



Oregon

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MEMORANDUM

TO: Water Resources Commission

FROM: Dwight French, Water Right Services Administrator

SUBJECT: Agenda Item D, August 8, 2013
Water Resources Commission Meeting

**Follow up to an Exception to the Willamette Basin Program by
Gary Yeakle**

I. Issue Statement

Under ORS 536.295 the Water Resources Commission may, under certain circumstances, allow the Department to consider an application to appropriate water for a use not classified as an allowable use by the applicable basin program. Gary Yeakle requested an exception to the Willamette Basin Program for hydroelectric use, which was approved by the Commission on May 9, 2013. The Commission asked for a follow-up informational report. This report explains the application process for a minor hydroelectric project and provides an update on how the Yeakle application is progressing.

II. Background

Mr. Yeakle filed an application (HE 600) for a new minor hydroelectric water right in Lane County on February 8, 2013. The application is for 300 gallons per minute (0.67 cubic feet per second) of water from Hucka Creek tributary to Fall Creek in the Willamette River basin. The project is in the immediate vicinity of the Fall Creek Reservoir owned and operated by the U.S. Army Corps of Engineers. The proposed project will use about 80 feet of head to develop 6 theoretical horsepower for electricity production.

Two maps (Site Map and Overview Map) showing the location of the facility are provided as Attachment 1.

III. Discussion

Minor Hydroelectric Application Processing

ORS 543.300 defines a “minor” hydroelectric project as less than 100 theoretical horsepower. That is equivalent to about 75 kilowatts of electrical capacity. In contrast, “major” hydroelectric project applications are for projects that are for 100 theoretical horsepower or greater.

An applicant for a hydroelectric project is required to consult with local, state and federal resource agencies prior to submitting an application. This provides the soon-to-be applicant with information about what is required and provides opportunities to study options for meeting the resource requirements.

By Oregon Administrative Rule (OAR 690-051-0090), when a minor hydroelectric application is received, the Department notifies 17 different local, state, tribal and federal agencies¹ about the details of the Project and publishes notice in the Department’s weekly notice. A 30-day comment period is provided.

During the comment period, it is the practice for the Department, Oregon Department of Fish and Wildlife (ODFW), and Oregon Department of Environmental Quality (ODEQ) staff to schedule a joint site visit to the proposed hydroelectric site. The agencies can then develop a common understanding of the issues that might be associated with the project and propose conditions on the construction or operation of the project.

Following the comment period, the Department prepares a technical report on the acceptability of the project considering the basin plan, scenic waterway flow requirements, potential conflict with existing water rights, and the resource standards in OAR 690-051-0160 through 690-051-0270. Please see a listing of the resource standards at Attachment 2. The basin program is referenced in OAR 690-051-0190(3). The results of the site visit are discussed in the report, along with any conditions for construction or operation of the Project.

The technical report and proposed water right are distributed to the applicant and any individuals or agencies who filed timely comments. Notice of the technical report is published in the Department’s weekly notice. A 60-day period is provided for comments or objections.

¹ The 17 federal, regional, state, and local agencies consulted include: Bureau of Land Management, Department of State Lands, 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, State Historic Preservation Office, United States Fish and Wildlife Service, United States Forest Service, United States Army Corps of Engineers and the United States Bureau of Reclamation.

If there are no protests to the technical report, the project would likely be approved as proposed. If there are protests, the Department will work with the applicant and protestant to determine if changes should be made to the technical report and proposed water right. If no agreement can be reached, it is possible that the project could be referred to a contested case hearing. Although the Department is required to take all major hydroelectric projects (greater than 100 theoretical horsepower) to contested case hearing, it has not had to refer any minor projects to such a hearing.

Processing of HE 600 Since May 9, 2013

A. Public Notice

On May 17, 2013, the Department sent notice of the application for a minor hydroelectric project (less than 100 theoretical horsepower) to the 17 state, and federal agencies. The notice solicits answers to specific resource questions for each agency.

On May 21, 2013, the project was listed in the Department's weekly public notice inviting comments within a 30-day time period. The notice included project details including its location, the 0.67 cubic feet per second from Hucka Creek, tributary to Fall Creek in the Willamette basin, and the 6 theoretical horsepower to be developed for home use.

Comments were received from the Oregon Office of the Northwest Power and Conservation Council and the Oregon Division of State Lands. Neither of the entities had concerns regarding the proposed project.

