

MEMORANDUM OF AGREEMENT
BETWEEN
THE DEPARTMENT OF ECOLOGY
AND
THE DEPARTMENT OF FISH AND WILDLIFE

Regarding the implementation of

KENNEWICK GENERAL HOSPITAL MITIGATION UNDER GROUNDWATER PERMIT G4-30584P

I. PARTIES

THIS AGREEMENT is made and entered into by and between the DEPARTMENT OF ECOLOGY, hereinafter referred to as "ECOLOGY", and the Washington Department of Fish and Wildlife, hereinafter referred to as "WDFW," collectively referred to as the "Parties."

Under chapter 90.90 RCW, Ecology's Office of Columbia River (OCR) is directed to aggressively pursue development of new water supplies in the Columbia Basin for both instream and out-of-stream uses. WDFW responsibilities are to preserve, protect, perpetuate, and manage fish and wildlife resources under the authority of RCW 77.04.012.

II. PURPOSE

This Agreement outlines the mutual understanding between the Parties to effectuate issuance of a new water right permit to Kennewick General Hospital (KGH) in the amount of 4,000 acre-feet per year as detailed below. This Memorandum of Agreement (Agreement) outlines the mutual agreement of the Parties as to the mitigation for that water right, and represents a commitment by the parties to implement the actions under this Agreement.

III. THE WATER RIGHT

The KGH application G4-30584 requests Ecology to approve a permit for a new appropriation of 4,000 acre-feet per year (7,990 gallons per minute) of groundwater in continuity with the mainstem Columbia River from March 1 through October 31 annually to provide irrigation to 2,780 acres in east Benton County owned by KGH. The well field is located in the E ½, Section 20, Township 7 North, Range 31 E.W.M. The place of use is located in east Benton County. If the permit application is approved, the annual quantity allocated to KGH would be a portion of the amount reserved by the adoption of the John Day/McNary Reservation under WAC 173-531A-040. The priority date for application G4-30584 under the reservation is June 24, 1980.

The request for 4,000 acre-feet per year for the irrigation of up to 2,780 acres equates to an average water duty of 1.44 acre-feet per acre. This quantity is lower than would normally be associated with most row, cover, and orchard crops. However, implementation of careful and efficient irrigation water management, seasonal cropping patterns (including non-irrigated or fallowed acreage and short season crops), and low water duty crops such as

vineyards, means that actual per-acre duty might be higher at certain locations or during certain stages of growth.

The water resource management program for the John Day/McNary Pools reach of the Columbia River, from which the applicant's proposed sources would withdraw water, is described in chapter 173-531A WAC. This program reserves 1,320,000 acre-feet annually for irrigation purposes and specifies that the priority date of filings under the chapter is the effective date of regulation (June 24, 1980). The well field where water would be withdrawn penetrates an aquifer hydraulically continuous with the Columbia River. Currently, it is estimated that approximately 450,000 acre-feet per year have been allocated under chapter 173-531A WAC.

Use of water under the permit (and, ultimately, certificate, after proof of appropriation of water is made) would be contingent upon KGH and its successors' compliance with a water service contract with Ecology for recovery of costs associated with funding of the mitigation plan. Failure to comply with the terms of the water service contract would result in cancellation of the permit or revocation of the certificate, as outlined in the water service contract.

Benefits of the permit: KGH plans to transfer the parcel(s) with appurtenant water rights, and plans to use the proceeds of any sale to expand and improve hospital services to the public in the Kennewick area, as well as provide for additional agricultural production which would support the local and state economy through increased revenue and job creation.

IV. CONSULTATION

The history of consultation on this application is found in the Ecology Investigator's report¹. WDFW's concerns with the application included:

- The mainstem Columbia River at Kennewick and affected reaches downstream are inhabited by Federal Endangered Species Act (ESA) Endangered Snake River sockeye and Upper Columbia River Spring Chinook, ESA Threatened fall Chinook and steelhead salmon stocks; and these waters are included as critical habitat for ESA Threatened bull trout; and these waters host additional non-ESA-listed salmon and steelhead stocks and many resident native and non-native species, including white sturgeon, Pacific lamprey, and walleye;
- Flows in dry years sometimes fall below the minimum instream flows provided for in chapter 173-563 WAC, and/or below flow requirements specified in the Federal Columbia River Power System Biological Opinion;
- Guidance from the National Research Council of the National Academies in 2004 indicated that "Given the current setting and likely future trends, additional withdrawals

¹ INVESTIGATOR'S REPORT Application for Water Right -- Kennewick General Hospital Water Right Control Number G4-30584 Trevor Hutton, Department of Ecology [September 26, 2013].

from the Columbia River during periods of low flows will pose substantial additional risks to salmon survival².”

