

2022 ANNUAL REPORT

Monitoring conducted in compliance with U. S. Fish and Wildlife Service Incidental Take Permit TE89773D-0 and Deschutes Basin Habitat Conservation Plan

Submitted to:

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Introduction

U. S. Fish and Wildlife Service (USFWS) issued Incidental Take Permit TE89773D-0 (USFWS Permit) to eight Central Oregon irrigation districts and the City of Prineville, Oregon on December 31, 2020. The USFWS Permit covers the incidental take of Oregon spotted frog (*Rana pretiosa*) and bull trout (*Salvelinus confluentus*) during lawful activities associated with the storage, release, diversion and return of irrigation water by Arnold Irrigation District (AID), Central Oregon Irrigation District (COID), Lone Pine Irrigation District (LPID), North Unit Irrigation District (NUID), Ochoco Irrigation District (OID), Swalley Irrigation District (SID), Three Sisters Irrigation District (TSID) and Tumalo Irrigation District (TID). The USFWS Permit also covers lawful activities associated with the diversion and withdrawal of water for municipal uses and discharge of municipal effluent by the City of Prineville. Collectively, the eight irrigation districts and City of Prineville are referred to hereinafter as the Permittees.

All activities covered by the USFWS Permit are described in detail in the Deschutes Basin Habitat Conservation Plan (DBHCP) (DBBC 2020), which was approved by USFWS simultaneous with permit issuance in December 2020 (USFWS 2020). DBHCP Chapter 6 (*Habitat Conservation*) and Chapter 7 (*Monitoring, Reporting and Adaptive Management*) are organized by covered activity (e.g., storage reservoir, diversion structure, etc.), with the conservation measures and monitoring requirements for each covered activity or set of activities described separately.

The DBHCP requires compliance/implementation monitoring (DBHCP Section 7.2) and effectiveness monitoring (DBHCP Section 7.3). The former involves documentation that the Permittees are complying with the requirements of the DBHCP and the USFWS Permit. The latter involves monitoring to support a number of adaptive management provisions of the DBHCP that address minor levels of uncertainty about the effectiveness of the conservation measures. The organization of this report follows the numbered conservation and effectiveness measures associated with the covered activities. For each activity or set of activities, the compliance/implementation monitoring and reporting as well as the effectiveness monitoring and adaptive management required by the DBHCP are quoted in text boxes for reference. Results of monitoring for the reporting period follow. The biologist hours funded by the Permittees to complete required monitoring tasks are summarized in Table 1.

Much of this annual reporting involves detailed hydrological data for the surface waters covered by the DBHCP. As required, these data are provided in Microsoft Excel format as supporting files to this document. Additionally, correspondences and meeting notes (as required by the DBHCP) are also provided as supporting files to this document (Attachment B and Attachment C, respectively) and are directly referenced in text.

Table 1. Hours funded by the Permittees in 2022.

Requirement Description	DBHCP Measure	Maximum Required Hours	Qualified Biologist Hours Requested in WY22
Dead Slough Habitat Assessment	WR-1	80	0
Upper Deschutes River Habitat Suitability Assessment Downstream of Wickiup Dam	WR-1	80	80
Crescent Creek Egg Mass Counts	CC-1	80	71.5
Crescent Creek/Little Deschutes Monitoring for Stranding	CC-1	80	0
Crescent Creek/Little Deschutes Habitat Suitability Analyses	CC-1	80	80
Upper Deschutes River OSF Pre-breeding Assessment	OSF-1, WR-1.1		
Upper Deschutes River OSF Egg/Larvae Survival Monitoring	OSF-1, WR-1.2	240	97.5 ¹
Crane Prairie OSF Egg Mass Counts	OSF-1, CP-1.1		

¹ As per prior agreement with USFWS, a boat was provided for crew access to Crane Prairie Reservoir and the 2-day fee for the boat (\$720.00) was converted to biologist hours using the billing rate of \$129.00 per hour.

Crane Prairie Reservoir

Compliance and Implementation Monitoring

Central Oregon Irrigation District (COID) implements, monitors, adaptively manages, and reports on covered activities at Crane Prairie Dam and Reservoir. Monitoring and reporting requirements are described in the Deschutes Basin Habitat Conservation Plan Chapter 7.

Conservation Measure CP-1 (Crane Prairie Reservoir Operation: Crane Prairie Reservoir)

Midnight stage (water surface elevation in feet) and storage volume (acre-feet) for Crane Prairie Reservoir will be monitored daily at Hydromet Station CRA (or a comparable replacement) for the term of the DBHCP. COID will use these data to direct day-to-day operation of Crane Prairie Dam in compliance with Measure CP-1. Water surface elevations outside the allowable range of deviation in Table CP-1 will be reported to USFWS via email within 12 hours of occurrence. The report will include an explanation for the deviation and the steps being taken to bring water surface elevation back within the allowable range of deviation. COID will assist USFWS in determining the impact of the water surface deviation on the Oregon spotted frog. USFWS will determine what, if any, remedial actions are necessary to mitigate the impacts, and COID will implement those actions.

No later than January 31 of each year, daily (midnight) water surface elevation and storage volume data for the preceding water year (October 1 through September 30) will be reported to the Services in Microsoft Excel or other format approved by the Services. In addition, annual reports will identify all daily water surface elevations outside the required range specified in Table CP-1 of Measure CP-1, explain the reason for each such deviation, and identify any remedial actions identified by USFWS and taken by COID.

The DBHCP Conservation Measure CP-1 specifies required ranges and allowable ranges of deviation for both midnight water surface elevation and daily change in water surface elevation at Crane Prairie Reservoir (provisions A through F). Conservation Measure CP-1 also requires monthly coordination between USFWS and COID on the implementation of this conservation measure (provision G) and coordination on the release of an additional 5,000 acre-feet of stored water (provision H). Lastly, COID is required to report any deviations from provisions A through F to USFWS via email (provision I).

Daily reported values for midnight water surface elevation and daily changes in water surface elevation in Crane Prairie Reservoir from October 1 through September 30 are presented in Figure 1 and Figure 2. All surface elevations for Water Year 2022 were reported in a Microsoft Excel file (CranePrairie_WY2022.xlsx) and submitted to USFWS as part of this report package. This file also includes daily values that were outside the allowable range of deviation for Conservation Measure CP-1, the rationale or explanation for those deviations, and any remedial actions taken. Email notifications of compliance deviations and other correspondences are included in supplemental materials, Attachment B.

During the previous water year (Water Year 2021), the Permittees and USFWS agreed that an additional 5,000 acre-feet of storage would be released from Crane Prairie Reservoir to

counteract the effects of drought and support Deschutes River flows downstream of Wickiup Dam (Provision H of Conservation Measure CP-1). This release of additional storage resulted in reservoir storage volumes outside (below) the allowable range of deviation from October 1 to November 10, 2021 (Figure 1). However, this situation is allowed for in Provision H, which specifies that COID shall not be required to hold reservoir storage volume within the allowable range of deviation until the water surface elevation once again reaches 4,443.23 feet. The reservoir reached 4,443.26 feet on April 4, 2022. Water surface elevation of the reservoir was also outside (above) the allowable range of deviation in May and June of 2022 after COID and USFWS agreed it would be beneficial to store additional water as a hedge against the ongoing drought. The reservoir reached a high surface water elevation of 4,443.9 feet (49,990 acre-feet) for the year on June 12, 2022 and dropped back within the allowable range of deviation (4,443.69 feet) on June 22, 2022. It remained within the allowable range of deviation for the remainder of the water year. Daily changes in water surface elevation at Crane Prairie Reservoir were within the allowable range of deviation for the entire water year (Figure 2).