B. Site Visit

On June 13, 2013, representatives from the Department, ODFW and ODEQ performed a site visit to the Yeakle property. Agency representatives on the visit observed that the stream had little or no riparian disturbance and was well shaded. The stream drops sharply to the reservoir. No fish were observed in the stream.

C. Technical Report

The Department will publish notice of the technical report and proposed water right certificate for this project in the near future. Standard conditions that apply to hydroelectric projects will be included on the proposed water right certificate. There is a 60-day comment and protest period from the date of the notice.

IV. Conclusion

The Water Resources Commission's approval under ORS 536.295, for an exception to the Willamette Basin Program on May 9, 2013, allowed Mr. Yeakle's project to move

forward into the next stages of processing. As noted in Attachment 2, the resource review standards are significant and the list of agencies that are invited to comment is lengthy. In addition, all minor hydroelectric applications receive a site visit from ODFW, ODEQ, or Department staff and most of the time, as occurred with this application, all three agencies were represented.

It is much more difficult to obtain authorization for a minor hydroelectric use than for any other type of use. The basin program issue is one small portion of the overall process.

V. Alternatives

This is an informational report. No action is required of the Commission.

Attachments:

1. Location maps (Site Map and Overview Map)
2. OAR 690-051-0160 to -0270: Hydroelectric application review standards

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Attachment 1 – Overview Map

Attachment 2 - Resource Standards for Minor Hydro Projects

690-051-0160

Standards for Evaluation

The standards in OAR 690-051-0170 to 690-051-0290 implement the provisions of ORS 537.160, 537.170, 543.017, 543.225 and 543.255 for the review of all hydroelectric applications. To be approved, a project must meet the general and resource specific standards in OAR 690-051-0170 to 690-051-0260. Economic and need for power standards in 690-051-0270 and 690-051-0280 must be met as well. When required, a project must also be reviewed with other projects pursuant to 690-051-0290.

Stat. Auth.: ORS 537 & ORS 543

Stats. Implemented:

Hist.: WRD 14-1986, f. & ef. 10-13-86

690-051-0170

Protection of Designated Resource Areas and Special Management Areas

(1) Proposed projects having effects on a designated resource area listed in OAR 690-051-0030(1) or a special management area listed in section (2) of this rule, shall be consistent with the authorized use of the area. The Director, or Commission in actions where exceptions have been filed to the Director's proposed order requiring Commission action, shall decide if a project is consistent only after review of input from the managing agency. If the Director or Commission approves a project that is not consistent, findings that support the action shall be made.

(2) Section (1) of this rule applies to the following special management areas:

- (a) National wildlife refuges;
- (b) National recreation areas;
- (c) State wildlife management areas;
- (d) State forests;
- (e) County parks;
- (f) City parks;
- (g) Special district parks;
- (h) Sites listed in or determined eligible for inclusion on the National Register of Historic Places;

(i) Areas managed by federal agencies for study, inclusion or designation as a Protected Area under federal law or regulation; and

(j) Areas under study by state agencies for inclusion in or designation as a Protected Area under state statute or regulation.

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

(3) All applications for projects in or affecting the Columbia Gorge as designated in ORS 390.460 shall be consistent with the policy in ORS 390.415 as determined by the Commission after considering the recommendation of the Oregon Columbia River Gorge Commission.

Stat. Auth.: ORS 536.025, ORS 536.027, ORS 537 & ORS 543

Stats. Implemented:

Hist.: WRD 14-1986, f. & ef. 10-13-86; WRD 2-1993, f. & cert. ef. 5-19-93

690-051-0180

Mitigation, No Net Loss

(1) The following standards on mitigation and no net loss are minimums. They apply to all natural resources in general. Resource specific rules may impose stricter standards. In order to approve an application, the Director, or Commission when exceptions have been filed to the Director's proposed order on the License or Permit, shall have due regard for and enter appropriate findings on the following standards:

(a) Proposed mitigation must be in the project vicinity;

(b) Proposed mitigation must be acceptable to the Director or Commission;

(c) All mitigation measures which reasonably can, shall be fully functional when the project begins operation; and

(d) The Collective benefits of all mitigation measures must equal or exceed the collective adverse impacts on natural resources so there is no net loss of natural resources.

