

## Oregon Water Resources Department

Regarding the	)	
Hydroelectric License	)	Final Order
Application HE 620	)	
In the Name of Brent Kerns	)	
Diamond K Ranch	)	

**This is a final order in other than contested case. This order is subject to judicial review under ORS 183.484. Any petition for judicial review must be filed within the 60-day time period specified by ORS 183.484(2). Pursuant to ORS 536.075 and OAR 137-004-0080 you may either petition for judicial review or petition the Director for reconsideration of this order. A petition for reconsideration may be granted or denied by the Director, and if no action is taken within 60 days following the date the petition was filed, the petition shall be deemed denied.**

Pursuant to OAR 690-051-0090(3)(d), this final order is being issued with findings that the proposed project together with any recommended measures to protect, mitigate, or enhance the natural resources of the State is consistent with the minimum standards in ORS 543.017 and the requirements in OAR 690-051-0160 through 690-051-0290 and that the project would not impair or be detrimental to the public interest as provided in ORS 543.225.

#### A. APPLICATION HISTORY

On January 24, 2022, Kent Kerns (Applicant) applied for a minor hydroelectric project (Project) is diverting up to 0.11 cubic feet per second (cfs) of water from Willow Creek, tributary to the Powder River, in Baker County, Oregon. The proposed project uses approximately 300 feet of head to develop 3.8 theoretical horsepower (THP) to generate electricity for use on-site. The project operates year-round.

Pursuant to OAR 690-051-0090(3)(a), on February 2, 2022, notice of the application was included in WRD's weekly public notice and was subsequently distributed to county, state, regional and federal agencies<sup>1</sup> for a thirty-day review and comment period seeking input on how the proposed Project would affect various resources.

<sup>1</sup> The federal, regional, state, and local agencies consulted include: Bureau of Land Management, County of Coos, Oregon Department of Geology and Mineral Industries, Legislative Commission on Indian Services, National Park Service, National Marine Fisheries 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 Department of State Lands, Oregon Parks and Recreation Department - State Historic Preservation Office, Oregon Water Resources Department, U.S. Bureau of Reclamation, U.S. Fish and Wildlife Service, and U.S. Forest Service.

Timely comments were received from the United State Department of Agriculture Forest Service, Oregon Department of Fish and Wildlife (ODFW), Oregon Department of Forestry (ODF), and the Northwest Power and Conservation Council (NWPPCC). All comments were considered by WRD in making its findings of fact.

## **B. PROJECT DESCRIPTION**

The applicant constructed a minor hydroelectric project with approximately 300 feet of head to develop 3.8 theoretical horsepower (THP) to generate electricity year-round for use on-site.

The applicant diverts up to 50 gallons per minute (0.11 cubic feet per second) from Willow Creek tributary to the Powder River. Willow Creek flows year-round and serves as the principal source of irrigation for the Diamond K Ranch (certificates 4192 and 92938).

The applicant constructed a 1-foot tall by 8' wide wood diversion dam that impounds the water, which enters a screened 8-inch diameter steel pipe. The 8-inch diameter steel pipe narrows to a 4-inch diameter PVC penstock for the majority of its length and descends 300 feet down the hillside where it passes through the turbines.

Discharge from the tailrace water enters another pipe allowing it to return to Willow Creek.

## **C. PROJECT LOCATION**

The point of diversion is in Tax Lot 600, within the SW¼ NE¼, Section 4 Township 8 South, Range 38 East, Willamette Meridian (W.M.). The land is owned by Brent Kerns/Diamond K Ranch. There are no neighbors within 300 feet of the proposed powerhouse.

## **D. WATER USE**

Water availability: The water use is non-consumptive and does not impact water availability in Willow Creek.

This water right shall be subordinated to all other uses. A hydraulic head of 300 feet is stated on the application. Theoretical horsepower is calculated as  $0.11 \text{ cfs} \times 300 \text{ feet of head} / 8.8 = 3.8 \text{ THP}$ .

Existing water rights: There are other water uses on Willow Creek, however, they occur after this use and are small. The applicant has rights to divert Willow Creek for irrigation and livestock uses.