Monthly coordination between USFWS and the Permittees on the implementation of Conservation Measure CP-1 (provision G) occurred via Microsoft Teams video conferencing for all 12 months during water year 2022 (Attachment C). Participants in these meetings included representatives of USFWS, Bureau of Reclamation, Oregon Water Resources Department (OWRD), AID, COID, LPID and NUID. Notes were provided to the USFWS via email.

Conservation Measure CP-1 (Crane Prairie Reservoir Operation: Deschutes River Below Crane Prairie Dam)

Daily average flow (cfs) in the Deschutes River below Crane Prairie Dam will be monitored at Hydromet Station CRAO (or a comparable replacement) for the term of the DBHCP. COID will use these data to direct day-to-day operation of Crane Prairie Dam in compliance with Measure CP-1. Daily average flows outside the allowable range of deviation in Table CP-1 will be reported to USFWS via email within 12 hours of occurrence, and will include an explanation for each such deviation. The report will include an explanation for the deviation and the steps being taken to bring daily average flow back within the allowable range of deviation. COID will assist USFWS in determining the impact of the flow deviation on the Oregon spotted frog. USFWS will determine what, if any, remedial actions are necessary to mitigate the impacts, and COID will implement those actions.

No later than January 31 of each year, daily average flow data for the preceding water year (October 1 through September 30) will be reported to the Services in Microsoft Excel or other format approved by the Services. In addition, annual reports will identify all daily average flows outside the required range specified in Table CP-1 of Measure CP-1, explain the reason for each such deviation, and identify any remedial actions identified by USFWS and taken by COID.

Releases from the reservoir, monitored by the discharge below Crane Prairie Dam (CRAO), were within the allowable range of deviation the entire water year (Figure 3). All flows for Water Year 2022 were reported in a Microsoft Excel file (Attachment A: CranePrairie_WY2022.xlsx) and submitted to the USFWS as part of this report package. This file also includes daily values that were outside the required range for Conservation Measure CP-1, the rationale or explanation for those deviations, and any remedial actions taken. Email notifications of compliance deviations

and other correspondences are included in the email correspondences submitted with this report (Attachment B).

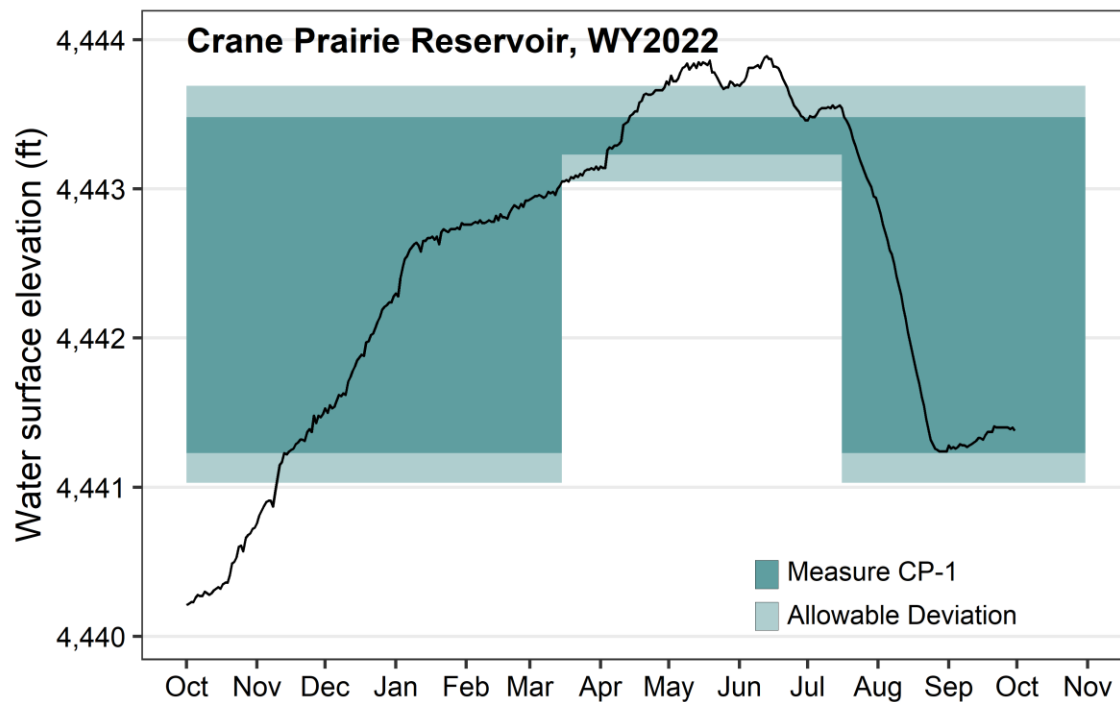


Figure 1: Daily (midnight) water surface elevations (feet) in Crane Prairie Reservoir measured at Hydromet Station CRA (OWRD Gage 14053500) between October 1, 2021, and September 30, 2022. Values outside the colored areas fall outside the required range and allowable deviation for Measure CP-1.

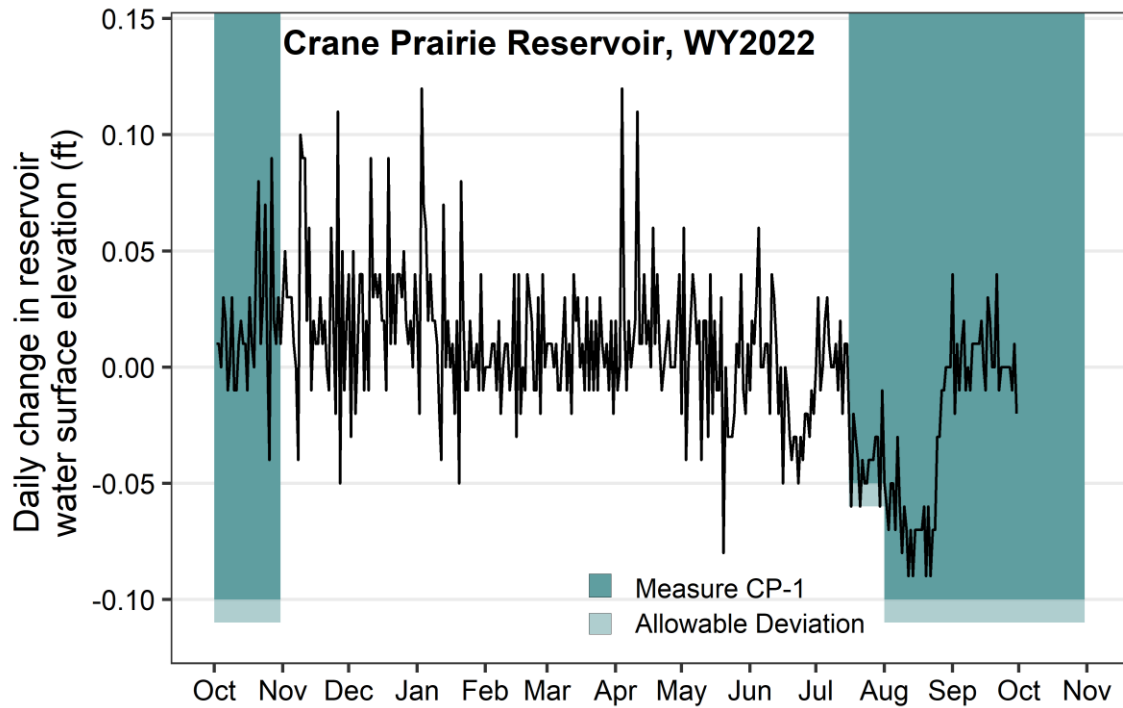


Figure 2: Daily change in reservoir surface elevation (feet) in Crane Prairie Reservoir measured at Hydromet Station CRA (OWRD Gage 14053500) between October 1, 2021, and September 30, 2022. DBHCP requirements only apply October 1-31 and July 15-September 30.