(2) In applying the standards in section (1) of this rule, the Commission or Director shall:

- (a) Consult with federal, state, and local resource agencies, and the appropriate affected tribe(s); and
- (b) Prefer mitigation that benefits the natural resource(s) affected, over mitigation that benefits some other natural resource(s). If mitigation that benefits the affected natural resource(s) is unacceptable or not possible, mitigation that benefits some other natural resource(s) may be considered.
- (3) The standards in section (1) of this rule shall apply to the following natural resources: Water quality; wildlife; scenic and aesthetic resources; historic, cultural, and archaeological; agricultural lands; forest resources; wetlands; plant life; fish life; recreation; soils; and natural communities and geologic features.
- (4) At the Director's discretion, or the Commission's discretion in the case where an exception has been filed to the Director's proposed order, the standards in section (1) of this rule may apply to natural resource(s) not identified in section (3) of this rule that an applicant or interested party can demonstrate to be of value to the public. Anyone making a showing of value for a natural resource not listed in section (3) of this rule shall also propose, for consideration, a standard for the protection of the natural resource. If agreed by the Director, or Commission in cases where an exception has been filed to the Director's proposed order, and upon acceptable showing of public value, an applicant may propose enhancement or other mitigation of an unlisted natural resource to offset impacts on natural resources listed in section (3) of this rule.

Stat. Auth.: ORS 536.025, ORS 536.027, ORS 537 & ORS 543

Stats. Implemented:

Hist.: WRD 14-1986, f. & ef. 10-13-86; WRD 2-1993, f. & cert. ef. 5-19-93

690-051-0190

Water Resources

The Director and Commission shall have due regard for water resources. In order to approve an application, the Director, or in cases where the final order is issued by the Commission, the Commission, shall enter appropriate findings on the following standards:

- (1) There is available water to provide for reasonable operation of the proposed project.
- (2) The proposed use will not preclude or interfere with any existing rights or permits for the use of water.

(3) The proposed use is 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 or, in the absence of a policy, the proposed use is consistent with the policies set forth in ORS 536.300 through 536.350.

(4) The project is consistent with achieving maximum economic development of the waters involved.

(5) The project is consistent with making the fullest practical use of the stream's hydroelectric potential in the project vicinity.

(6) The project will not constitute wasteful, uneconomic, impracticable or unreasonable use of the waters involved.

(7) The project, including mitigation and enhancement measures, is consistent with conserving the highest use of the waters of the state for all beneficial purposes.

(8) The project is consistent with controlling the waters of the state for all beneficial purposes, including, drainage, sanitation and flood control.

(9) Construction and operation of the proposed project shall comply with water quality standards established in OAR Chapter 340, Division 41. Exceptions to this standard may be allowed if permitted by Division 41 rules, granted by the DEQ and approved by the Director, or in cases where an exception has been filed to the Director's proposed order, the Commission.

Stat. Auth.: ORS 536.025, ORS 536.027, ORS 537 & ORS 543

Stats. Implemented:

Hist.: WRD 14-1986, f. & ef. 10-13-86; WRD 2-1993, f. & cert. ef. 5-19-93

690-051-0200

Fish Resources

(1) The Director and Commission shall have due regard for fish resources in general. In order to approve an application, the Director, or in cases where exceptions have been filed to the Director's proposed order, the Commission, shall enter appropriate findings on the following standards:

(a) Project facilities and operations will not have significant adverse impacts on fish populations;

(b) Project facilities and operations will not unreasonably interfere with upstream and downstream passage of fish through the project vicinity. The Director, or in cases where the final order is approved by the Commission, the Commission may make exceptions to this standard in special cases where fish populations have been significantly damaged by past activities and the proposed single- or multiple-purpose project development will improve existing fish populations;

(c) Project facilities and operation have 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;

(d) Unavoidable adverse impacts on fish or to fish management programs will be mitigated;

(e) Project construction, timing and procedures are designed to minimize fishery impacts from instream construction work and premature or unnecessary land clearing and disturbances;

(f) All fishery protective measures and scheduled to be fully functional when the project commences operations; and

(g) The proposed project is consistent with ODFW management programs in force on the effective date of these rules.

(2) The Director and Commission shall have due regard for wild game fish. No project shall be approved that would result in a net loss of wild game fish. In order to approve an application, the Director, or in cases where exceptions have been filed to the Director's proposed order, the Commission shall enter appropriate findings on the following standards:

(a) A project, any part of which is located on a river or stream reach used by wild game fish, or that would adversely affect wild game fish, shall include 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; and

(F) Employ workable and generally accepted methods and techniques of mitigation best suited to the affected fish resource(s).