Basin Program: Power development is a classified use in the Powder Basin Program per OAR 690-509-0000(1).



#### **E. STANDARDS (OAR 690-051-0160)**

All proposed new minor (less than 100 theoretical horsepower) hydroelectric projects in Oregon, such as this Project, must comply with the minimum standards in ORS 543.017, meet the resource protection standards of OAR 690-051-0170 to OAR 690-051-0260, and must not impair or be detrimental to the public interest as provided in ORS 543.225.

#### **F. FINDINGS OF FACT**

##### **▪ Protection of Designated Resource Areas and Special Management Areas (OAR 690-051-0170)**

The Project is not part of any other special management area for a federal, state, city, or county agency, or on any designated resource area listed in OAR 690-051-0030. Willow Creek is not designated as a protected area by the Columbia River Basin Fish and Wildlife Program of the Northwest Power and Conservation Council. The Project is not located in the Columbia River Gorge as designated in OAR 390.460. The project is not located within a designated scenic waterway.

WRD finds that the Project complies with the standards and requirements of this rule.

##### **▪ Mitigation, No Net Loss (OAR 690-051-0180)**

This application was submitted along with detailed questionnaires to federal, state, regional and county entities to ensure the following natural resources of OAR 690-051-0170 to OAR 690-051-0260 were considered: water resources including water quality; fish and wildlife; plant life; recreation; historic, cultural, and archeological resources, land resources including wetlands, forest lands, agriculture, and scenic and aesthetic resources; and compliance with county planning documents.

Based on the consultations noted above including the written comments from the ODFW, ODEQ, ODF, NWPCC, and of the facts contained in the file, WRD finds that the Project, as conditioned, will result in no net loss of natural resources. This finding is supported by those below.

##### **▪ Water Resources (OAR 690-051-0190 (1-8))**

There are other water uses on the main stem or tributaries of Willow Creek, however they are small. The only other use of this spring and creek are for the applicants' irrigation use. Power development is a classified use in the Powder Basin Program per OAR 690-509-0000(1).

The hydroelectric use is consistent with other Water Resources Policies and with achieving maximum economic development of the waters involved and with making the

fullest practical use of the stream's hydroelectric potential. The Project will not constitute wasteful, uneconomic, impracticable, or unreasonable use of the waters involved.

Based on a review of the information contained in the file and in Section D above, WRD finds that the Project complies with the standards and requirements of this rule.

▪ **Water Quality (OAR 690-051-0190(9))**

DEQ's assessment of potential water quality-related impacts is based on the location and operation of the project as proposed in the WRD application, discussions with the applicant during the site visit, visual observations during the project site visit, and a review of available database resources maintained by DEQ.

Willow Creek is a tributary to the Powder River in the Powder Subbasin of the Powder River Basin. DEQ's fish use designation maps (OAR 340-041, Figure 260A) designate the Powder River Subbasin as supporting Redband trout. The seven-day-average maximum temperature of a stream identified as Redband trout habitat may not exceed 20.0 degrees Celsius (OAR 340-041-0028[4][e]). Where summertime water temperatures are below the temperature criterion activities are prohibited from warming the water temperature more than 0.3 degrees Celsius. DEQ believes the Project as proposed will have minor effects on downstream stream temperature. This position is based on the small portion of the available base flow that is diverted from the creek and the relatively short distance before this water is returned to Willow Creek. For these reasons, DEQ expects any alteration in water quality caused by project operation to be small and unlikely to measurably affect downstream conditions. To protect against future temperature-related impacts the water right holder should avoid reducing vegetative shade in the project area. The water right holder should also consult with DEQ prior to undertaking ground-disturbing activities that could contribute to soil instability or sedimentation of waterways.

Should DEQ determine the Project is causing a violation of water quality standards found in OAR 340, Division 041, DEQ may require the permit holder to modify the Project or the Project's operation in such a way to prevent future violations of water quality standards.

Consistent with comments from ODEQ, the Project shall be conditioned to require erosion and sediment controls to protect water quality consistent with standards in OAR 340-41.

Based on a review of the facts contained in the file, WRD finds that the Project, as conditioned, complies with the standards and requirements of this rule.