Initially, WDFW recommended³ that new water right permits for the mainstem Columbia River be conditioned on instream flows provided in chapter 173-563 WAC.

During consultation in 2012, WDFW indicated that because of the risk associated with the uncertainty about flow reduction and fish survival, WDFW could not support approval of this application without mitigation, and that any “alternative” mitigation must, in the opinion of WDFW, provide better benefits for fish than would be achieved with the traditional water-for-water approach. Mitigation criteria WDFW suggested for this project included:

1. Any mitigation project shall feature streams containing spawning populations of ESA-listed salmonids that utilize the McNary Pool (i.e. fish that would be impacted from the proposed withdrawal). A “project” can include (but is not limited to) large-scale restoration, water acquisition, or land acquisition or easement;
2. Selection of projects, lands, or easements shall be dependent upon the availability of such projects or lands from willing participants, and shall be located in accordance with the following order of priority: 1) Lands or waters near the mainstem Columbia or Snake Rivers upstream from John Day Dam and downstream from the Hanford Reach/Ice Harbor Dam; or 2) Lands/waters in the Yakima River Basin, or 3) Other lands/waters upstream from John Day Dam;
3. Protection and expansion of spawning habitat for ESA-listed salmon or steelhead is a priority;
4. Critical values for mitigation include long-term protection for and enhancement of riparian or wetland areas, or opportunities to create new riparian or wetland plant communities, or opportunities for restoration of floodplain function, channel restoration, and/or aquifer recharge;
5. Protection and potential enhancement of shrub steppe, native grassland habitats, and other upland habitats of the types that have been heavily impacted by agricultural development in the Yakima and Columbia Basins is also desirable.

In 2012, WDFW agreed that issuance of the permit can be considered if there is either water-for-water mitigation or alternative mitigation that provides better benefits for fish than would be achieved with the traditional water-for-water approach. Since then, Ecology

² *Managing the Columbia River: Instream Flows, Water Withdrawals, and Salmon Survival*. National Research Council of the National Academies. 2004.

³ Under authority provided in chapter 77.57.020 RCW.

and WDFW have collaborated with others to develop a suite of mitigation projects that would address and remedy impacts to fish stocks that would be incurred by approval of this application.

V. MITIGATION AGREEMENT

Ecology will provide mitigation as follows:

1. The applicant, KGH, has executed an agreement with Ecology OCR that provides for recovery of costs incurred by OCR in funding the elements of the mitigation plan. The applicant (and any successors) are required by this agreement to repay Ecology \$35 per acre-foot per year until the cumulative sum reaches \$6,000,000. This equates to an annual payment of \$140,000 for 43 years (final payment reduced to \$120,000). The Report of Examination associated with this application states that "use of water under this permit or certificate is contingent upon the applicant's compliance with a water service contract with Ecology for recovery of costs associated with funding of the mitigation plan. Failure to comply with the terms of the water service contract will result in cancellation of the permit or revocation of the certificate, as outlined in the water service contract." Disposition of cost-recovery funds will be as set forth in Appendix A.
2. Capital funds are presently available for OCR to begin making expenditures upon issuance of a permit. Projects described in the mitigation plan (Appendix A) are expected to be implemented by the end of the 2013-2015 Biennium.
3. Ecology will fund the identified mitigation elements in collaboration with WDFW. Should any part of the proposed mitigation be found to be infeasible, or otherwise fail to be implemented, a suitable replacement project will be identified, and the replacement project will be funded as part of the initial \$6,000,000.

Ecology will direct all cost recovery payments made by KGH (and any successors), an additional \$6,000,000, toward funding projects that result in direct instream flow augmentation within the McNary Pool of the Columbia River and within the Walla Walla, Yakima, and Snake River Basins.

WDFW agrees that the provisions represented in this agreement, taken together, provide better benefits for fish than would be achieved with the traditional water-for-water mitigation approach. In the event that any of the projects listed in Appendix A receive funding from other sources, WDFW agrees to assist Ecology in finding a substitute project or projects of equal cost that will provide equal or greater benefit than the project it replaces.

WDFW agrees to work with Ecology to identify potential instream flow enhancement projects that the \$6,000,000 will be used to fund, and will work with Ecology to assess the efficacy of flow enhancement projects to directly offset the effects on instream flow of the KGH water right permit.