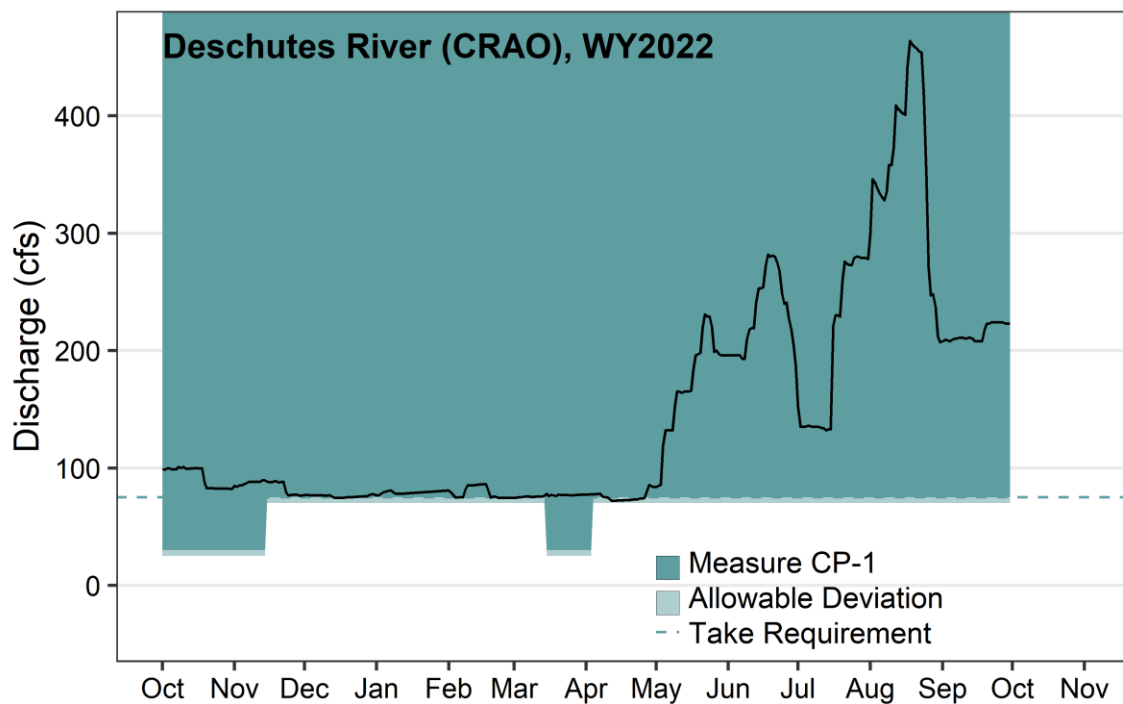


Figure 3: Deschutes River discharge (cfs) below Crane Prairie Reservoir measured at Hydromet Station CRAO (OWRD Gage 14054000) between October 1, 2021, and September 30, 2022. The dashed line indicates the 75 cfs minimum required under the Incidental Take Permit.

Effectiveness Monitoring

Adaptive Management Measure CP-1.1 (Crane Prairie Reservoir Breeding Surveys)

Adaptive Management Measure OSF-1: The Permittees will provide funding for up to two biologists qualified to conduct Oregon spotted frog egg mass counts in the Upper Deschutes Basin each year as specified in Adaptive Management Measures CP-1.1, WR-1.1 and WR-1.2. This funding will be provided annually for the term of the DBHCP. Total funding each year will be sufficient to provide 240 hours of professional biologist labor (120 hours each if two biologists are required). The distribution of this funding between Adaptive Management Measures CP-1.1, WR-1.1 and WR-1.2 will be determined each year by USFWS based on need and logistics, but total funding each year will not exceed 240 hours.

Adaptive Management Measure CP-1.1: The Permittees will support USFWS in the performance of Oregon spotted frog egg mass counts at Crane Prairie Reservoir by providing annual funding for qualified biologists as specified in Adaptive Management Measure OSF-1. Egg mass counts will be designed, coordinated and led by USFWS or another entity designated by USFWS.

If USFWS determines that egg mass counts at Crane Prairie Reservoir indicate Oregon spotted frogs are attempting to lay eggs in the reservoir prior to March 15, USFWS will modify Item A of Conservation Measure CP-1, as needed, to require a water surface elevation of at least 4,443.23 feet (approximate reservoir volume of 46,800 acre-feet) as early as March 1.

Reporting: The biologists funded by the Permittees in accordance with Adaptive Management Measure OSF-1 will provide the breeding survey data they collect to USFWS and/or the entity leading the spring egg mass counts by June 1 each year. The data will be provided in a format determined by USFWS. The data collected by these biologists will also be included in the DBHCP annual report submitted to the Services by January 31 of each year.

Permittees provided three qualified biologists to conduct Oregon spotted frog egg mass counts at Crane Prairie Reservoir in close coordination with USFWS in 2022. A total of 62.5 hours of qualified biologist time were funded to support Adaptive Management Measures CP-1.1 (Table 1). The hours shown in Table 1 were used for field data collection and data processing under the direction of USFWS. Travel time for biologists to and from the Deschutes Basin, which amounted to another 21.5 hours, is not included in Table 1. Additionally, the Permittees provided a boat for crew access to the breeding habitat in April, when snow prevented land access.

A total of 43 Oregon spotted frog egg masses were observed in Crane Prairie Reservoir during the survey on April 23. Counts were exceptionally low due to the degraded state of most egg masses, which prevented many from being counted. Moreover, 90% of the discernable egg masses had hatched out, suggesting that breeding occurred in early March when the reservoir was inaccessible for surveying due to snow. Count data collected by the Permittee-funded biologists was provided to USFWS on May 2, 2022, for incorporation into the USFWS database. These data are also summarized in the annual egg mass survey report submitted with this annual report (MHE 2022a; Attachment D).

Due to drought conditions that delayed seasonal filling, the reservoir water surface elevation was 4,443.05 feet (storage volume of 45,991 acre-feet) on March 15, which was below the required minimum of 4,443.23 feet for that date. However, extraordinary spring precipitation raised the water surface elevation in the reservoir above the maximum requirement (4,443.48 feet) by April 14. Because there was recent breeding activity documented during the egg mass survey on April

23, USFWS recommended that the reservoir be kept at or above the maximum requirement to prevent stranding of eggs and tadpoles. Accordingly, COID did not lower the surface elevation below 4,443.48 feet. Spring precipitation continued to fill the reservoir in May and COID, in coordination with USFWS, began managing the rising volume by increasing the outflow (Attachment C).

Adaptive Management Measure OSF-1 allows for shifting of hours between measures; however, this was not required in 2022. The total of hours expended in 2022 was less than the 240-hour maximum allowed for under Adaptive Management Measure OSF-1 (Table 1), for three reasons. First, the hours expended on Oregon spotted frog egg mass counts at Crane Prairie Reservoir (Adaptive Management Measure CP-1.1) were sufficient to complete the task. Second, it was unnecessary for the Permittees to assess Oregon spotted frog activity, weather conditions and habitat conditions along the Upper Deschutes River prior to the onset of breeding (Adaptive Management Measure WR-1.1) because this was accomplished by U. S. Geological Survey (USGS) under the direction of USFWS. Lastly, USFWS did not request assistance with Adaptive Management Measure WR-1.2 (monitoring of Oregon spotted frog egg/larvae survival at spotted frog habitats along the Upper Deschutes River) in 2022.

