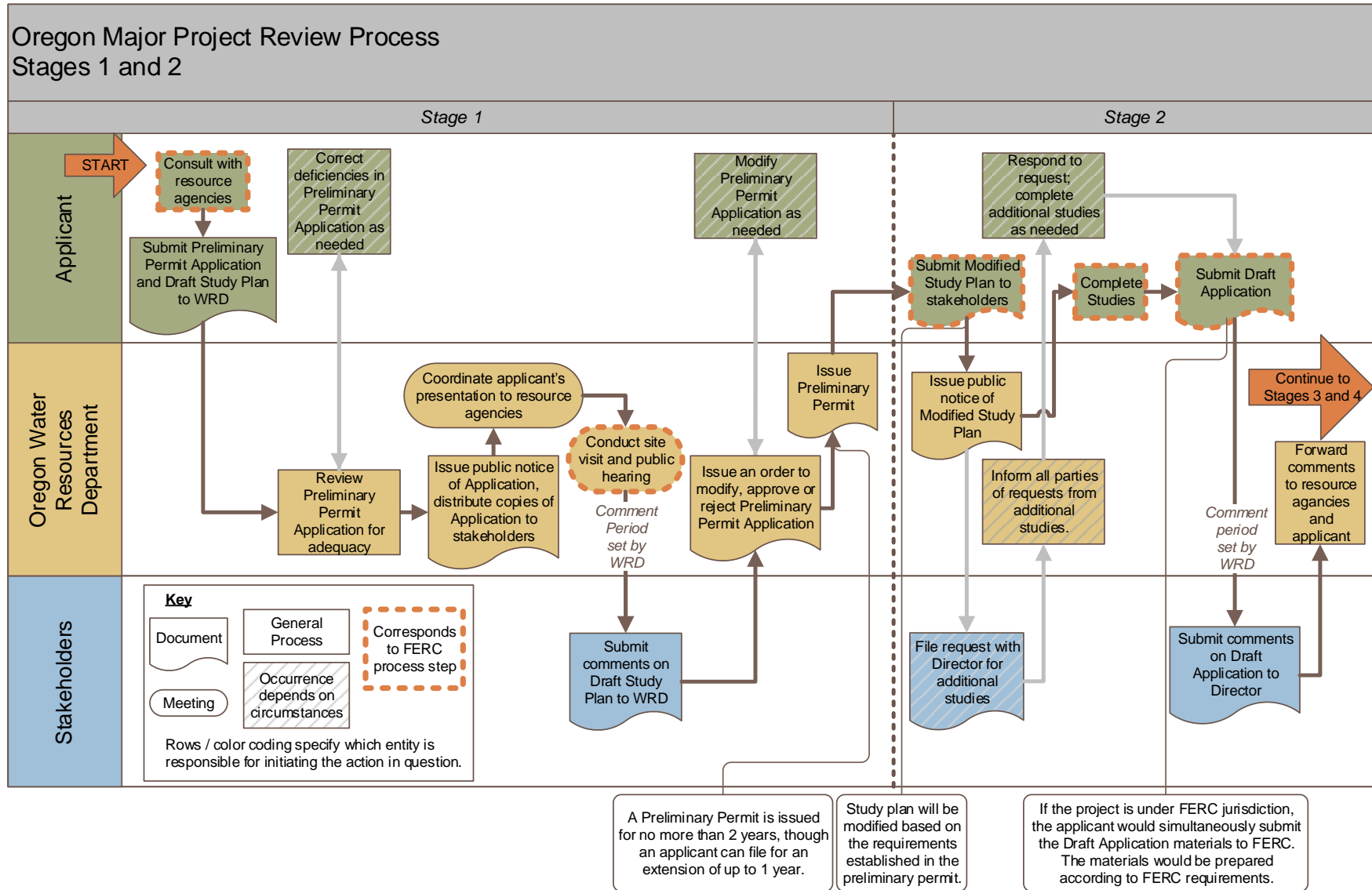
**Figure 8. Overview of Major Project Licensing Process**



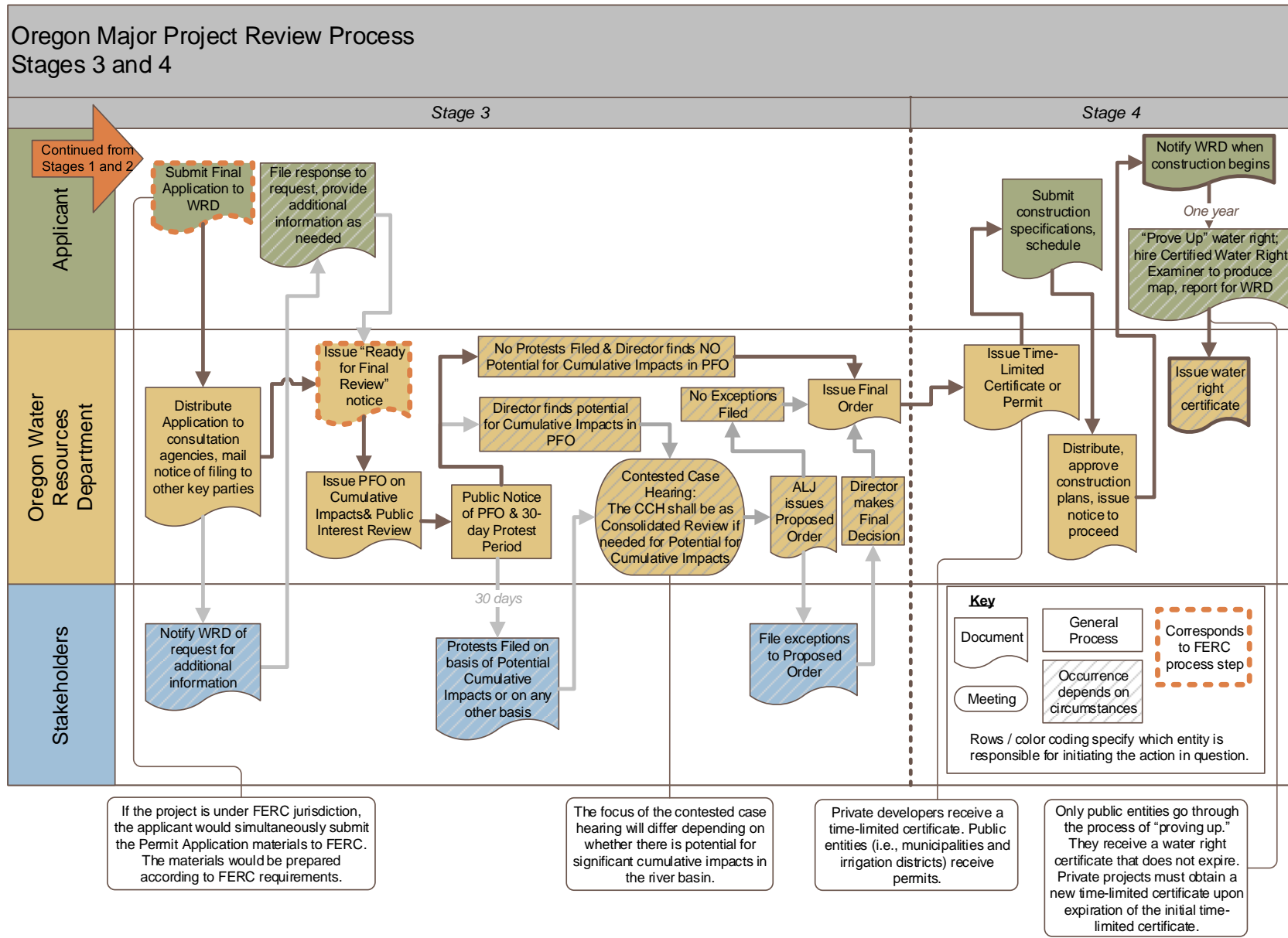
<sup>39</sup> Water rights play a fundamental role in Oregon’s hydroelectric project permitting process, and general familiarity with the state’s water laws would be beneficial to hydroelectric developers. However, hydroelectric projects are treated differently from other water uses in some ways. For example, most hydroelectric projects seek a time-limited certificate as opposed to a fully certificated water right. For discussion of Oregon water law and the process of obtaining water rights in general, see Oregon Water Resources Department, 2008. *Water Rights in Oregon: An Introduction to Oregon’s Water Laws*. Available at: <https://www.oregon.gov/owrd/PUBS/docs/aquabook.pdf>. Also see ORS Chapter 543.