▪ **Fish Resources (OAR 690-051-0200)**



The proposed diversion structure would be located on Willow Creek and will be the first diversion from this system.

On July 2, 2021, ODFW La Grande District Fish Biologist, Joe Lemanski, and Region Hydropower Coordinator, Aaron Maxwell, visited the project location and sampled for fish presence upstream of the project site. Brook trout were recovered during the sampling effort. Although Redband trout were not recovered during the sampling event, the project reach is proximal to known Redband trout distribution and is believed to be within current or historic Redband trout habitat.

An official site visit was performed on June 14, 2022, including the applicant, John Zauner from ODFW and Water Master Marcy Osborn and Craig Kohanek from WRD. The intake pipe was screened adequately for the project site. ODFW has completed the additional fish presence surveys in the Fall and Spring at the Kerns Hydro Project (HE 620) located on Willow Creek, tributary to the Powder River.

Although an abundance of Brook trout was encountered, no Redband trout were found in the Project Area. Due to the lack of historic documentation and current distribution of Redband in the Project Area, fish passage rules do not apply to the Project.

ODFW recommended that the applicant maintain the intake fish screen for the duration of the project.

Based on the project application, the permit holder will not divert more than ten percent of the water available in Willow Creek. ODFW finds that leaving ninety percent of the water in-channel is adequate bypass flow. A measuring device to monitor flow will need to be installed to ensure that no more than ten percent of the water is diverted from Willow Creek.

Comments received from the NWPCC stated that "the proposed project appears not to be in what the NWPCC has designated a Protected Area for anadromous fish. The NWPCC's evaluation included their review of maps of the project location and comparing those maps to the protected area designations on the Streamnet website at: <http://map.streamnet.org/protectedquery/viewer.htm>.

Based on a review of the facts contained in the file, WRD finds that the Project, as conditioned, complies with the standards and requirements of this rule.

▪ **Wildlife (OAR 690-051-210)**

There will be minimal land disturbances during construction of the dam, the placement of the penstock, and the building of powerhouse. There is not expected to be much area of inundation behind the diversion structure, but if trees are lost due to inundation or other construction activity's they should be replaced in close proximity to mitigate

wildlife habitat loss. There should be no significant disruption of wildlife.

The location, design, construction, or operation of the proposed project will not jeopardize the continued existence of animal species that have been designated or officially identified as threatened or endangered, nor have adverse impacts been identified to wildlife, wildlife habitat, nesting, and wintering grounds, or wildlife migratory routes.

Based on a review of the facts contained in the file, WRD finds that the Project, as conditioned, complies with the standards and requirements of this rule.

▪ **Plant Life (OAR 690-051-0220)**

The location, design, construction, or operation of the proposed project will not jeopardize the continued existence of plant species that have been officially proposed or designated as threatened or endangered.

Based on a review of the facts contained in the file, WRD finds that the Project, as conditioned, complies with the standards and requirements of this rule.

▪ **Recreation (OAR 690-051-0230)**

The Project is being developed on private lands, thus there are no public recreation areas within the Project area.

Project facilities will be designed, located, constructed, and operated to substantially avoid visible or audible intrusion on the existing environment. The proposed Project will not reduce the abundance or variety of recreational facilities or opportunities available in the vicinity.

Based on a review of the facts contained in the file, WRD finds that the Project, as conditioned, complies with the standards and requirements of this rule.

▪ **Historic, Cultural and Archaeological Resources (OAR 690-051-0240)**

The Confederated Tribes of the Umatilla Reservation did not comment but shall be contacted immediately if any known or suspected cultural resource(s) are encountered during the work.

The Project shall be conditioned so that, if any cultural material is discovered during construction, all activities shall stop, and the State Historic Preservation Office shall be contacted to assess the discovery. It is a Class B misdemeanor to impact archaeological site(s) (ORS 358.905-955) and a Class C felony to impact Indian Burials (ORS 97-740-990).



Based on a review of the facts contained in the file, WRD finds that the Project, as conditioned, complies with the standards and requirements of this rule.

▪ **Land Resources (OAR 690-051-0250)**

The proposed Project is located entirely on privately owned parcels of land. Adverse impacts on prime forest lands, high value or important farmlands, agricultural lands, or wetlands due to this project are not anticipated.