Adaptive Management Measure CP-1.2 (Drawdown Monitoring)

Adaptive Management Measure CP-1.2: During the first 2 years of DBHCP implementation and for 2 years out of 10 thereafter, the Permittees will provide qualified biologists to monitor Crane Prairie Reservoir during drawdown (July 16 through October 31) for signs of stranding of Oregon spotted frog tadpoles, juveniles and adults. If stranding of tadpoles is observed it will be reported to USFWS within 24 hours. In the event of stranding, USFWS will delay the onset of drawdown to no later than August 15 and/or reduce the rate of drawdown after July 31 to as low as 0.05 foot per day, as needed, to prevent stranding, provided these changes will not prevent a net seasonal reduction in reservoir storage volume of 10,000 acre-feet by September 30. After August 15, USFWS will increase the allowable rate of drawdown to as much as 0.25 foot per day, as needed, if no stranding of tadpoles, juveniles or adults is observed. Funding for biologists to conduct this monitoring will be separate from and in addition to funding specified in Adaptive Management Measure OSF-1.

Reporting: Observations of stranding of tadpoles during drawdown of Crane Prairie Reservoir will be reported to USFWS within 24 hours. In years when ramp-down monitoring is conducted, the results for the year will be reported in the DBHCP annual report submitted to the Services by January 31 of the following year.

Crane Prairie drawdown was regularly monitored from July 9 through August 10 for observations of Oregon spotted frog stranding. Monitoring was focused on areas along the north shoreline of the reservoir where Oregon spotted frog egg masses were located during the spring egg mass count. Documented high use oviposition sites and surrounding areas were visited multiple times as the water receded. Biologists conducted surveys for larvae and frogs visually, with dip nets, and with minnow traps and recorded water levels at the egg mass and capture locations.

Tadpoles were captured proximal to oviposition sites throughout the drawdown. There was evidence that stranding was likely for larvae that were hatched from late season breeding

activity, but that most larvae successfully metamorphosed prior to the full drawdown. Potential stranding was reported to USFWS within 24 hours by the Permittees' biologist (Attachment B; Attachment D). No change in the timing or rate of drawdown is warranted as a result of the 2021 and 2022 surveys. Detailed monitoring results are reported separately in the drawdown monitoring report submitted with this annual report (MHE 2022b; Attachment D).

Adaptive Management Measure CP-1.3 (Vegetation monitoring)

Adaptive Management Measure CP-1.3: Within the first 5 years of DBHCP implementation, the Permittees will determine the total area of breeding/rearing/nonbreeding habitat in Crane Prairie Reservoir (as defined in Objective CP-1) through LiDAR or other available digital bathymetry, interpretation of aerial photographs and ground verification. Bathymetry and topographic contours will be overlain on orthographic photos to determine the total area (acres) of vegetation below the maximum reservoir operating elevation of 4,443.48 feet (storage volume of approximately 48,000 acre-feet). Ground verification will be used to determine the species composition of the vegetation and to confirm the slope of the substrate and the extent of vegetation from elevation 4,443.48 feet to elevation 4,439.23 feet (i.e., to a depth of 24 inches below the annual low water elevation of 4,441.23 feet). The interpretation of current aerial imagery and ground verification will be repeated at 5-year intervals for the term of the DBHCP to detect changes in the areal extent or species composition of the vegetation.

If the total area of vegetation below elevation 4,443.48 decreases or the species composition of the vegetation changes in a way that reduces the total area of Oregon spotted frog breeding/rearing/nonbreeding habitat in the reservoir (as defined in Objective CP-1), USFWS may modify the timing and rate of reservoir drawdown specified in Items B and C of Conservation Measure CP-1, provided the drawdown will never begin prior to July 1, never end later than October 31, never proceed at a rate of more than 0.2 foot/day, and never involve a net reduction in seasonal reservoir storage volume of less than 10,000 acre-feet. In addition, the results of monitoring under Adaptive Management Measure CP-1.2 will be considered to ensure a balance between the long-term effects on vegetation and the short-term effects on Oregon spotted frog tadpoles.

Reporting: In years when habitat monitoring is conducted in Crane Prairie Reservoir, the results of the monitoring will be reported in the DBHCP annual report submitted to the Services by the following January 31.

The mapping of Oregon spotted frog habitat in Crane Prairie Reservoir to support CP-1.3 began in 2021, as the first year of a multi-year effort to establish baseline habitat conditions. Vegetation data collected in 2021 will be used in conjunction with the aerial imagery to delineate polygons of plant communities within the reservoir in 2023. Once bathymetry of the reservoir becomes available (within the next three years as per Adaptive Management Measure CP-1.3), it will be combined with the vegetation data to prepare a baseline map of Oregon spotted frog habitat for the reservoir.

Wickiup Reservoir

Compliance and Implementation Monitoring

North Unit Irrigation District (NUID) implements, monitors, adaptively manages, and reports on covered activities at Wickiup Reservoir. Monitoring and reporting requirements are described in the Deschutes Basin Habitat Conservation Plan Chapter 7.

Conservation Measure WR-1 (Wickiup Reservoir Operation)

Midnight storage volume (acre-feet) in Wickiup Reservoir (measured at Hydromet Station WIC or a comparable replacement), daily average flow (cfs) in the Deschutes River below Wickiup Dam (measured at Hydromet Station WICO or a comparable replacement) and daily average flow in the Deschutes River at Benham Falls (measured at Hydromet Station BENO or a comparable replacement) will be monitored daily for the term of the DBHCP. Water depth (stage) will also be monitored on a continuous basis at Hydromet Station WICO (or a comparable replacement) whenever flow at WICO is ≤ 800 cfs. NUID will use these data to direct day-to-day operation of Wickiup Dam in compliance with Measure WR-1. Flows and water surface elevations outside the allowable range of deviation in Table WR-1 of Conservation Measure WR-1 will be reported to USFWS via email within 12 hours of occurrence. The report will include an explanation for the deviation and the steps being taken to bring flow and water surface elevation back within the allowable range of deviation. NUID will assist USFWS in determining the impact of the deviation on the Oregon spotted frog. USFWS will determine what, if any, remedial actions are necessary to mitigate the impacts, and NUID will implement those actions.

No later than January 31 of each year, monthly storage volume, daily average flow and continuous water stage data (as required above) for the preceding water year (October 1 through September 30) will be reported to the Services in Microsoft Excel or other format approved by the Services. In addition, annual reports will identify all daily average flows and continuous water surface elevations outside the required range specified in Table WR-1 of Conservation Measure WR-1, explain the reason for each such deviation, and identify any remedial actions identified by USFWS and taken by NUID.

Each year beginning in Year 1 of DBHCP implementation NUID will report on the volume of water NUID has obtained as live flow from COID on a permanent basis in that year, and the volume of Wickiup Reservoir storage NUID has subsequently converted to instream flow or otherwise made available to support winter minimum flows at WICO required under Conservation Measure WR-1. This information will be included in the DBHCP annual report provided to the Services by January 31 of each year.