<sup>40</sup> The figures only show timeframes for steps for which a standard timeframe exists. For several steps in the process, the timeframe will be set by WRD on a case-by-case basis. Timeframes are not shown for these steps.

**Figure 9. Major Project Process Overview, Stages 1 and 2**



**Figure 10. Major Project Process Overview, Stages 3 and 4**



## 13.1 Coordinating State and Federal Processes

Several elements of Oregon’s major project process are designed to coincide with elements of the FERC licensing and exemption processes. For example, both the Oregon major process and the FERC processes involve holding public meetings and site visits early on, consulting with resource agencies, developing study plans, and submitting both draft and final application materials. All the steps that occur in both the state and federal processes are shown with an orange dashed border in Figure 9 and Figure 10.<sup>41</sup>

**Applicants can reduce the burden of the process by proceeding through the federal and state processes at the same time, and by submitting to WRD the same application materials submitted to FERC for federal approval.**<sup>42</sup> WRD intends for major project applicants to pursue the federal and state processes in a coordinated manner.

Under the best circumstances, the federal and state timelines will not align perfectly, as each process includes some unique steps. However, WRD will make an effort to facilitate federal-state coordination (i.e., piggybacking on the FERC site visit, scheduling comment periods to coincide with FERC timelines, where appropriate, etc.).

## 13.2 Exceptions for Public Entities<sup>43</sup>

There are important differences in the treatment of public (i.e., municipalities and utility districts) and private applicants in Oregon’s major project process. Applicants from municipalities and utility districts receive special benefits and are not subject to all of the same requirements as other applicants. As noted in the sections that follow, municipal entities:

- Do not need to obtain preliminary permits;
- Can displace non-municipal preliminary permit-holders in gaining access to a water use; and
- Are exempt from certain time restrictions and other requirements.

In addition, public entities may obtain a water right of infinite duration. In contrast, private entities receive time-limited water rights, which must be renewed at the end of their term. Differences between the public and private processes are described in greater detail in WRD’s “New Major Public Hydroelectric Projects” document, which is included as Appendix A of this section of the guidebook.

## 13.3 Additional Requirements

Applicants may also need to obtain permits from other local, state, or federal agencies if the project will involve construction in waterways, riparian areas, or wetlands. Applicants should check with their local city or county planning office to determine local permitting requirements. Information on the types of activities that are regulated and the agencies that administer regulations can be found in Appendix B of this section of the guidebook.

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<sup>41</sup> Obtaining a preliminary permit from the state is a required step for private entities. It is also part of the standard process for those pursuing a FERC license. A preliminary license application is not required of those pursuing a FERC exemption. Since the focus of the FERC-related guidebooks in this series is on exemptions rather than licensing, the preliminary permit stage is not highlighted in Figures 2 and 3.

<sup>42</sup> See ORS 537.140(2). This section of ORS 537 also states that if a copy of the federal application materials are filed with OWRD at the same time they are filed with FERC, OWRD may determine that the federal application materials can fulfill requirements for submittal of state-level application materials.

<sup>43</sup> As stated in 543.150, municipal entities and utility districts are exempt from provisions in the following sections of ORS 543: 543.010, 543.050, 543.210, 543.220, 543.250, 543.260, 543.290, 543.610. Special benefits for public entities are also addressed in the following sections of ORS 543: 543.270, 543.650, and 543.664, as well as ORS 537.352.

# 14 OREGON MAJOR PROJECT STEP-BY-STEP PROCESS DESCRIPTION

The four-stage process of securing approval to construct a major hydroelectric project is described in this section. Unless otherwise noted, the process described in this section of the guidebook is based on WRD's procedural requirements for hydroelectric project applications, as set forth in the Oregon Administrative Rules.<sup>44</sup>

## 14.1 Stage 1: Preliminary Permit and Consultation

A key purpose of this first stage in the process is for the applicant to provide WRD with fundamental information about the proposed project. The goal is for the applicant to provide enough information for WRD to use as the basis for determining the stakeholders that may have an interest in the project, as well as key areas of concern that will require WRD's detailed review. WRD will share this information with other agencies and the public.

Upon submitting a preliminary permit application, the applicant also establishes its priority position for securing the water use in question; if others are also applying for the same water use in the same location, the earliest preliminary permit applicant would have preference.<sup>45</sup>

### 1. Consultation<sup>46</sup>

All applicants must consult with relevant local, state, and federal agencies to review key facts and potential resource impacts that may result from construction and operation of the project. The consultation process is a time for the applicant to initiate direct contact with resource agencies and engage in discussions about the merits and potential impacts of the project.