The location, design, construction, or operation of the project will not disturb fragile or unstable soils, or cause soil erosion.

Project facilities shall be designed with appropriate safety standards with regards to geological hazards and naturally occurring conditions or hazards, such as flooding, landslides, or ice formation.

Based on a review of the facts contained in the file, WRD finds that the Project, as conditioned, complies with the standards and requirements of this rule.

▪ **Land Use (OAR 690-051-0260)**

The proposed water use has been approved as being allowed or not regulated by the Acknowledged Comprehensive Plans from the Baker County Planning Department.

Based on a review of the facts contained in the file, the WRD finds that the Project, as conditioned, complies with the standards and requirements of this rule.

**G. CONCLUSIONS OF LAW**

Upon review of the application and input received from numerous state and federal agencies, OWRD concludes that the proposed Project, with the conditions set forth below, complies with the minimum standards of ORS 543.017, will not violate the standards expressed in OAR 690-051-0160 through -0260, and will not impair or be detrimental to the public interest per ORS 543.225. The proposed Project is well adapted to the development and utilization of the waterpower involved.

**H. LICENSE CONDITIONS**

The proposed use of water is subject to the following express conditions:

1. The priority date for the water right is January 24, 2022, and Project operation is year-round.

2. Use of water is limited to the amount that the generation facilities can utilize efficiently and shall not exceed the specifications noted in the water right. This water right is inferior in right and subsequent in time to any future appropriation of water upstream for beneficial consumptive uses.
3. The applicant shall comply with all statutes and rules applicable to the Project.
4. The license is effective from the date of issuance through December 31, 2042. It is to be exercised consistent with the conditions contained in the license. This may be reauthorized under laws existing at that time.
5. The applicant shall construct and build the Project according to the maps, plans and specifications filed with and approved by the WRD within two years of issuance of the license or within any lawful extension thereof. The Project map will be incorporated into the license.
6. The applicant will maintain the Project, and each part thereof, in good order and repair and in efficient operation, for the development and transmission of electricity to its reasonable capacity; shall make all necessary renewals and replacements as required; and shall maintain and operate the Project, and all parts thereof, conformably to the rules of the Water Resources Commission (Commission) not inconsistent with Oregon Revised Statutes (ORS) 543.010 to 543.610.
7. No voluntary transfer of the license or of any property acquired, constructed, or operated pursuant to the license issued under ORS 543.010 to 543.610 shall be made without written approval of the Commission. Any successor or assignee of any license under any project acquired, constructed, or operated by the applicant, whether by voluntary transfer approved by the Commission or sale upon foreclosure, execution or otherwise, shall be subject to all the terms and conditions of the license and of the provisions of ORS 543.010 to 543.610 to the same extent as though the successor or assignee was the original applicant. Any mortgage, deed of trust, or other lien suffered or created upon any such project shall be subject and subordinate to all the terms and conditions of ORS 543.010 to 543.610. However, the provisions of this section shall not apply to any transfer, voluntary or involuntary, to the state or any municipal corporation thereof, and upon such transfer the license shall terminate.
8. The Project shall comply with the water quality standards stated in OAR Chapter 340, Division 41, ORS 468B.048, and Section 303 of the Clean Water Act. The Project must meet water quality requirements including numeric and narrative standards, protect beneficial uses, and not degrade existing water quality. Best management practices to minimize erosion and control sediment as identified by ODEQ will be followed for the In-water construction work, including any streambank excavation, and should be completed in the season of August 1 to September 15 to limit impacts to fish and wildlife. Riparian areas impacted during



project construction must be restored/replanted. If trees are lost due to inundation behind the dam or other construction activities, they should be replaced in close proximity to mitigate wildlife habitat loss.