DBHCP Conservation Measure WR-1 specifies required ranges and allowable ranges of deviation for the daily average flows in the Deschutes River below Wickiup Dam (Items A through D, F through H, and J) and daily average flows in the Deschutes River at Benham Falls (Item E). Conservation Measure WR-1 also requires monthly coordination between USFWS and NUID on the implementation of this conservation measure (Item L). Lastly, NUID is required to report any deviations from Items A through L to USFWS via email (Item K).

Monthly storage volume for Wickiup Reservoir (Hydromet Station WIC) along with daily average flow and continuous water stage data from the Deschutes River downstream of Wickiup Reservoir (Hydromet Stations WICO and BENO) from October 1, 2021 through September 30, 2022 are being reported to the USFWS in Microsoft Excel files as part of this annual reporting.

Daily values for discharge and the percent change in daily discharge at WICO are shown in Figure 4 and Figure 5, respectively. Deschutes River discharge below Benham Falls (Hydromet station BENO) is presented in Figure 6. Any flow metrics that were outside the allowable range of deviate for Conservation Measure WR-1 are indicated in Attachment A:

Wickiup_WY2022.xlsx, including the rationale or explanation for those deviations and any remedial actions taken. Email notifications of compliance deviations are included with this annual report (Attachment B).

Compliance with Item J was determined using a rolling average of water surface elevations (measured every 15 minutes at WICO) to calculate the rate of change for 4-hour and 12-hour periods (Attachment A: WickiupItemJ_WY2022.xlsx). The rate of change in water surface elevation at WICO exceeded the allowable deviations allowed under Item J of WR-1 on four occasions between October 16, 2021 and March 18, 2022. These incidents were related to calculation errors and scheduled maintenance activities that affected the gage reading and are noted in Attachment A: Wickiup_WY2022.xlsx. NUID notified USFWS of each of these instances via email. USFWS notified NUID on March 31 that Oregon spotted frog breeding was delayed in 2022. As previously agreed, NUID then halted the 2022 ramp up at live flow on March 31 resulting in a flow of 335 cfs on April 1. As a result of delaying the ramp up, flows fell below the allowable deviation of 370 cfs for the adaptive management provision of Item A for the period between April 1 and April 6. WICO flow remained at live flow until April 8, when irrigation demand warranted an increase to 659 cfs. All other dates during Water Year 2022 were in compliance with Conservation Measure WR-1.

Additionally, Item J requires that during the fall ramp-down (September 15 – October 31), WICO flows reduction must be halted when BENO flows reach 1,200 and 1,100 cfs. It should be noted that this ramp-down period coincides with consecutive water years. On October 1, 2021 the (2021 fall ramp-down) flows at BENO were 885 cfs, below the requirement to trigger a halt at WICO. In fall 2022, the following fall ramp-down schedule was determined in coordination with USFWS (see Attachment C: September and October meeting notes):

- Sep 15-Sep 25: Allow flows in WIC to naturally reduce at BENO to 1240-1160 cfs;
- Sep 25-Oct 1: Hold flows at BENO between 1240-1160 cfs;
- Oct 1-Oct 5: Allow flows @ BENO to reduce naturally to 1140-1060 cfs;
- Oct 5-Oct 10: Hold flows @ BENO to 1140-1060 cfs;
- Oct 11-Oct 13: Final ramp down to 100 +/- cfs;
- Oct 14: NUID stops diverting water in Bend.

On September 29, 2022 flows reached 1200 cfs and ramp-down proceeded into the 2023 Water Year. Between October 7 and 10, 2022, flows at BENO were lower than the range discussed at the September coordination meeting and NUID notified USFWS via email (Attachment B). This deviation from the schedule resulted when AID performed an emergency shut-off on Friday, October 7, 2022. However, this additional reduction in flow complied with the ramp-down procedures for Item J.

NUID obtained 8,576.67 acre-feet (as live flow) from COID in Water Year 2021. NUID subsequently converted 6,494.80 acre-feet of Wickiup Reservoir storage to instream flow or made it available to support winter minimum flows at WICO required under Conservation Measure WR-1 in Water Year 2022.

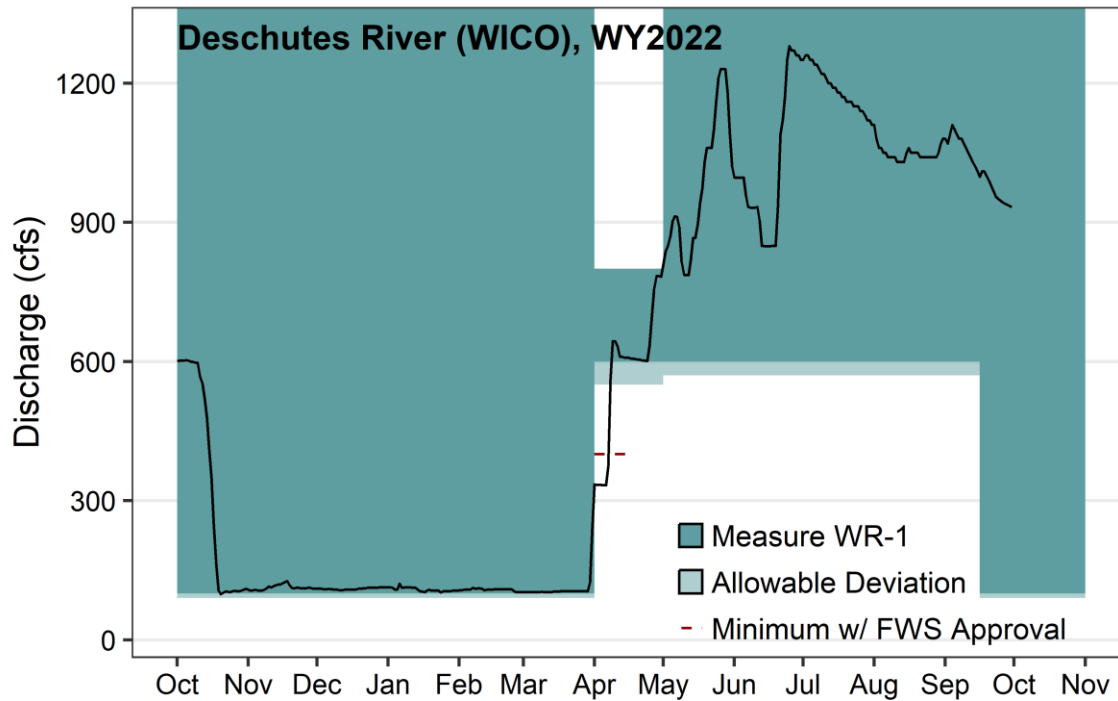


Figure 4. Deschutes River discharge below Wickiup Dam (OWRD Gage 14056500).