(3) The Director and Commission shall have due regard for salmon and steelhead fish and habitat. No project shall be approved that may result in mortality or injury to an individual anadromous salmon or steelhead or loss of any salmon or steelhead habitat. In order to approve an application, the Director, or in cases where the Commission approves the final order, the Commission, shall enter appropriate findings on the following standards:

(a) If proposed at an undeveloped site, it is not 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; and

(b) 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 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 (2)(a)(C) and (D) of this rule 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; and

(E) Are in effect at the time of adverse impact or start of project operation, whichever comes first.

(4) In order to approve an application for a project within the Columbia River Basin, the Director, or in cases where exceptions have been filed on the proposed order, the Commission shall find that the proposed project complies with the fish protection, mitigation and enhancement requirements of the NPPC's Columbia River Basin Fish and Wildlife Program. Certification of compliance by the NPPC shall satisfy this standard.

Stat. Auth.: ORS 536.025, ORS 536.027, ORS 537 & ORS 543

Stats. Implemented:

Hist.: WRD 14-1986, f. & ef. 10-13-86; WRD 2-1993, f. & cert. 3f. 5-19-93

690-051-0210

Wildlife

The Director and Commission shall have due regard for wildlife. In order to approve an application, Director, or in cases where an exception has been filed on the proposed order, the Commission shall enter appropriate findings on the following standards:

- (1) The location, design, construction or operation of the proposed project shall not jeopardize the continued existence of animal species which have been:
 - (a) Designated, or officially proposed by the USF&WS, or the NMFS as threatened or endangered pursuant to the Endangered Species Act of 1973;
 - (b) Identified by the Oregon Natural Heritage Data Base as endangered, threatened or limited in Oregon; or
 - (c) Identified by the Oregon Fish and Wildlife Commission as threatened or endangered in Oregon.
- (2) The location, design, construction and operation of project facilities will minimize adverse impacts on wildlife habitat, nesting and wintering grounds, and wildlife migratory routes.
- (3) Project construction methods and scheduling will minimize disruption of wildlife and avoid premature or unnecessary land clearing in the project vicinity.
- (4) Unavoidable adverse impacts on wildlife or wildlife habitat will be mitigated in the project vicinity by 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.
- (5) The project is consistent with applicable ODFW management programs in force on the effective date of these rules.
- (6) If, within the Columbia River Basin, the project is consistent with the provisions of the NPPC's Columbia River Basin Fish and Wildlife Program and the Northwest Conservation and Electric Power Plan. Certification of compliance by the NPPC shall satisfy this standard.

Stat. Auth.: ORS 536.025, ORS 536.027, ORS 537 & ORS 543

Stats. Implemented:

Hist.: WRD 14-1986, f. & ef. 10-13-86; WRD 2-1993, f. & cert. ef. 5-19-93

690-051-0220

Plant Life

The Director and Commission shall have due regard for plant life. In order to approve an application, the Director, or the Commission in cases where an exception has been filed to the Director's proposed order, shall find that the location, design, construction or operation of the proposed project shall not jeopardize the continued existence of plant species which are:

(1) Designated or officially proposed by the USF&WS as threatened or endangered pursuant to the Endangered Species Act of 1973.

(2) Identified by the Oregon Natural Heritage Data Base as endangered, threatened or limited in Oregon.

Stat. Auth.: ORS 536.025, ORS 536.027, ORS 537 & ORS 543

Stats. Implemented:

Hist.: WRD 14-1986, f. & ef. 10-13-86; WRD 2-1993, f. & cert. ef. 5-19-93

690-051-0230

Recreation

The Director and Commission shall have due regard for recreation. No project may be approved that would result in a net loss of recreation opportunities. In order to approve an application, the Director, or in cases where an exception has been filed to the Director's proposed order, the Commission shall enter appropriate findings on the following standards:

(1) Project facilities will be designed, located and operated to substantially avoid visible or audible intrusion on the natural setting integral to existing recreational facilities, activities or opportunities.

(2) The proposed project will not reduce the abundance or variety of recreational facilities or opportunities available in the project vicinity.

(3) Unavoidable adverse impacts on nonwater-dependent recreation facilities, activities or opportunities will be mitigated in the project vicinity by providing replacement facilities or opportunities of the same or similar nature and abundance.

(4) The project will not have significant adverse impacts on any unique, unusual or distinct natural feature which provides the focus or attraction for non water-dependent recreational facilities or activities.

(5) Unavoidable adverse impacts on any water-dependent recreational opportunity will be mitigated with replacement by or enhancement or another water-dependent recreational opportunity available in the project vicinity.

