

**BUREAU OF RECLAMATION
PACIFIC NORTHWEST REGION
RECORD OF DECISION**

**On Aspects of the Proposed Wanapa Energy Center
Subject to Reclamation Jurisdiction and Approval**

I. Background

The Wanapa Energy Center Final Environmental Impact Statement (FEIS) documents the impacts from proposed construction and operation of a 1,200 megawatt, gas-fired electrical generating plant to be located in Umatilla County, Oregon. The proposal includes a 4.4-mile electrical transmission line to interconnect the plant with the Bonneville Power Administration's (Bonneville's) McNary Substation and a 9.9-mile natural gas supply pipeline to provide power plant fuel from the interstate natural gas pipeline system near Stanfield, Oregon. Cooling water for the plant would be withdrawn from the Columbia River through an existing Port of Umatilla intake structure. The plant cooling wastewater is proposed to be discharged to Cold Springs Reservoir via a pipeline routed parallel to the natural gas pipeline. Cold Springs Reservoir is part of the Bureau of Reclamation's Umatilla Project.

The Bureau of Indian Affairs (BIA) was the lead federal agency responsible for preparation of the FEIS. Reclamation and Bonneville were cooperating agencies based on their jurisdiction and expertise regarding specific portions of the overall proposal. The BIA filed the FEIS with the Environmental Protection Agency on December 17, 2004. The FEIS addresses a no-action alternative, six alternative routes for the natural gas pipeline, three alternative routes for the electrical transmission line, and one alternative location for the plant cooling wastewater discharge.

Based on the analysis contained in the FEIS, the BIA and Bonneville have reached decisions on portions of the overall proposal. The BIA issued a record of decision (ROD) on February 24, 2005, announcing its intention to implement the proposed action and stating that BIA will approve an acceptable lease between the project developers and the Confederated Tribes of the Umatilla Indian Reservation (CTUIR). The lease agreement must include provisions for adequate bonds and financial guarantees to ensure contractual obligations including the proper decommissioning of the proposed facility and restoration of the site. The BIA's decision is also conditioned by requirements to implement mitigation measures described in the FEIS, and to develop and implement a series of plans addressing concerns such as storm water pollution prevention, emergency spill and other emergency response, noxious weed control, and vegetation reclamation.

Bonneville also issued a ROD on February 24, 2005, announcing that it will offer contract terms for interconnection of the Wanapa Energy Center with the Federal Columbia River Transmission System (FCRTS), as proposed in the FEIS. Bonneville will construct, at Wanapa's expense, a 500-kilovolt transmission line

from the Wanapa site to Bonneville's existing McNary Substation. A Large Generation Interconnection Agreement (LGIA) with Diamond Wanapa I, L.P. (Diamond), in partnership with the CTUIR, will provide for interconnection of the Wanapa Energy Center with the FCRTS and electrical generation in the Bonneville Control Area. The agreement will provide for construction of interconnection facilities and continued operation and maintenance of interconnection equipment at Diamond's expense. The LGIA will include appropriate provisions for remediation of oil or other hazardous substances associated with construction and operation of related electrical facilities in a manner consistent with applicable Federal, State, and local laws. Bonneville's decision is also conditioned by requirements to implement mitigation measures described in the FEIS and, if and when the Wanapa Energy Center is constructed, to comply with permit conditions specified by appropriate regulatory agencies.

II. Alternatives Considered

The FEIS addresses a no-action alternative, six alternative routes for the natural gas supply and wastewater pipelines, three alternative routes for the electrical transmission line, and one alternative location for the cooling wastewater discharge. Under the no-action alternative, the project would not be built. The proposed action evaluated in the FEIS includes (among other things) the discharge of cooling wastewater into Cold Springs Reservoir via a pipeline conveying it to the Feed Canal drop structure. The pipeline would be in the Feed Canal right-of-way for approximately one mile before discharging into the reservoir. The alternative wastewater pipeline routes are generally located in the same area of the Feed Canal as the proposed action.

The no-action alternative is considered to be the environmentally preferred alternative, primarily because there would be no potential for adverse water quality impacts.

III. Findings of Independent Review of the BIAs FEIS

As a cooperating agency, Reclamation may adopt the Wanapa Energy Center FEIS for use in making decisions as provided for under the regulations for implementing the procedural provisions of the National Environmental Policy Act (43 CFR § 1506.3(c)). Reclamation has independently reviewed the FEIS and has determined that comments and suggestions provided by Reclamation during preparation of the FEIS have been satisfactorily addressed. The FEIS identifies relevant environmental concerns and effects based on general descriptions of the proposed action and alternatives. The FEIS contains sufficient analysis of environmental effects to permit a decision to be made by Reclamation as described in the following sections.