The timing of the consultation process can vary; though it is listed as Step 1 here, it does not need to occur this early in the process. However, consultation with resource agencies must take place before the applicant submits an application for a license or permit, and evidence of the consultation process must be filed along with the application materials. By consulting with resource agencies early on in the process, applicants and agencies can identify, and ideally resolve, potentially controversial issues upfront.

At a minimum, applicants must contact the agencies listed in Table 1, organized by category.

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<sup>44</sup> See OAR 690-051.

<sup>45</sup> The exception to this provision is that municipal applicants can take precedent over preliminary permit-holders (ORS 543.210).

<sup>46</sup> See OAR 690-051-0060.

**Table 1. Agencies Required to Be Contacted During Consultation**

Category	Agencies
Fish and Wildlife Resources	Oregon Department of Fish and Wildlife (ODFW) U.S. Fish and Wildlife Service (USF&WS) National Marine Fisheries Service (NMFS) Appropriate Indian tribe(s) identified by the Legislative Commission on Indian Services Northwest Power and Conservation Council (NPPC), if the proposed project is within a Protected Area <sup>47</sup>
Water Quality	Department of Environmental Quality (DEQ)
Historic, Cultural, and Archaeological Resources	State Historic Preservation Officer (SHPO) Appropriate Indian tribe(s) identified by the Legislative Commission on Indian Services
Forestlands	U.S. Forest Service Bureau of Land Management State Forestry Department
Wetlands	Division of State Lands (DSL) U.S. Army Corps of Engineers
Scenic – Aesthetic Resources	Planning department of each affected local government DEQ (regarding noise standards) Federal managing agency, if public land Oregon Parks and Recreation Department
Recreation Resources	Oregon Parks and Recreation Department Federal managing agency, if public land Planning department of each affected local government

<sup>47</sup> Protected Areas are those designated by the Columbia River Basin Fish and Wildlife Program (1987); Northwest Conservation and Electric Power Plan (1991); Strategy for Salmon (1992); and including amendments identifying Protected Areas (September 14, 1988; August 8, 1990; August 13, 1992).

Category	Agencies
Land Use and Access	Planning department of each affected local government Appropriate state land management agencies Federal managing agency, if public land Landowner(s), if private land
Threatened and Endangered Species	ODFW USF&WS NMFS
Natural Areas	Oregon Parks and Recreation Department

## 2. Applicant Submits Preliminary Permit Application

The preliminary permit application is the first document an applicant prepares. The preliminary permit application provides WRD with key information about the proposed project and it establishes the applicant’s priority position for gaining access to the water use.

As noted earlier, applicants can minimize the burden of the process by preparing application materials that meet FERC requirements, and concurrently submitting those materials to both WRD and FERC. However, a Preliminary Permit is not required by FERC for exemptions applicants; applicants only submit a Preliminary Permit application to FERC if they wish to secure a priority position for a particular project site. Since it is possible that major project applicants would submit Preliminary Permit applications to WRD, but not to FERC, WRD’s Preliminary Permit application requirements are detailed here.

WRD does not provide a form for applicants to complete. However, the rules governing hydroelectric project approval describe the elements the applicant must include in the Preliminary Permit application. The Preliminary Permit application content requirements are also summarized here. The Preliminary Permit application must include the following information:<sup>48</sup>

- a. The name and address of the applicant including every person, association of persons, domestic corporation, or municipality that has any proprietary right or interest in the project. If the applicant is a municipality, it must submit copies of applicable state or local laws, a municipal charter, or other evidence that the municipality has the authority to engage in business related to power development and distribution.
- b. A description of the location of the project, giving the county or counties within which it will be located, and the stream or streams from which water will be appropriated.
- c. The quantity of water to be appropriated.

<sup>48</sup> See OAR 690-051-0070.

- d. If a reservoir is to be used in connection with the project, the application should state the quantity of water to be stored, the maximum surface area in acres, the name of the stream(s) on which the reservoir is to be located or the name of the stream(s) or aquifer from which the stored water is to be collected or both.
- e. The head to be utilized and the number of theoretical horsepower (THP) to be developed. The number of THP shall be determined by multiplying the quantity of water to be diverted in cubic feet per second by the vertical head in feet and dividing the product by 8.8.
- f. The approximate location of the point(s) of diversion and the quantity of water to be taken at each point.
- g. The approximate length of the proposed canal, pipeline, or other conduit, the approximate location of the proposed power plant and the point where water will be returned to some natural stream.
- h. The approximate height of diversion or storage dams and the material from which they will be constructed.
- i. A legible map to be prepared on U.S. Geological Survey topographic quadrangle sheets showing the general location of the project and the location of key project features (i.e., dams, reservoirs, canals, pipelines, forebays, power plants and streams). If the project is on land that is part of the public land survey, the map must include township and section lines. If it is on unsurveyed land, the location should be shown using projections of township and section lines. See Appendix C of this section of the guidebook for a sample map and a figure explaining the public land survey system of references that should be used to identify the project's location.
- j. A statement describing the proposed use or market for the power to be developed.
- k. The name and mailing address of all property owners:
  - Within 300 feet of the project boundary if the project is within an urban growth boundary; or
  - Within 1,000 feet if the project is outside of an urban growth boundary. If this is the case, the applicant must also provide a record of the amount of land (in acres or hectares) owned by the adjacent property owners.
- l. The length of time for which a Preliminary Permit is desired. A Preliminary Permit may be issued for a period not exceeding two years. This period may be extended by order of the Director. An extension may not exceed one year. This provision does not apply to municipal entities or utility districts.
- m. An Exhibit A containing a description of the proposed project, specifying to the extent possible:
  - The total estimated average annual energy production and installed capacity of the project.
  - Details regarding project-related infrastructure. This includes the number, physical composition, dimensions, general configuration, and where applicable, age and condition, of any dams, spillways, penstocks, powerhouses, tailraces, or other structures, whether existing or proposed, that would be part of the project.<sup>49</sup>
  - Any other information demonstrating how the proposed project would develop, conserve, and utilize water resources.

The procedural requirements related to submittal of the Preliminary Permit application and other documents are described in Section 15 of this document. Notably, the Preliminary Permit application must be submitted along with payment of 20% of the total application fee for the project.

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<sup>49</sup> WRD recognizes that energy production figures submitted with the preliminary application may be rough. Values that are more precise will be calculated for the draft license application.