VII. CONTACTS

Any notice provided under the terms of this Contract by either party shall be sufficient if made or addressed as follows:

PROJECT MANAGER (Ecology)

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PROJECT MANAGER (WDFW)

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CONTRACT MANAGER (WDFW):

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Email: phillip.thompson@dfw.wa.gov

VIII. CONTRACT TERM

Projects described in the mitigation plan are expected to be implemented by the end of the 2013-2015 Biennium. This contract term shall begin when the latter signatory has signed, and end when all projects associated with this Agreement, or substitute projects as provided for in section V(3), are completed.

IX. AMENDMENT

This Agreement may be amended by the mutual agreement of the parties, using the standard contract amendment process. It is anticipated that the agreement would be amended if the time frame to complete the mitigation will extend substantially past June 2015, and that the list of mitigation projects (Appendix A) would be amended if any was found infeasible and needed to be replaced by another suitable project.

X. TERMINATION

Prior to issuance of the KGH water right permit, either party may terminate this Agreement upon 30 days prior written notification to the other party. After the water right permit is issued and the appeal period has passed, the Agreement can be terminated only after all the mitigation commitments have been satisfied.

XI. DISPUTES

In the event that a dispute arises under this Agreement, it shall be resolved by a Dispute Board in the following manner: Each party to this Agreement shall appoint one member to the Dispute Board. The members so appointed shall jointly appoint an additional member to the Dispute Board. The Dispute Board shall review the facts, agreement terms and applicable statutes and rules and make a determination of the dispute. The determination of the Dispute Board shall be final and binding on the parties hereto. As an alternative to this process, either of the parties may request intervention by the Governor, as provided by RCW 43.17.330, in which event the Governor's process will control.

XII. SEVERABILITY

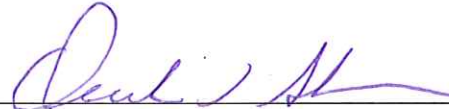
All parties agree that, should any of the provisions contained in this Agreement be held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provisions, and the Agreement shall continue in full force and effect.

XIII. SIGNATURES

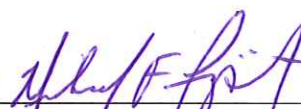
This agreement is hereby executed:

State of Washington
Department of Ecology

State of Washington
Department of Fish and Wildlife



3/17/14
Date



3-20-14
Date

Derek I. Sandison
Director, Office of Columbia River

Mike Livingston
Regional Director, Region 3

MITIGATION PLAN ELEMENTS

27 January 2014

Ecology plans to invest \$6,000,000 to fully or partially fund the mitigation elements identified below with collaboration from WDFW. Ecology will execute a cost recovery agreement with KGH which will establish yearly payments to be made to Ecology as a condition of receiving water under application G4-30584. Should any part of the proposed mitigation fail to be implemented, a suitable replacement project will be identified and evaluated, and the replacement project will be funded as part of the initial \$6,000,000.

In addition to the identified out-of-kind mitigation projects, Ecology will direct all cost recovery payments made by KGH (and any successors) toward funding projects that result in direct instream flow augmentation within the McNary Pool of the Columbia River and within the Walla Walla, Yakima, and Snake River Basins. These projects and any subsequent acquisitions of water will allow for increased stream flows in habitats utilized by many aquatic species, including ESA-listed salmonids.

1) Project Name: Tucannon Ranch Project

PROPONENT: Columbia Conservation District

DESCRIPTION/BENEFITS: Project is located in the lower Tucannon River, a priority restoration reach in the Salmon Recovery Plan for South East Washington. The project will restore channel complexity, side channel habitat, and floodplain connectivity by the removal of remnant levees and dredge spoils and installation of a new setback levee. Removal of channel constrictions restoring accessibility of the floodplain would provide for energy dissipation during high water flow events, thus reducing scour of redds and flushing of juvenile salmonids including Snake River Fall Chinook.

2) Project Name: Indian Creek Conservation Easement and Floodplain Enhancement

PROPONENT: WDFW/DNR

DESCRIPTION/BENEFITS: Project would involve a transfer of Sec. 16, T.21N., R.16E.W.M. from the Washington Department of Natural Resources to WDFW. The transfer would allow for stream enhancements such as placement of large woody debris that would improve storage and late season flow. This project is scalable and may include only acquisition of the geomorphic floodplain (approximately 87 acres) or may include the purchase of the entire section, including the upland habitat surrounding the project site. Acquisition by WDFW would result in long term habitat protection with many restoration opportunities that would have positive impacts on native fish stocks and adjacent riparian and upland habitat.