IV. Decisions Pending Before Reclamation

Based on the general description of the proposed action contained in the FEIS, and in light of its jurisdiction and authorities, Reclamation has determined that its authorization or consent will be needed before any of the following activities associated with the eventual construction of natural gas and wastewater pipelines and discharge of plant cooling wastewater into Cold Springs Reservoir can occur:

1. Reclamation consent is needed for pipeline crossings or other use of Reclamation-owned easements in the project area. Such consent generally will be provided upon a determination that the proposed use will not interfere with Reclamation's use of its easements, and with concurrence of the underlying landowner.
2. The grant of a Reclamation easement is needed for pipeline crossings or other use of Reclamation lands held in fee title. Under the Reclamation Project Act of 1939 and subsequent delegation of authority, easements may be provided at Reclamation's discretion only when Reclamation determines that their exercise will not be incompatible with the purposes for which the lands or interests in lands are being administered, and shall be on such terms and conditions as in Reclamation's judgment will adequately protect the interests of the United States and the project for which said lands or interests in lands are being administered.
3. Reclamation's approval is needed for the storage and carriage of plant cooling wastewater in its facilities. Reclamation may contract with qualified entities to allow such use of excess capacity within its facilities under the act of February 12, 1911, otherwise known as the Warren Act. The Warren Act authorizes Reclamation to convey non-project water for agricultural uses in Reclamation facilities.

Reclamation has no general siting authority or responsibility for the proposed Wanapa Energy Center.

Reclamation has not received final design plans or requests for final consent or approval of any particular aspect of the project within Reclamation's jurisdiction or subject to Reclamation's authority. If and when such plans or requests are received, additional environmental analysis, engineering review, and other considerations may be required and decisions will be made based on the information provided at that time. Any future environmental analyses (if required) would be tiered to the Wanapa Energy Center FEIS as provided for by regulation.

In light of the preceding discussion, the decisions pending before Reclamation at this time are conditional in nature and are limited to the following:

1. Whether Reclamation will consent to the crossing or other use of its easements for the construction and operation of pipelines as proposed in the FEIS and if so, the conditions required.

2. Whether Reclamation will grant an easement and enter into a Warren Act contract facilitating the eventual direct discharge of plant cooling wastewater into Cold Springs Reservoir as proposed in the FEIS and if so, the conditions required.

V. Issues Bearing on the Pending Decisions

The primary issues identified during preparation of the Wanapa Energy Center FEIS and during Reclamation's independent review of that FEIS which are relevant to Reclamation's pending decision include:

1. Potential Impacts to Water Quality in Cold Springs Reservoir

Water quality at Cold Springs Reservoir is highly important for several reasons. The primary purpose of Cold Springs Reservoir is to provide water needed for cropland irrigation within the Umatilla Project. In addition, the reservoir is used by waterfowl and other wildlife and is the central feature of the Cold Springs National Wildlife Refuge.

The FEIS (Table 3.3-2) documents that the plant cooling wastewater proposed for discharge to Cold Springs Reservoir generally would be of lower quality than the water presently stored in the reservoir. However, the FEIS concludes that the wastewater discharge will result in no significant adverse effect on surface water quality, nor to resources and uses dependent on such water (FEIS, pp. 3.3-14, 3.3-15, and Appendix C-9). This conclusion is based on a number of considerations, assumptions, and future permitting actions summarized below.

With the exception of total dissolved solids (TDS), the estimated average concentrations of effluent analytes are less than the lowest applicable aquatic life water quality standards (FEIS, Table 3.3-2). For TDS, the estimated effluent concentration is 1,586 mg/l, while the estimated present reservoir concentration is 117 mg/l. For streams and tributaries in Oregon, the lowest applicable aquatic life water quality standard is 100 mg/l. There is no established TDS standard for lakes and reservoirs in Oregon.

The FEIS also notes that the Oregon Department of Environmental Quality (ODEQ) has not yet determined what temperature standard or limit would be applied. The temperature of the plant discharge water would be controlled within the range of 70 to 75 degrees Fahrenheit (FEIS, p. 3.3-12). The FEIS does not describe the current seasonal temperatures of Cold Springs Reservoir nor does it evaluate or model how reservoir temperatures may change based on the proposed wastewater discharge.