### **3. WRD Receives Preliminary Permit Application and Reviews for Adequacy**

WRD date stamps the application, establishing the priority date for the application. WRD will then review the application to ensure it is complete and contains correct information. If any deficiencies are found, it will be returned to the applicant.<sup>50</sup>

### **4. WRD Issues Notice of Preliminary Permit Application, Distributes Copies, and Sets Meeting Date**

Once the application is deemed complete, WRD will print a notice of the application in its [weekly newsletter](#).<sup>51</sup> This notice will specify the duration of the stakeholder comment periods that will apply during later stages of the process.

At this time, WRD will distribute copies of the application to the other agency representatives. WRD will also set a meeting date for the applicant to make a presentation of key facts about the project before the other agency representatives.

### **5. Applicant Prepares Draft Study Plan**

Depending on the environmental impacts of the project, studies may or may not be requested by stakeholders during the consultation process. If studies are necessary, the applicant prepares a plan outlining the studies that will be completed to document the likely impacts of the proposed project. For each of the resources that may be affected by the project (i.e., water, wildlife, recreation, etc.), the study plan should describe the following:

- Study objectives;
- Resource description;
- Study area;
- Methodology and rationale for the proposed approach;
- Sampling location and number, frequency and timing of sampling;
- Data treatment and analysis;
- Report preparation;<sup>52</sup> and
- Schedule, including plans for review of draft and final technical reports by resource agencies.

The draft study plan must be distributed to the agencies with which the applicant is required to engage in consultation (see list of agencies in Step 1).

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<sup>50</sup> This is one of the requirements that does not apply to municipal entities or utility districts (543.150).

<sup>51</sup> See [http://apps.wrd.state.or.us/apps/misc/wrd\\_notice\\_view/default.aspx?notice\\_id=21](http://apps.wrd.state.or.us/apps/misc/wrd_notice_view/default.aspx?notice_id=21)

<sup>52</sup> FERC usually takes the lead on specifying details regarding report preparation.

## **6. WRD Schedules Site Visit and Public Hearing**

A public hearing and site visit are scheduled for each Preliminary Permit applicant. The date and location are set by WRD. WRD will select a location in a community near the proposed project. WRD will provide notice of the hearing to the applicant, parties that have expressed interest in the proceeding, property owners within the project vicinity, affected Indian Tribes (as identified by the Legislative Commission on Indian Services), and the governing bodies and planning departments of any affected counties or cities.<sup>53</sup>

The site visit usually takes place in the afternoon, and the public hearing will take place that same evening. The hearing will start with the applicant's presentation of key facts about the project, and then attendees will have an opportunity to raise questions or present comments.

## **7. Stakeholders Submit Comments on Draft Study Plan**

Members of the other agency representatives, other affected agencies, and members of the public have the opportunity to submit comments on the draft study plan prepared by the applicant. The comment period is established by WRD and published in the initial notice stating that the application was received (Step 4 above).

## **8. WRD Decides on Preliminary Permit Application and Issues Preliminary Permit<sup>54</sup>**

The Director of the Water Resources Department will issue an order to modify, approve, or reject the Preliminary Permit Application. Preliminary Permit Applications will be approved unless the Director finds that the proposed project would not be in the public interest. The determination is on whether the project would result in significant adverse impacts on natural resources or whether it would significantly limit or affect other uses of the water involved. Information in the Preliminary Permit Application and the hearing record inform the Director's decision.

The Preliminary Permit would include conditions to which the applicant must adhere. Failure to adhere to the conditions would result in cancellation of the Preliminary Permit. The Preliminary Permit usually identifies what studies must be completed by the applicant, and any data gathering that must take place for inclusion in the final application. The Preliminary Permit may not be issued for more than three years and is not transferable except with WRD approval.

Issuance of the Preliminary Permit does not mean that the applicant has the right to construct any project facilities. The applicant will still need to secure approval of the actual Permit Application before project construction can take place.

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<sup>53</sup> Procedural requirements for the public hearing are described in OAR 690-051-0130.

<sup>54</sup> See OAR 690-051-0080.

## 14.2 Stage 2: Study and Draft Application

During the second stage, the applicant finalizes the study plan, completes the studies, and submits a draft application.

### 1. Applicant Modifies Study Plan as Needed

The applicant must make any changes to the study plan that were called for in the Preliminary Permit. The revised study plan must then be submitted to the Director for approval. WRD will notify the public of the submittal of the revised study plan in its weekly newsletter.

### 2. Stakeholders May Request Additional Studies

Up to 30 days after the applicant submits the revised study plan, an agency, tribe, or member of the public can request that the applicant conduct additional studies. The applicant must file a response to any requests for additional studies within 30 days of receiving notice of those requests from the Director.

The Director will inform all participants of request and responses to study requests that are received.

### 3. Applicant Completes Studies

The applicant completes all studies outlined in the revised study plan as well as any additional requested studies that the Commission deems necessary. Studies must be carried out in coordination with state and federal agencies.

### 4. Applicant Prepares and Submits Draft Application to Stakeholders

The applicant prepares a draft application. The draft application materials must address any outstanding issues identified in stakeholder comments up to this point in the application process.

**It is standard practice for major projects to submit the same application materials to WRD that they submit to FERC for licensing or exemption from licensing.** The application materials should be prepared according to FERC requirements, and submitted simultaneously to both WRD and FERC.

WRD would notify the public of the opportunity to comment on the draft application in its weekly public notice. Notice of the draft application would specify the duration of the public comment period for the draft application.

### 5. Stakeholders Submit Comments to WRD on Draft Application

Any comments on the draft application must be submitted to the Director during the specified public comment period. The Director will collate and forward all comments to other agency representatives and the applicant.

## **14.3 Stage 3: Application and Cumulative Impact Review and Determination**

This third stage of the process is when the applicant submits final application materials to WRD, and WRD conducts critical decision-making on the proposed project.

### **1. Applicant Submits Application to WRD**

In response to stakeholder comments, the applicant will make necessary changes to the application materials that were submitted in draft form during Stage 2 and file as a Final License or Permit application. Submittal of the application should adhere to procedural requirements described later in Section 15 of this document.

### **2. WRD Distributes Notice and Copies of Application**

Upon receiving the application, WRD will send copies of the application materials to all agencies that have actively engaged in consultation related to the proposed project. WRD will also send a notice to other stakeholders stating that the application is available for review. Those stakeholders would include the local planning authority, affected property owners and any parties that have specifically requested notification. WRD and the applicant are also required to make the application materials available at their offices for review by the members of the public.