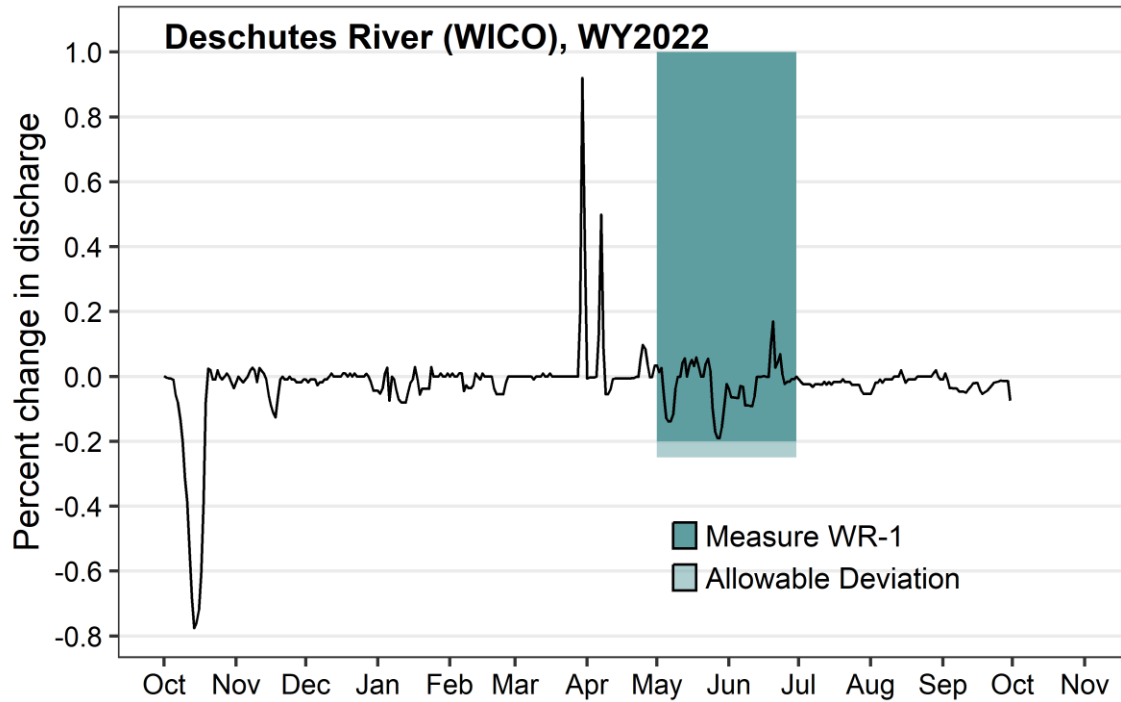


Figure 5. Percent change in Deschutes River discharge below Wickiup Dam (OWRD Gage 14056500).

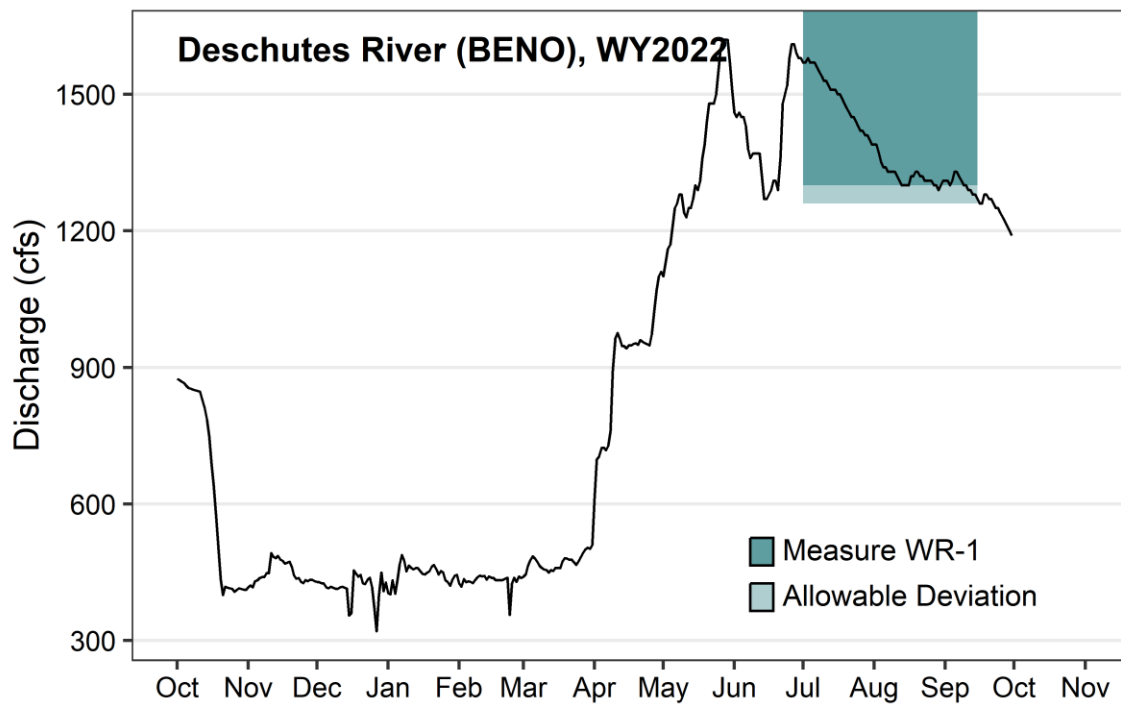


Figure 6. Deschutes River discharge at Benham Falls (OWRD Gage 14064500).

Conservation Measure WR-1 (Dead Slough Monitoring)

The Permittees will provide up to two qualified biologists for up to 40 hours each per year to assess habitat conditions in Dead Slough if the flow at WICO decreases by 20 percent over any 5-day period between May 1 and June 30. The assessment will be done in coordination with USFWS and will include documentation (including photographs) of the level of inundation in the slough. All information gathered by the biologists will be provided to USFWS within 24 hours of collection, as well as in the DBHCP annual report submitted to the Services by January 31 of each year.

Monitoring in Dead Slough was not required in 2022. Observations from 2021 indicated that the downstream end of the slough was not at risk of surface connection with the river until the flow at WICO was between 1,050 and 1,100 cfs and sufficient time had elapsed for this flow to reach Dead Slough (DBBC 2022). During spring coordination meetings (Attachment C) USFWS stated they would inform the Permittees if any monitoring at Dead Slough was necessary. No monitoring requests were made by USFWS during 2022.

Conservation Measure WR-1 (Habitat Suitability Analyses Along the Deschutes River)

Starting in Year 1 and repeating every 5 years for the term of the DBHCP, the Permittees will provide funding for two qualified biologists for up to 40 hours each (or up to 80 hours total for one biologist) to conduct Oregon spotted frog habitat suitability analyses at up to three sites along the Deschutes River selected by USFWS. The analyses may include, but are not limited to, determining surface water elevations relative to flood plains, monitoring vegetation (including presence of invasive reed canarygrass), monitoring bullfrogs, and conducting drone flights. Methodology will vary by site and will be developed in coordination with USFWS.

Habitat suitability analyses along the Deschutes River are required under Conservation Measure WR-1 in Year 1 of the DBHCP and every 5 years thereafter. Through consultation with USFWS in 2021, the Year 1 analysis was deferred to Year 2 (DBBC 2022). In 2022, the Casey Tract, an 86.5 acre parcel along the Little Deschutes River, was selected for monitoring by USFWS to meet the Permittees' requirements for conducting habitat suitability analyses under both DBHCP Sections 7.2.2.1 (Conservation Measure WR-1) and 7.2.5 (Conservation Measure CC-1). The rationale was that monitoring and analysis on the Casey Tract required significantly more biologist hours and resources than could be accomplished within the scope of DBHCP Section 7.2.5 and would not fulfill the upper Deschutes habitat suitability analysis requirement. Consequently, it was mutually agreed upon by the Permittees and USFWS that completing the analysis on the Casey Tract would fulfill the requirements of both DBHCP Sections 7.2.2.1 and 7.2.5. The biologist hours for those requirements were combined to meet the total 160-hour requirement.

Aerial and habitat surveys were conducted from September 19 - 22, 2022 at five oxbow complexes in the Casey Tract known to support OSF breeding. The goal of this assessment was to map and delineate vegetation community types, breaks, and relative elevations of off-channel breeding habitats. Additionally, this study identified locations and total area of reed canary grass within high-use breeding areas. This effort included three major components:

- (1) UAV remote sensing to capture high-resolution imagery
- (2) Vegetation surveys mapping community types and breaks within selected habitats
- (3) Photogrammetric processing and analysis

The results for this assessment are reported and were submitted to the USFWS as part of this annual report package (MHE 2022c; Attachment D).