Temperature, TDS, and other necessary standards for the proposed discharge into Cold Springs Reservoir would be established by the ODEQ as part of the National Pollution Discharge Elimination System (NPDES) permit process. An NPDES permit is required under the Clean Water Act prior to discharging the plant cooling wastewater into Cold Springs Reservoir or any other water body. The

FEIS indicates that Reclamation and the Environmental Protection Agency (EPA) will have an opportunity to review the draft NPDES permit before it is issued and comments will be evaluated and addressed by ODEQ. The FEIS also indicates that there will be a 30-day public review and comment period for the permit after initial cooperating agency review. The analysis in the FEIS assumes that ODEQ will assure through its future issuance of a NPDES permit that no significant effect will occur to water quality or to dependent resources and uses, including irrigation, fish and wildlife.

The FEIS documents that wastewater discharged to Cold Springs Reservoir would mix with higher quality water diverted from the Umatilla River during the winter-spring refill period. In effect, Cold Springs Reservoir would serve as a mixing zone where higher and lower quality water would blend. As discussed in the FEIS (Appendix C), Oregon water quality standards and regulations allow the use of a mixing zone in determining how a wastewater discharge will meet state water quality standards. The wastewater discharge must meet acute water quality standards at the end-of-pipe to prevent acute toxicity to organisms in the mixing zone. The mixing zone concept allows a portion of the receiving water body to exceed chronic water quality standards. However, at the edge of the mixing zone chronic standards must be met so that the rest of the water body is protected, including during low flow conditions.

The FEIS (Appendix C) notes that once a NPDES permit is in place and the Wanapa Energy Center begins operation, effluent sampling and analysis will be required and ODEQ may modify (during a limited period of time) the NPDES permit for additional water quality parameters and limits if necessary. Long term monitoring, analysis, and reporting will also be required and ODEQ may initiate enforcement actions if permit limits are exceeded.

The conclusions reached in the FEIS regarding water quality impacts are based to some degree on the assumption that final design of the proposed action (or modifications to the proposed action following implementation) will address any water quality concerns that may be identified in the future. For example, the FEIS states that if based on future analysis it is determined that plant discharge water quality can significantly impact water quality in Cold Springs Reservoir; the plant discharge water would be treated before discharge to maintain water quality standards in the reservoir (FEIS, p. 3.3-14).

The plant cooling wastewater will be added to water ultimately used to irrigate crops. TDS concentrations in excess of 480 mg/l in irrigation water can begin to affect sensitive crops such as field beans, lettuce, bell pepper, onion, carrots, and string beans. Water from Cold Springs Reservoir is used to irrigate alfalfa, fruit trees, melons, and a variety of garden products. As noted earlier, there is no established TDS standard for lakes and reservoirs in Oregon. A TDS standard (and other necessary standards) for the proposed discharge into Cold Springs Reservoir would be established by the Oregon Department of Environmental Quality (ODEQ) as part of the National Pollution Discharge Elimination System (NPDES) permit process. Therefore it is not known with certainty at this time how the proposed action, through its effects on water quality in Cold Springs Reservoir, will affect crop production within the Hermiston Irrigation District.

The FEIS concludes (based on assumptions discussed earlier) that impacts to irrigation use of the reservoir are expected to be negligible (FEIS, Appendix C, p. C-9).

2. Potential Impacts to the Cold Springs National Wildlife Refuge

The 3,117-acre Cold Springs National Wildlife Refuge consists of wetland habitats adjacent to Cold Springs Reservoir and surrounding riparian and upland habitats. The refuge was established in 1909 primarily as a preserve and breeding ground for native birds and is administered by the U.S. Fish & Wildlife Service (FWS). Refuge wetlands support large numbers of wintering waterfowl while adjacent riparian and upland habitats support songbirds and other wildlife. Fish populations in Cold Springs Reservoir consist of warm water species such as white crappie, carp, and largemouth bass.

The FEIS concludes that the proposed wastewater discharge to Cold Springs Reservoir would benefit fish and aquatic habitat by adding water. The FEIS does not identify any water quality-related adverse effects to fish, wildlife, or other resource values or uses at the refuge. Based on communication during preparation of the FEIS, the FWS has confirmed that, in their opinion, the plant cooling wastewater would not adversely affect fish and wildlife utilizing the refuge.

3. Potential Impacts to Operations and Maintenance of the Reservoir and Associated Irrigation Facilities

The proposed action would require locating the natural gas supply and wastewater pipelines across Reclamation water distribution facilities. Part of the wastewater pipeline would also be located within Reclamation's right-of-way for the Feed Canal, and would involve use of Reclamation's Feed Canal drop structure for discharge into Cold Springs Reservoir.