### **3. Stakeholders May Request Additional Information**

Any stakeholder that would like the applicant to provide additional information on the project must submit a request to the Director within 60 days after the application is filed. The Director will notify the applicant of the request, and the applicant can file a response to the request within 30 days of receiving that notice. The Director will determine whether the applicant is required to submit the requested additional information and will notify the affected parties. If necessary, the applicant will provide the additional information.

### **4. WRD Issues a “Ready for Final Review” Notice**

The Director will send a “Ready for Final Review” notice to agencies and other interested stakeholders once the Director has all of the information needed from the applicant.

### **5. Stakeholders Submit Comments on Application**

A 60-day comment period will follow issuance of the Ready for Final Review notice. Stakeholders must submit any comments on the application during this period.

## **6. Director Issues Initial Order**

The Director will prepare a ‘final proposed order’ that determines whether the proposed project, together with the recommended measures to protect, mitigate or enhance the natural resources of the State is consistent with the minimum standards and whether the project would impair or be detrimental to the public interested. The proposed final order will also provide findings on whether the proposed project may contribute to cumulative impacts with other existing, proposed or approved hydroelectric projects in the same river basin and whether consolidated review is required.

Factors such as those listed may be considered:

- Whether the proposed project would cause injury to other users or public resources;
- Whether water is likely to be available for use;
- Basin plan and local land use restrictions; and
- Impacts on sensitive, threatened or endangered species, water quality, and other state and federal rules.

## **7. The Office of Administrative Hearings Conducts a Contested Case Hearing**

If the Director determines that consolidated review is required, the WRD will refer the matter to the Office of Administrative Hearings (OAH) to conduct a contested case hearing, only after the period to file protests has passed, to allow for all issues regarding the proposed project to be addressed in one contested case hearing. The hearing may be consolidated to include representatives of the other existing, approved or proposed projects in the sub-basin, as the WRD directs. If one or more protests are filed within 30 days after issuance of a proposed final order, the WRD shall cause a contested hearing to be held.

## **8. WRD Issues Final Order on Public Interest and Cumulative Impacts**

A proposed order will be issued by the ALJ (Administrative Law Judge) after a contested case hearing. Any party in the contested case hearing may file an exception to the ALJ’s proposed order within 30 days of the order. If no exceptions are filed to the ALJ’s proposed order within 30 days, the Director shall issue a final order.

If after the contested case hearing, or, if a hearing is not held, after the close of the period allowed to file a protest, the Director determines that the proposed use does not comply with the minimum standards and would otherwise impair or be detrimental to the public interest, the Director shall issue a final order rejecting the application or modify the proposed final order to comply with the requirements.

If the Director determines the project meets the requirements, a final order may set forth the provisions or restrictions to be included in the permit or final License. If the project is approved, the permit or final License is issued.

## 14.4 Stage 4: Final Plan Review and Inspection

The first step in the fourth stage is issuance or denial of a time-limited certificate or permit by WRD. This key milestone is followed by procedures related to the planning and implementation of project construction. The fourth stage ends when the completed project undergoes final inspection, or a final proof survey. Steps 2 and 3 of this stage correspond with items 2 and 3 in the earlier discussion of the overall process of obtaining a new water right (Section 13 of this document).

### 1. Director Issues or Denies the Hydroelectric Right

If approved, the Director will issue a time-limited certificate or permit that will include conditions that must be fulfilled in order to proceed with project construction. As noted earlier, time-limited certificates are issued to private hydroelectric developers, and permits are issued to municipalities and irrigation districts. If denied a hydroelectric right, the Director will notify the applicant.

The hydroelectric water right cannot be issued until at least six months after the applicant submitted a preliminary permit application.<sup>55</sup> As long as the permit holder complies with the conditions associated with the permit, WRD cannot revoke or impose new conditions on the water right as long as it is in effect.<sup>56</sup>

The term of a time-limited certificate will be set to coincide with the term of the federal license issued by FERC.<sup>57</sup> Permits do not expire.

### 2. Applicant Secures Necessary Approvals and Proceeds with Project Construction

The time-limited certificate or permit-holder must follow the necessary procedures to secure approval for project construction. This involves the following steps:

- a. Applicant submits construction specifications to the Director and the Director distributes the plans and specifications to appropriate agencies and collates issues to be addressed.
- b. Applicant submits construction schedule to the Director, and construction bond documentation;
- c. Director issues Notice to Proceed.
- d. Applicant notifies Director of beginning of construction.
- e. Director conducts a final inspection of the constructed project.

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<sup>55</sup> See 543.220 (3).

<sup>56</sup> Oregon Water Resources Department. 2008. *Water Rights in Oregon: An Introduction to Oregon's Water Laws*. Available at: <https://www.oregon.gov/owrd/PUBS/docs/aquabook.pdf>

<sup>57</sup> See 543.260.

### **3. Permit Holders “Prove Up” the Water Use**

In the case of a project developed by a municipality or irrigation district, once the project is completed, a permit holder must send notice of completion to WRD. Within a year of project completion, the permit holder must submit proof that the water is being used according to the terms and conditions of the permit. This will require hiring a Certified Water Right Examiner (CWRE) to survey the project, prepare a map, and report documenting water use at the site.<sup>58</sup> WRD personnel may inspect the completed project to verify the accuracy of the materials submitted by the CWRE.

### **4. WRD Issues Water Right Certificate, Water Right is “Perfected”**

For municipalities and irrigation districts that hold permits, the permit holder proves that it has met the conditions of the permit; WRD will issue a water right certificate. This certificate will remain valid as long as the water is used once every five years in accordance with the conditions associated with the water right.

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<sup>58</sup> Certified water right examiners (CWREs) are registered, professional surveyors, geologists, or engineers. They must pass a test given by the Oregon State Board of Examiners. A list of CWREs is available from WRD.

# 15 OREGON MAJOR PROJECT APPLICATION REQUIREMENTS

This section first describes the fees and procedural requirements related to the application process. Content requirements for the draft and final applications are then addressed. Note that requirements for the Preliminary Permit Application are discussed earlier in Section 14.1.

## 15.1 Fees and Procedural Requirements

Application materials should be submitted to:

Oregon Water Resources Department 725 summer  
Street NE, Suite A Salem, OR 97301-1271  
Attention: Hydroelectric Division

Applicants are encouraged to communicate with hydroelectric staff at the WRD with any questions related to the process. See contact information provided in Section 12 of this guidebook.