3) Project Name: Upper Wapato Riparian Restoration

PROPONENT: Yakima County

DESCRIPTION/BENEFITS: Project would supplement riparian areas and install vertical roughness structures in the Wapato Reach of the Yakima River near Buena resulting in enhancement of natural river processes including channel migration, floodplain interaction and habitat formation. These processes would improve spawning, migratory, and wintering habitat for anadromous salmonids in a priority reach of the Yakima River.

4) Project Name: Lower Drainage Improvement District #1 Levee Setback

PROPONENT: Yakima County

DESCRIPTION/BENEFITS: Project would open almost 900 acres of floodplain lands to active connection with the Yakima River through removal of a 3,000 foot long existing levee and construction of a 3,500 foot long setback levee. Accessibility of floodplain lands will result in increased ecosystem function benefitting priority species and habitat necessary to support them.

5) Project Name: Cle Elum River Side-Channel Restoration Project – Phase 2

PROPONENT: Kittitas Conservation Trust

DESCRIPTION/BENEFITS: Project would install engineered log jams, gravel bars, and snags on a two mile reach of the Cle Elum River and improve flow in five miles of side channels, creating 20-60 new pools and allowing for recruitment of 240 acres of floodplain and side channel habitat. These components would enhance habitat availability for spawning and juvenile salmonids.

6) Project Name: Little Rattlesnake Road Decommissioning

PROPONENT: Mid-Columbia Fisheries Enhancement Group

DESCRIPTION/BENEFITS: Project would decommission and rehabilitate 5 miles of Forest Service Road 1501 allowing for increased floodplain connectivity while reducing channel scouring. Increased riparian vegetation would provide cover and shade over the stream, improving stream temperatures for anadromous and resident species.

7) Project Name: Taneum Creek MP 4.4 Repair and Enhancement

PROPONENT: US Forest Service

DESCRIPTION/BENEFITS: Project would repair a washed out section of Taneum Road and identify habitat enhancements to construct contemporaneously which would benefit aquatic and riparian species, including steelhead.

8) Project Name: Ellensburg Water Company/Coleman Creek Restoration

PROPONENT: Kittitas County Conservation District

DESCRIPTION/BENEFITS: Project would replace Ellensburg Water Company's existing upstream diversion with a new structure that includes fish screens and passage as well as constructing a siphon at the intersection with Colman Creek. This project is a part of a series of projects aimed at improving fish passage in the lower 5 miles of Coleman Creek.

9) Project Name: Reed Diversion Barrier Removal

PROPONENT: Kittitas County Conservation District

DESCRIPTION/BENEFITS: Project would remove the last existing fish passage barrier on Manastash Creek, allowing access to more than 20 miles of stream habitat.

10) Project Name: Trout Meadows Acquisition and Enhancement

PROPONENT: Yakima County

DESCRIPTION/BENEFITS: Project would acquire a majority of land ownership of Trout Meadows on the Naches River and construct new side channels, connecting the river to floodplain lands and improving mainstem channel. Decreased confinement of the main channel will likely improve habitat conditions on the adjacent reach as well as upstream and downstream reaches.

11) Project Name: Plum Creek/Little Naches/Manastash Land Acquisition

PROPONENT: WDFW/TNC

DESCRIPTION/BENEFITS: Project would purchase and protect forest land, riparian zones, and floodplain areas that are currently privately owned. Undisturbed upper and middle elevation conifer forest areas serve to protect water quality and maintain late season flows of cool water temperatures crucial for the protection and restoration of resident bull trout as well as spawning anadromous species.

12) Project Name: Mill Creek Bennington Ladder Replacement

PROPONENT: US Army Corps of Engineers/Bonneville Power Administration

DESCRIPTION/BENEFITS: This project on Mill Creek, tributary to the Walla Walla River, would design and replace an unsuitable existing fish ladder. This will allow for improved upstream passage to thirty-six miles of pristine habitats for ESA-listed steelhead and bull trout as well as other salmonid species.

13) Project Name: Lostine River Water Conservation Project

PROPONENT: BPA/Oregon Watershed Enhancement Board

DESCRIPTION/BENEFITS: This project on the Lostine River in the Grande Ronde River basin would convert over ten miles of open conveyance to pressurized pipeline and convert up to 850 acres of flood irrigation to sprinkler irrigation. These efficiency upgrades would reduce diversion rates from the Lostine River, which is an important spawning stream for ESA-listed Chinook and Steelhead, during low flow conditions in August and September.