9. The Project shall be designed to minimize visual, aesthetic and noise impacts.
10. If any cultural material is discovered during Project construction, all activities should stop, and an archaeologist contacted to assess the discovery. In addition, the State Historic Preservation Office shall be contacted. It is a Class B misdemeanor to impact an archaeological site (ORS 358.905-955) and a Class C felony to impact Indian Burials (ORS 97-740-990).
11. The permit holder shall maintain and operate the Fish Screen at the diversion intake. The Fish Screen shall be maintained and operated to Oregon Department of Fish and Wildlife (ODFW) approval. The permit holder shall be responsible for the operation and all repair and maintenance necessary to keep the Fish Screen in proper working order.
12. All fish and wildlife mitigation features shall be properly maintained for the duration of the project (543A.025 (2) (a) and (5) (d)).
13. The permit holder shall not divert more than ten percent of the natural flow from Willow Creek. The permit holder shall, with the approval of WRD, install a measuring device to monitor the flow of Willow Creek and regulate the amount of water diverted at the intake accordingly.
14. If at any time an unanticipated situation arises in which the permit holder or operator observes or suspects that fish, wildlife, or their habitat may be harmed by any of the project facilities or as the result of project operation, the permit holder or operator shall immediately take appropriate action to prevent further loss. The permit holder or operator shall, within 24 hours, notify the ODFW La Grande Fish District Office and comply with the measures required by ODFW to prevent additional fish and wildlife injury or mortality. The permit holder shall subsequently restore any damaged fish and wildlife protection features of the project consistent with direction provided by ODFW.
15. The permit holder shall allow the WRD Director and authorized agents and employees of the ODEQ, ODFW, and WRD free and unrestricted access upon reasonable notice, in, through, or across the Project in the performance of their official duties, and shall allow free access to all reports, accounts, records, and other data relating to said Project.
16. Issuance of the license does not absolve the permit holder from compliance with the requirements and enforcement of the requirements under other applicable local, state, and federal laws. The Certificate holder is made aware that permits may be required from the United States Army Corps of Engineers under Section 404 of the Clean Water Act, or from the Division of State Lands for removal and fill of material in waters of the

state.

17. WRD shall coordinate a HART Project site visit every 5 years to review the Project and its operation.
18. The applicant shall be liable for all damages occasioned to the persons or property of others by the construction, operation, or maintenance of the Project facilities, and in no event shall the State of Oregon be liable.
19. Use of water is governed by this license. However, the operations of the Project by the applicant, so far as those operations affect the use, storage, and discharge from storage of waters affected by the applicant, shall at all times be controlled by such reasonable rules as the Commission may prescribe for the protection of life, health, and property, and in the interest of the fullest practicable conservation and utilization of such waters for power purposes and for other beneficial public uses.
20. The applicant shall pay, upon receiving an invoice from WRD, an annual fee to WRD in the amount of \$15.00, (per ORS 543.078(2)(c)). This amount shall be due by the date specified on the invoice.
21. Consistent with ORS 540.610, if after completing construction of the Project, the applicant fails to use or operate the Project facilities for any period of five consecutive years, the water right shall be subject to termination by WRD. The Owner shall comply with the decommissioning standards under OAR 690-52.
22. Upon a decision to terminate the hydroelectric use, the applicant shall comply with any decommissioning statutes and rules in effect at that time. (OAR 690-052).
23. The following requirements of ORS 543 are hereby waived, under authority of OAR 690-051-0350:
  - ORS 543.530 which relates to the issuance of bonds or other evidence of indebtedness and the control thereof by the Commission.
  - ORS 543.550 relating to liens against the Project and providing that any sale shall be of the whole property embraced in the Project unless a partial sale is approved by the WRD Director.
  - ORS 543.560 which requires the applicant to execute to the State of Oregon a bond to the effect that the applicant shall promptly make payment to all persons supplying labor, material, machinery, etc.
24. Prior to receiving a final license, the applicant paid the remainder of the application



fee (\$500.00) to WRD.

#### I. FINAL ORDER

Based on the findings and conclusions above, the standards of ORS 543 and OAR 690-051 have been met with regards to hydroelectric application HE 620. A minor hydroelectric license shall be issued containing a time-limited water right for the Project that allows the water right holder to use water to generate hydroelectricity as specified and conditioned above.

Issued JUL 03 2025

  
Katherine Ratcliffe, Administrator  
Water Right Services Division, *for*  
Ivan Gall, Director  
Oregon Water Resources Department

Attachment: Hydroelectric License for HE 620