Applicants must submit a project fee to WRD to cover the costs of recording, publishing notices, conducting hearings, and investigating the proposed project. For a major project, the total project fee is \$5,000 plus \$1,000 for each megawatt of capacity that exceeds five megawatts. The project fee cannot exceed \$100,000 despite the capacity of the project.<sup>59</sup>

The applicant must pay a portion of the project fee at the beginning of each of the four stages of project review. The schedule of payments is presented in Table 2.

**Table 2. Schedule of Project Fee Payments**

Stage of Review	Percentage of Total Project Fee Due
1	20%
2	30%
3	30%
4	20%

In addition to the project fee described above, if a project is located where anadromous fish or threatened or endangered species are present, there is a surcharge of 30% of the total project fee. The fee is collected in conjunction with the project fee at each state of the project review.

<sup>59</sup> See ORS 543.280(3)(b).



## 15.2 Application Content Requirements

WRD makes an effort to coordinate the federal and state processes as a means of improving overall efficiency and minimizing the burden for project developers. As a result, applicants can submit to WRD the same application materials they submit to FERC, both at the draft and final application submittal stages.<sup>60</sup> The application materials should be prepared according to FERC requirements, and submitted simultaneously to both WRD and FERC.

In addition to the FERC application materials, the applicant would need to submit a [Land Use Information Form](#), available at WRD's website. The form must be completed by a local government planning official. Key purposes of the form are to: 1) verify that the applicant's proposed project, if approved, would be compatible with the local jurisdiction's comprehensive plan; and 2) that the applicant has obtained all the local-level permits necessary to proceed with the project.

Included in this series of guidebooks offered by the Energy Trust are two guidebooks that focus specifically on the FERC approval processes that are relevant to smaller hydroelectric projects, the Conduit Exemption and 5 MW Exemption processes. Applicants whose proposed projects are eligible for a FERC exemption should refer to those guidebooks for detailed descriptions of the application requirements associated with those processes. Readers can refer to a separate guidebook in this series to determine whether a proposed project is eligible for a FERC exemption.

Some applicants will propose projects that are not eligible for a FERC exemption. If this is the case, it is likely the applicant will follow FERC's Integrated Licensing Process (ILP) to secure a FERC license. The Energy Trust does not offer a guidebook focusing on the ILP. However, FERC provides a guidebook that outlines the ILP and related hydroelectric licensing topics.<sup>61</sup> FERC's [Handbook for Hydroelectric Project Licensing and 5 MW Exemptions From Licensing](#) is available on the FERC website.<sup>62</sup> As noted earlier, those interested in developing hydroelectric facilities should consult official state documents (including those listed below) for complete details, and obtain legal advice as necessary.

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<sup>60</sup> See ORS 543.280.

<sup>61</sup> FERC, *Handbook for Hydroelectric Project Licensing and 5 MW Exemptions From Licensing*, April 2004.

<sup>62</sup> Projects that are not under FERC jurisdiction and will not submit FERC licensing materials can refer to OAR 690-051-0100 for a description of application requirements for major projects.

# 16 OREGON MAJOR PROJECT CONCLUSION

The process of obtaining state-level approval for a major project involves many steps, and a great deal of stakeholder input. WRD embraces coordination of the federal and state processes to minimize the burden for project proponents. Applicants are encouraged to engage in discussions with WRD and resource agencies early in the development process to identify and begin to resolve any potentially controversial issues related to the project.

## **Appendix A: Process Summary for New Major Public Hydroelectric Projects**

### **NEW MAJOR PUBLIC HYDROELECTRIC PROJECTS (PC)**

New public hydroelectric projects are governed by Oregon Revised Statutes (ORS) Chapter 543, Oregon Administrative Rules (OAR) Chapter 690, Division 51, and some provisions of ORS 537 and ORS 536.

The process used in applying for and processing an application for a new public hydroelectric project varies by whether the project is minor (under 100 theoretical horsepower, or THP), or major (over 100 THP). Major projects have a more extensive review process.

Be sure to note that new “public” hydroelectric projects are designated as being a “power claim,” or “PC,” while “private” hydro projects are designated as an “HE” or “hydroelectric.” There are important differences in how public hydroelectric applications are handled as compared to private applications.

This document provides a very general description of the process for applying for and reviewing applications for new major private hydroelectric projects. Be sure to review all applicable statutes and rules carefully for full details. OWRD strongly suggests that all applicants call OWRD hydroelectric staff to schedule a pre-application consultation. This document does not contain legal advice and may be corrected, revised, or modified without notice.

### **MUNICIPAL PREFERENCE**

Municipal and district applicants receive the benefits of the municipal preference. See ORS 543.260, 543.270, 543.610, ORS 537.352, 543.650, and 543.664. If the application is successful, the end result of this process is a potentially infinite duration water right, subject to loss from non-use, forfeiture, abandonment, violation of permit/certificate conditions, loss of municipal status, etc.

### **MUNICIPAL EXEMPTION**

Municipal and district applicants are also subject to the municipal exemptions contained in ORS 543.150. In essence, a limited number of provisions of ORS Chapter 543 do not apply to public hydroelectric applicants.

### **NO NEED FOR STATE PRELIMINARY PERMIT**

Municipal and district applicants do not need to apply for a preliminary permit. See OAR 690-051-0095.

If the Federal Energy Regulatory Commission (FERC) is involved with the project, the applicant’s FERC preliminary permit application may be submitted to the state if it meets the requirements for the state water right application. See ORS 537.140(2) and application requirements under ORS 543 and OAR 690 Division 51. More information may be requested of the applicant. The requirements for new public hydroelectric applications are mostly contained in ORS 543 and OAR 690 Division 51, although ORS 537 contains some such requirements.

### **GENERAL INFORMATION**

The governing law is ORS 537, ORS 543, and OAR 690 Division 51. If the application is successful, the end result of this process is a potentially infinite duration water right, subject to loss by non-use, forfeiture, abandonment, violation of permit/certificate conditions, loss of municipal status, etc. Public hydroelectric files and rights are designated as a power claims or “PC.”

Although municipal and district applicants do not need to apply for preliminary permits for major projects, they must comply with the consultation requirements described in OAR 690-051-0095.