Effectiveness Monitoring

Adaptive Management Measure WR-1.1

Adaptive Management Measure OSF-1: The Permittees will provide funding for up to two biologists qualified to conduct Oregon spotted frog egg mass counts in the Upper Deschutes Basin each year as specified in Adaptive Management Measures CP-1.1, WR-1.1 and WR-1.2. This funding will be provided annually for the term of the DBHCP. Total funding each year will be sufficient to provide 240 hours of professional biologist labor (120 hours each if two biologists are required). The distribution of this funding between Adaptive Management Measures CP-1.1, WR-1.1 and WR-1.2 will be determined each year by USFWS based on need and logistics, but total funding each year will not exceed 240 hours.

Adaptive Management Measure WR-1.1: Each spring, prior to the Oregon spotted frog breeding season, the Permittees will provide funding for qualified biologists as specified in Adaptive Management Measure OSF-1 to assess Oregon spotted frog pre-breeding activity, weather conditions, and habitat conditions at known breeding locations along the Upper Deschutes River. This information will be provided to USFWS to inform its decision on whether breeding season flows at WICO specified in Conservation Measure WR-1, Item A should be less than 600 cfs on April 1. If the April 1 flow is set at less than 600 cfs, this information will also be used by USFWS to determine when within the first two weeks of April the flow should increase to 600 cfs.

Reporting: Observations made in accordance with this adaptive management measure will be reported to USFWS daily as they are made (within 24 hours). All observations for the year will be reported in summary fashion in the DBHCP annual report submitted to the Services by January 31 of each year.

Under prior arrangement by USFWS, the field assessment described in Adaptive Management Measure WR-1.1 was completed by biologists employed by the U.S. Geological Survey (USGS), and no funding for this measure was needed from the Permittees in 2022. Survey coordination notes from the March 31, 2022, meeting between USFWS and the Permittees biologist (Attachment C) document this task was completed by USGS in 2022.

Adaptive Management Measure WR-1.2

Adaptive Management Measure OSF-1: The Permittees will provide funding for up to two biologists qualified to conduct Oregon spotted frog egg mass counts in the Upper Deschutes Basin each year as specified in Adaptive Management Measures CP-1.1, WR-1.1 and WR-1.2. This funding will be provided annually for the term of the DBHCP. Total funding each year will be sufficient to provide 240 hours of professional biologist labor (120 hours each if two biologists are required). The distribution of this funding between Adaptive Management Measures CP-1.1, WR-1.1 and WR-1.2 will be determined each year by USFWS based on need and logistics, but total funding each year will not exceed 240 hours.

Adaptive Management Measure WR-1.2: The Permittees will support USFWS in the monitoring of Oregon spotted frog egg/larvae survival at spotted frog habitats along the Upper Deschutes River by providing annual funding for qualified biologists as specified in Adaptive Management Measure OSF-1. Monitoring will be designed, coordinated and led by USFWS or another entity designated by USFWS.

If USFWS determines through this monitoring that Oregon spotted frog eggs/larvae in Dead Slough can tolerate decreases in water depth of more than 1 inch without being adversely affected, USFWS may modify Item C of Conservation Measure WR-1 to increase the maximum allowable decrease in flow at Hydromet Station WICO in April.

Monitoring of other OSF sites on the Deschutes will inform the shaping and release of winter flows for the life of the permit.

Reporting: The biologists funded by the Permittees in accordance with Adaptive Management Measure OSF-1 will provide the breeding survey data they collect to USFWS and/or the entity leading the spring egg mass counts by June 1 each year. The data will be provided in a format determined by USFWS. The data collected by these biologists will also be included in the DBHCP annual report submitted to the Services by January 31 of each year.

USFWS did not request assistance with Adaptive Management Measure WR-1.2 (monitoring of Oregon spotted frog egg/larvae survival at spotted frog habitats along the Upper Deschutes River) in 2022. This measure was developed to be implemented if the Permittees proposed a decrease in flow at WICO of more than 30 cfs during April. Between April 9 and April 24 daily average flows at WICO were reduced from 644 cfs to 601 cfs, a decrease of 43 cfs, in response to decreased irrigation demand. The allowable range of deviation for this metric is 50 cfs. NUID informed USFWS in advance of this reduction, and the parties agreed the 40-cfs decrease was desirable to conserve storage for use later in the season. It was noted that the change in water surface elevation of the Deschutes River associated with a flow change of this magnitude has negligible effect on Oregon spotted frog habitat along the river (Attachment C), thus negating the need for field monitoring.

Adaptive Management Measure WR-1.3

Adaptive Management Measure WR-1.3: Beginning no later than Year 13 of DBHCP implementation, minimum flow at WICO shall be between 400 cfs and 500 cfs from September 16 through March 31, with actual flow during this period determined according to the variable flow tool described herein. The variable flow tool shall be developed collaboratively by USFWS and the Permittees in consultation with OWRD and Reclamation. USFWS must approve the final tool for usage. A prototype of the variable flow tool shall be developed by the end of Year 10 of DBHCP implementation and tested in Years 11 and 12. The final variable flow tool shall be implemented beginning in Year 13. The variable flow tool shall be used to establish the September 16 to March 31 minimum flow at WICO each year based on available storage in Wickiup Reservoir at the beginning of the storage season and anticipated inflow to the reservoir during the storage season. Monitoring, reporting and adaptive management provisions for the variable tool shall also be developed by the end of Year 10. For purposes of this calculation, target reservoir storage volume at the end of the storage season shall never be less than 92,000 acre-feet.

Reporting: The reporting requirements for this adaptive management measure will be determined as part of the development of the variable flow tool.

Development of the variable flow tool is required by year 10 of implementation. This tool is currently under development.

Upper Deschutes Basin

Compliance and Implementation Monitoring

Arnold Irrigation District (AID), COID, Lone Pine Irrigation District (LPID), NUID, Tumalo Irrigation District (TID) and Swalley Irrigation District (SID) are jointly responsible for implementation and reporting on Conservation Measure UD-1.

Conservation Measure UD-1 (Upper Deschutes Basin Conservation Fund)

No later than January 31 of each year, the Permittees will provide USFWS with documentation of their contributions to the Upper Deschutes Basin Conservation Fund for the previous year.

The DBHCP Permittees' contribution to the Upper Deschutes Basin Conservation Fund was posted on February 17, 2022, in the total amount of \$150,000 (Figure 7) sent to the Oregon Community Foundation.

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Print Item

DESCHUTES BASIN BOARD OF CONTROL
 PO BOX 919
 MADRAS, OR 97741

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34-827/1251
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PAY TO THE
 ORDER OF Oregon Community Foundation
One hundred fifty thousand and 00/100
 ColumbiaBank Madras 877.272.3678 columbiabank.com

DATE 2-5-22
 \$ 150,000.00
 DOLLARS

FOR _____

TWO SIGNATURES REQUIRED
[Signature]
[Signature]

Amount	\$150,000.00	OF6	0
Post Date	20220217	Serial Number	2191
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Figure 7. Payments from DBCHCP Permittees to the Upper Deschutes Conservation Fund.