The primary concern with use of the drop structure is that during non-irrigation season, when other water is not being put through the Feed Canal, the cooling wastewater discharge would create algae blooms and prevent necessary maintenance. These concerns have been partially addressed through Diamond Wanapa's commitment to construct a process water retention pond with a 30-day storage capacity to allow for routine maintenance (FEIS, p. 2-21). In addition, Diamond Wanapa has committed to work with the Hermiston Irrigation District and Reclamation in constructing a new drop structure that would have a separate discharge section for the cooling wastewater. The FEIS also notes that the proposed wastewater discharge could occur in either the drop structure at the end of the Feed Canal or in a diffuser that would extend out into the reservoir dead pool (FEIS, p. 3.3-12). These and other concerns will be addressed during Reclamation's review of the final drop structure design.

Liability and exchange credit accounting also must be addressed during development of a Warren Act Contract. Acceptance of wastewater discharge for use as irrigation water must be approved by the State and is required in order to issue a Warren Act Contract.

VI. Mitigation Measures

The FEIS identifies mitigation measures which will help minimize effects to soils, vegetation, wildlife, cultural resources, and local transportation and traffic (FEIS, Table 3.12-1). Other mitigation measures are likely to be required by ODEQ before issuance of the NPDES permit.

VII. Reclamation's Decisions and Rationale

The following decisions are conditional in nature. They are based on the general description of the proposed action, assumptions, and analysis of environmental effects contained in the Wanapa Energy Center FEIS. As noted in Section III of this Record of Decision, Reclamation has not received final design plans or requests for final consent or approval of any particular aspect of the project within Reclamation's jurisdiction or subject to Reclamation's authority. If and when such plans or requests are received, additional environmental analysis, engineering review, and other considerations may be required and decisions will be made based on the information provided at that time. Any future environmental analyses (if required) would be tiered to the Wanapa Energy Center FEIS.

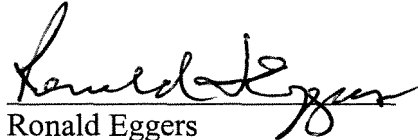
1. Reclamation will consent to the crossing of its easements (the proponent must also obtain approval of the underlying landowner) for construction and operation of the proposed natural gas supply and wastewater pipelines following review of final plans to be submitted by the project proponent. Consent is contingent upon a determination by Reclamation that the proposed construction and operation of such facilities will not interfere with Reclamation's use of its easements.
2. Reclamation will grant an easement for a pipeline crossing of Reclamation lands held in fee title and will allow its Feed Canal drop structure to be modified and used following review and approval of final plans to be submitted by the project proponent. Reclamation's review will be for the purpose of assuring that the proposed facilities and uses will not be incompatible with the purposes for which the lands or interests in lands are being administered. Reclamation's approval will be on such terms and conditions as in Reclamation's judgment will adequately protect the interests of the United States and the project for which said lands or interests in lands are being administered. Prior to granting such easement:
 - a. The Oregon State Water Resources Department must issue a water right to a qualified entity or otherwise determine that the discharge may be used by such qualified entity as irrigation water.
 - b. An NPDES permit must be obtained for discharge of cooling wastewater into Cold Springs Reservoir. The permit must include discharge standards and/or criteria that Reclamation determines will maintain the long-term suitability of Cold Springs Reservoir

water quality for irrigation, fish and wildlife, and other authorized uses.

3. Reclamation will enter into a Warren Act contract with a qualified entity for use of excess storage and carriage capacity in Reclamation facilities, provided that such contract contains conditions necessary to address impacts to operation and maintenance of Reclamation's facilities.
4. Construction activities carried out on Reclamation-administered lands must be consistent with the mitigation measures identified in the Wanapa Energy Center FEIS (Table 3.12-1).

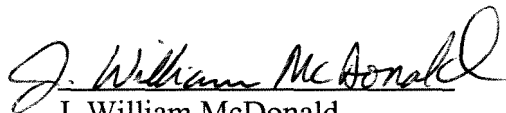
These decisions and associated conditions are consistent with Reclamation law and applicable regulations and policies. They address the primary issues and concerns identified during preparation of the Wanapa Energy Center FEIS as it pertains to those portions of the proposed project subject to Reclamation jurisdiction and authority. In particular, these decisions and conditions address potential impacts to the operation and maintenance of Cold Springs Reservoir, associated irrigation structures, and water quality for irrigation, fish and wildlife, and other authorized uses.

Recommended:


Ronald Eggers
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June 20, 2005
Date

Approved:


J. William McDonald
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Pacific Northwest Region
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July 5, 2005
Date