## APPLICATION REQUIREMENTS

The application must provide the information required by the following provisions:

- ORS 537.140 (application for permit)
- OAR 690-051-0060 (evidence of consultation with agencies, etc.)
- OAR 690-051-0095 and 690-051-0100 (applications for major projects – contents, scope of evaluation, and application standards)

## STANDARDS FOR REVIEW OF APPLICATION

The application is reviewed to see if it meets the substantive standards set out in the following provisions:

- Must not be in violation of ORS 538
- Must not be in violation of Basin Plan
- ORS 537.282 to 537.299 (see the mandatory conditions for *municipal* applicants)
- ORS 543.017 (minimum standards for development of hydroelectric power, public interest, etc.)
- ORS 543.255 (cumulative effects)
- ORS 543.265 (mandatory condition re: ODFW)
- ORS 543.650 to 543.685 (power generation by districts)
- OAR 690-051-0030 (restrictions on filing)
- OAR 690-051-0050 (filing procedure for application)
- OAR 690-051-0095 and –0100 (scope of evaluation and standards, application contents, etc., for major project)
- OAR 690-051-0160 → OAR 690-051-0170 to 690-051-0290 (resources protection standards)

The project must be constructed within the time limits of ORS 537.230. It appears that ORS 543.150 renders ORS 543.410 to 543.440 (which also address time limits for construction, etc.) as well as certain other provisions, inapplicable to municipalities and other entities, possibly including district applicants.

Although no preliminary permit is required, consultation and other provisions of OAR 690-051-0095(1) still apply. The applicant's FERC Preliminary Permit application, which provides the details of the proposed project, is submitted to OWRD at the beginning of the state process.

### **Stage One – Application, Consultation, and Study Plan**

- Stage One fees are paid.
- Notice is issued in OWRD’s weekly notice.
- Copies of FERC Preliminary Permit application are submitted to OWRD and distributed to the other agency representatives.
- OWRD sets a date for the applicant to give a presentation of the project to the other agency representatives.
- Applicant prepares draft study plan and distributes to agencies listed in OAR 690-051-0060.
- OWRD and other agency representatives schedule site visit.
- OWRD has public hearing to give info and receive public questions and comments on project.
- OWRD establishes a comment period on applicant’s draft study plan.

### **Stage Two – Studies**

- Stage Two fees are paid.
- Draft study plan is modified based on comments and then submitted as a final study plan to agencies and Director for approval.
- Notice of submittal of final study plan appears in OWRD weekly notice.
- An agency, tribe, or public may file request with Director for additional specific studies within 30 days of receipt of final study plan.
- Applicant must file response to study request within 30 days of receiving notice of request from Director. Director resolves any disputes.
- Applicant conducts studies in coordination with state and federal agencies. Comments on studies are due within a certain time to Director who sends to other agency representatives and applicant.

### **Stage Three – Final Application, Cumulative Impact Determination and Public Interest Review Determinations and Hearings Process**

- Stage Three fees are paid.
- After studies are completed, the applicant files the Final License or Permit application with WRD.
- OWRD distributes application to appropriate consultation agencies.
- OWRD mails notice of application’s availability and of filing to local planning authority, affected property owners, and public interest groups on record at OWRD requesting notices.
- An agency, Indian tribe, or member of public who requests additional information shall notify Director within 60 days after application filed.

- Applicant files responses to additional info within 30 days of receiving notice from Director of request.
- WRC either accepts or rejects applicant's position on additional studies and notifies parties.
- Once application issues are resolved, "ready for final review" notices are sent to agencies and interested parties by Director, with comments due within 60 days of final review notice.
- Director prepares a proposed final order that determines whether the project, together with measures to protect, mitigate or enhance the cultural resources of the State, is consistent with the minimum standards and requirements, including cumulative impact and the public interest. Parties may file protests with the WRD based on the proposed final order.
- If no protests are filed within 30 days after issuance of a proposed final order AND the Director finds no potential for cumulative impacts in the proposed order, then the proposed order is signed by the Director and becomes final.
- If one or more protests are filed within 30 days after issuance of a proposed final order, a contested case hearing may be assigned with all issues resolved in one hearing. The hearing may be combined with one for cumulative impact if the issue arises.
- If the Director determines that there is potential for cumulative impacts with other existing or pending projects in the same river basin, Director conducts a consolidated review in form of a contested case hearing.
- After the contested case hearing, a proposed order is issued by an Administrative Law Judge (ALJ).
- If no exceptions are filed to the proposed order issued by the ALJ within 30 days, the proposed order is signed by the Director and becomes final.
- If exceptions to final order are filed, the Director shall review and hear arguments at his/her discretion and make the determination for the final order.

#### **Stage Four – Final Plan Review and Inspection**

- Stage Four fees are paid.
- A permit or Final License or denied with conditions set by the Director.
- Applicant submits construction specifications to Director.
- Director distributes plans and specifications to agencies and collects comments on plans.
- Plans are approved by the Director or modified by the applicant and then approved or denied by Director. Applicant submits a construction schedule to Director and construction bond documentation. Director issues a Notice to Proceed. Applicant notifies Director of beginning of construction. Director conducts a final inspection or final proof survey.
- Water Right Certificate issued for an infinite duration water right.

## Appendix B: Summary of Other Potential Permitting Requirements <sup>63</sup>

Developing your water right often entails grading, trenching or other types of construction in waterways, riparian areas, and wetlands. Permits from local, state or federal agencies may be required. A good first step is to check with your local city or county planning office. The following information was provided by the Oregon Department of State Lands.

### Activities in Wetlands and Waterways are Regulated by:

- ◆ The Department of State Lands (DSL) under the State Removal-Fill Law
- ◆ The U.S. Army Corps of Engineers (Corps) under the Federal Clean Water Act and Rivers and Harbors Act
- ◆ The State Department of Forestry under the Forest Practices Act
- ◆ The U.S. Natural Resource Conservation Service (NRCS) under the Food, Agriculture, Conservation and Trade Act
- ◆ Some City and County land use ordinances

### What Areas are Regulated?

- ◆ Rivers streams and most creeks
- ◆ Estuaries and tidal marshes
- ◆ Lakes and some ponds
- ◆ Permanent and seasonal wetlands
- ◆ Regulations apply to all lands, public or private
- ◆ A wetland does not have to be mapped by the state or otherwise ‘designated’ to fall under the regulations
- ◆ If you are uncertain if there are regulated wetlands on your property, contact DSL for assistance.