(6) The proposed project will not cause the loss of or significant adverse impact to any water-dependent recreational opportunities of statewide significance.

(7) 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, will be offset by enhancement to other element(s) of the same water-dependent recreational opportunity in the project vicinity.

Stat. Auth.: ORS 536.025, ORS 536.027, ORS 537 & ORS 543

Stats. Implemented:

Hist.: WRD 14-1986, f. & ef. 10-13-86; WRD 2-1993, f. & cert. ef. 5-19-93

690-051-0240

Historic, Cultural and Archaeological Resources

(1) The Director and Commission shall have due regard for historic, cultural, and archaeological resources. In order to approve an application, the Director, or in cases where an exception has been filed to the Director's proposed order, the Commission shall enter appropriate findings on the following standards:

(a) The project will not 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;

(b) The project will 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);

(c) Unavoidable adverse impacts on historic, cultural and archaeological resources will be mitigated in accordance with generally accepted professional standards; and

(d) Archaeological data of significance associated with a site not eligible for inclusion in the National Register of Historic Places will be recovered in accordance with generally accepted professional standards.

(2) Before filing an application for a License or Permit, developers shall consult 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.

Stat. Auth.: ORS 536.025, ORS 536.027, ORS 537 & ORS 543

Stats. Implemented:

Hist.: WRD 14-1986, f. & ef. 10-13-86; WRD 2-1993, f. & cert. ef. 5-19-93

690-051-0250

Land Resources

The Director and Commission shall have due regard for land resources. In order to approve an application, the Director, or in cases where an exception has been filed to the Director's proposed order, the Commission shall enter appropriate findings on the following standards:

(1) Adverse impacts on high value or important farmlands or agricultural land as identified in OAR Chapter 660, Division 33, shall be avoided, minimized or offset by acceptable mitigation.

(2) Adverse impacts on prime forestlands as defined by the city or county and by the Oregon Forestry Department shall be avoided, minimized, or offset by acceptable mitigation.

(3) Adverse impacts on wetlands as defined by OAR 141-085-0010(20) or identified by the Oregon Natural Heritage Data Base will be avoided, minimized, or offset by acceptable mitigation.

(4) Project facilities shall 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; and

(b) Scenic and aesthetic resources identified by state or federal agencies as outstanding, significant or deserving special protection.

(5) Project facilities will be designed and located to blend with adjacent features.

(6) Mechanical noise caused by the project complies with applicable noise standards in OAR Chapter 340, Division 35.

(7) The location, design, construction or operation of the project will not:

(a) Disturb fragile or unstable soils; or

(b) Cause soil erosion which would impair other water uses.

(8) Design, location, construction and operation of the proposed project will avoid or minimize adverse impacts on natural communities or geological features identified by the Oregon Natural Heritage Data Base as threatened or endangered in Oregon.

(9) Project facilities located in geologically unstable areas are designed with appropriate safeguards.

(10) Project facilities located in areas subject to naturally occurring conditions or hazards, such as flooding or ice formation are designed to withstand damage to project facilities and allow reasonable access for project maintenance or operation under such conditions.

Stat. Auth.: ORS 536.025, ORS 536.027, ORS 537 & ORS 543

Stats. Implemented:

Hist.: WRD 14-1986, f. & ef. 10-13-86; WRD 2-1993, f. & cert. ef. 5-19-93

690-051-0260

Land Use

(1) 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.

(2) In the event of a land use dispute, as defined in OAR 690-005-0015 (Definitions), the Department shall follow resolution procedures provided in 690-005-0040 (Resolution of Land Use Disputes).

Stat. Auth.: ORS 197, ORS 536.025, ORS 536.027, ORS 537 & ORS 543

Stats. Implemented:

Hist.: WRD 14-1986, f. & ef. 10-13-86; WRD 12-1990, f. & cert. ef. 8-8-90; WRD 2-1993, f. & cert. ef. 5-19-93

690-051-0270

Economics

The Director and Commission shall have due regard for project economics. In order to approve an application, the Director, or in cases where the Commission approves the final order, the Commission shall find that the applicant, along with all co-owners, possesses or has reasonable assurance of obtaining the funds necessary to cover estimated construction, maintenance, operating, mitigation and compensation costs.

Stat. Auth.: ORS 536.025, ORS 536.027, ORS 537 & ORS 543

Stats. Implemented:

Hist.: WRD 14-1986, f. & ef. 10-13-86; WRD 2-1993, f. & cert. ef. 5-19-93