### What Activities are Regulated?

- ◆ Placement of fill material
- ◆ Alteration of stream bank or stream course
- ◆ Ditching and draining
- ◆ Plowing/disking non-farmed wetlands
- ◆ Excavation or dredging of material
- ◆ In-water construction (may also require a lease from DSL)
- ◆ For some activities, joint application forms can be obtained from DSL or the Corps

### What Activities are Exempt?

- ◆ Some routine maintenance activities
- ◆ Established, ongoing agricultural activities and grazing
- ◆ Some minor projects involving small amounts of fill or removal

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<sup>63</sup> Source: Oregon Water Resources Department. *Surface Water Permits Instruction Booklet: Obtaining Water Rights to Use Surface Water (Appendix A)*. Available at: [https://www.oregon.gov/owrd/pubs/docs/forms/surfacewaterbook\\_updated\\_02\\_1\\_2012.pdf](https://www.oregon.gov/owrd/pubs/docs/forms/surfacewaterbook_updated_02_1_2012.pdf)

## Appendix C: Map Resources

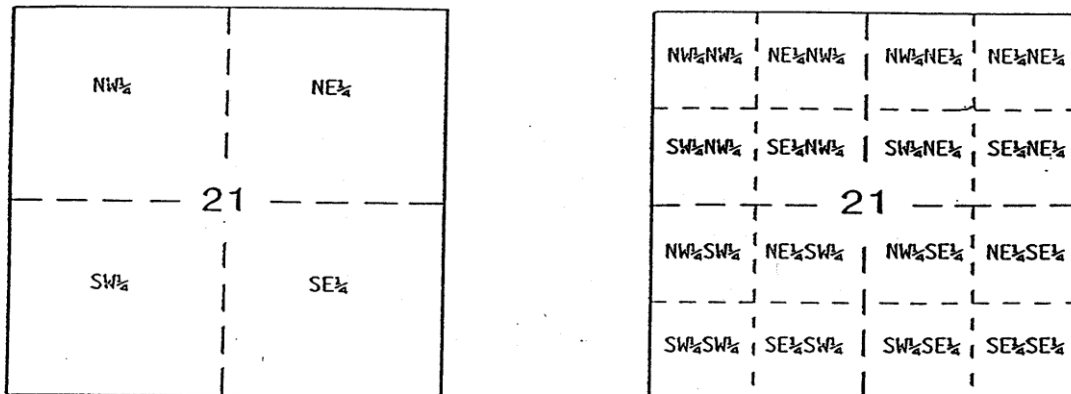
**Figure 11. System for Describing Location of Project Features<sup>64</sup>**

Land descriptions used to locate various project features are based on Section, Township, and Range. A Township is divided into 36 Sections, as shown below:

Township 2 South	6	5	4	3	2	1
	7	8	9	10	11	12
	18	17	16	15	14	13
	19	20	21	22	23	24
	30	29	28	27	26	25
	31	32	33	34	35	36

Range 2 West

When describing a particular location, Sections are further divided into quarter sections (160 acre portions), and sixteenth sections (40 acre portions), as shown below:



For example, the 40 acre portion shown in black on the diagram above right would be described as follows:

"The SW 1/4 of the NE 1/4 of Section 21, Township 2 South, Range 2 West, W.M."

A SAMPLE PROJECT MAP IS SHOWN ON THE REVERSE SIDE OF THIS PAGE

<sup>64</sup> Oregon Water Resources Department. *Application to Develop Hydroelectric Use as Part of an Existing Certified Water Right*. Available at: [http://www.oregon.gov/owrd/PUBS/docs/forms/Additional\\_use\\_hydroelectric\\_form\\_2014.pdf](http://www.oregon.gov/owrd/PUBS/docs/forms/Additional_use_hydroelectric_form_2014.pdf)

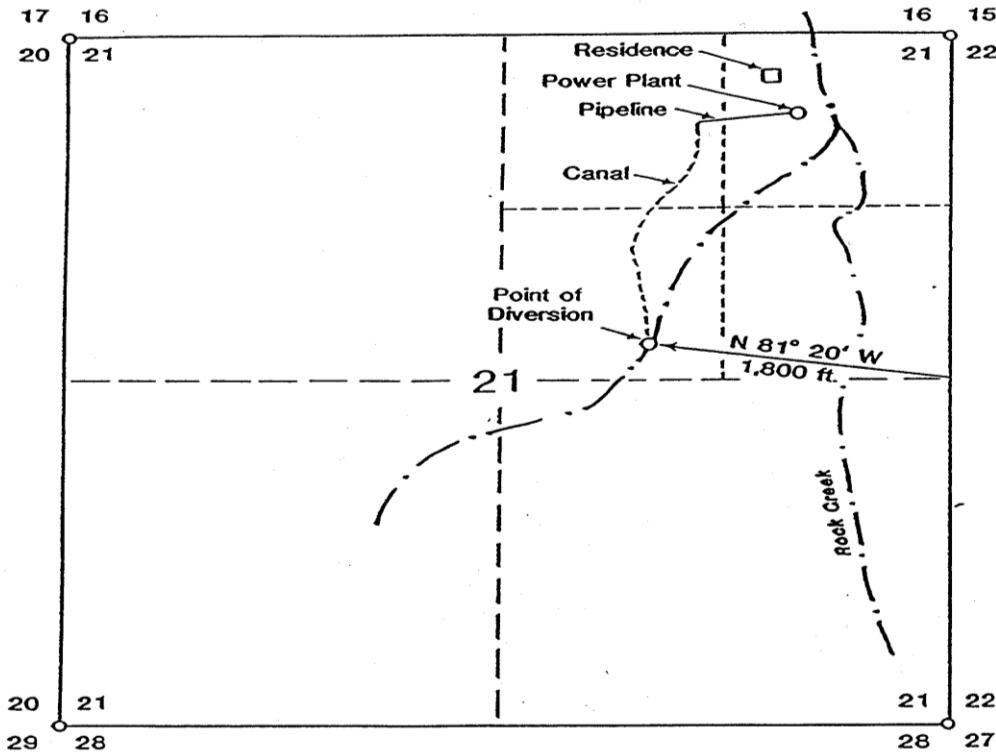


Figure 12. Sample Map<sup>65</sup>

## EXHIBIT A

### MAP TO ACCOMPANY APPLICATION FOR HYDROELECTRIC LICENSE

A.C. Smith  
January, 1988



SECTION 21  
TOWNSHIP 2 SOUTH, RANGE 2 WEST, W.M.

Scale: 1" = 1,000'



# SAMPLE

<sup>65</sup>Oregon Water Resources Department. *Application to Develop Hydroelectric Use as Part of an Existing Certificated Water Right*. Available at: [http://www.oregon.gov/owrd/PUBS/docs/forms/Additional\\_use\\_hydroelectric\\_form\\_2014.pdf](http://www.oregon.gov/owrd/PUBS/docs/forms/Additional_use_hydroelectric_form_2014.pdf)