Middle Deschutes River

Compliance and Implementation Monitoring

Three DBBC Districts (AID, COID and SID) coordinate stock water diversions and other diversions of live flow from the Deschutes River between November 1 and March 31 to prevent such diversions from resulting in a 1-day average flow of less than 250 cfs (± 25 cfs) at Hydromet Station DEBO (OWRD Gage 14070500) below Bend.

Conservation Measure DR-1 (Middle Deschutes River Flow Outside the Irrigation Season)

Daily average flow (cfs) in the Deschutes River below Bend will be monitored at Hydromet Station DEBO (or a comparable replacement) from November 1 through March 31 for the term of the DBHCP. These data will be used by AID, COID and SID to conduct winter stock water runs in compliance with Measure DR-1. These three Districts will report any flows of less than 235 cfs at DEBO during stock water runs to the Services via email within 12 hours of occurrence. The report will include an explanation for the flow below 235 cfs and the steps being taken to bring the flow back to the target minimum of 250 cfs. The three Districts will assist the Services in determining the impact of the deviation on covered species. The Services will determine what, if any, remedial actions are necessary to mitigate the impacts, and the three Districts will implement those actions.

No later than January 31 of each year, daily average flow data for the preceding November 1 through March 31 will be reported to the Services in Microsoft Excel or other format approved by the Services. The report will include all daily average flows less than 250 cfs during stock water runs and any remedial actions identified by the Services and implemented by the Districts for flows less than 235 cfs.

All daily average flows in the Deschutes River below Bend (Hydromet Station DEBO) were above 250 cfs from November 1, 2021 through March 31, 2022, including periods when stock water runs were occurring. Therefore, all stock water runs in Water Year 2022 were in compliance with Conservation Measure DR-1. Flows in the Deschutes River below Bend, above Bend (Hydromet Station BENO), and in the four irrigation district diversions used for winter stock water runs covered by DBHCP Conservation Measure DR-1 (Arnold Diversion, Central Oregon Diversion, North Canal Diversion, and Swalley Diversion) are included in Attachment A: MiddleDeschutes_WY2022.xlsx with this annual report.

Crescent Creek and Little Deschutes River

Compliance and Implementation Monitoring

Tumalo Irrigation District (TID) implements, monitors, adaptive manages, and reports on covered activities at Crescent Lake Dam and Reservoir.

Conservation Measure CC-1 (Crescent Creek Flow Management)

Daily average flow (cfs) in Crescent Creek below Crescent Lake Dam will be monitored at Hydromet Station CREO (or a comparable replacement) for the term of the DBHCP. TID will use these data to direct day-to-day operation of Crescent Lake Dam in compliance with Measures CC-1, CC-2 and CC-3. Flows outside the compliance allowances specified in Conservation Measures CC-1, CC-2 and CC-3 will be reported to USFWS via email within 12 hours of occurrence. The report will include an explanation for the deviation and the steps being taken to bring flows back within the allowances. TID will assist USFWS in determining the impact of the deviation on the Oregon spotted frog. USFWS will determine what, if any, remedial actions are necessary to mitigate the impacts, and TID will implement those actions.

No later than January 31 of each year, daily average flow data for the preceding water year (October 1 through September 30) will be reported to the Services in Microsoft Excel or other format approved by the Services. In addition, annual reports will identify all flows outside the allowances specified in Measures CC-1, CC-2 and CC-3, explain the reason for each such deviation, and identify any remedial actions identified by USFWS and taken by TID.

In the DBHCP annual report, TID will also report the volume of water in Crescent Lake Reservoir available for Oregon spotted frog management (OSF storage) on July 1 of the preceding calendar year according to Conservation Measure CC-1, as well as the volume of water released from OSF storage during the preceding water year (October 1 – September 30).

The DBHCP Conservation Measure CC-1 specifies volumes of storage in Crescent Lake Reservoir to be made available for Oregon spotted frog conservation. The measure also specifies minimum flows and allowable ranges of deviation in flows in Crescent Creek during both irrigation and storage seasons. Reporting for this measure includes the volume of water in Crescent Lake Reservoir available for Oregon spotted frog management (OSF storage) based on the reported storage volume on July 1 of the preceding calendar year and volume of water released from OSF storage during the preceding water year (October 1 – September 30). Daily average flow data for the preceding water year (October 1 through September 30) is reported to the USFWS in Microsoft Excel file that include flows outside the allowances specified in Measures CC-1, explanations for each deviation, and any remedial actions identified by USFWS and taken by TID.

The total storage volume in Crescent Lake Reservoir on July 1, 2021 was 28,157 acre-feet, resulting in 5,264 acre-feet of Crescent Lake storage to be made available for Oregon spotted frog conservation in Water Year 2022 (DBBC 2022). However, Crescent Lake did not refill appreciably during the Water Year 2022 storage season, so the maximum flow at CREO was held at 10 cfs until irrigation releases began on June 29. Storage season releases accounted for a total of 3,564 acre-feet from the reservoir. This enable TID to maintain releases of 50 cfs or more

from early July through mid-September, which helped support Oregon spotted frog habitat in lower Crescent Creek and Little Deschutes River that would otherwise be dry due to drought conditions.

The total storage volume in Crescent Lake Reservoir on July 1, 2022 was 18,163 acre-feet, calculated as the three-day average storage volume between June 29 to July 1. By September 30, the storage volume had dropped to 12,300 acre-feet with a flow at CREO of 13.7 cfs. In accordance with Conservation Measure CC-1, the July 1 total storage volume results in 5,264 acre-feet of Crescent Lake storage to be made available to USFWS for Oregon spotted frog conservation in Water Year 2023. Similar to Water Year 2022, it is likely that continued drought conditions and low storage volumes in the reservoir will preclude these storage releases in 2023.

The DBHCP requirement for 10 cfs or more during the storage season (October 1 through June 30) was rarely met during Water Year 2022 (Attachment A: CrescentLake_WY2022.xlsx). Similarly, flows were below the allowable deviation of 9 cfs during 141 days of the storage season. During that time, the pumps were set at 10 cfs but the low storage volume in Crescent Lake resulted in little to no head pressure available to maintain flows. Further, the screens at the outlet are inaccessible for maintenance during winter conditions, allowing debris and ice to accumulate and potentially impact flows. Consequently, there was no action that could be taken by TID to adjust the flows at CREO. All reported daily average flows in Crescent Creek below Crescent Lake Dam (Hydromet Station CREO) for Water Year 2022 are included in CrescentLake_WY2022.xlsx with this annual report.

Conservation Measure CC-1 (Maintenance of Gage Downstream of Big Marsh Creek)

TID will maintain a flow monitoring gage in Crescent Creek downstream of Big Marsh Creek confluence (near the Highway 58 Bridge) and include daily average flows at that gage in the DBHCP annual report delivered to the Services by January 31 of each year. No later than December 31 of Year 1 of DBHCP implementation, TID will instrument the gage to provide USFWS with on-line access to flow information in real time. Until real-time access to flow information is available, TID will report daily average flows to USFWS at two-month intervals, with reports provided to USFWS no later than the last day of the following (third) month. Once real-time access to flow data is available to USFWS, TID will cease reporting at 2-month intervals and will report daily average flows only in the DBHCP annual report.

The gage downstream of Big Marsh Creek was not instrumented with the capability to provide real-time data during the 2022 water year due to staffing and funding shortages. For these same reasons, TID was unable to deliver data to USFWS on two-month intervals. Additionally, technological difficulties with the data logger have prevented access to the data and winter conditions have limited TID's ability to troubleshoot the device. Once these data are successfully downloaded and reviewed, daily average flows for Water Year 2022 will promptly be submitted to the USFWS.

Conservation Measure CC-1 (Breeding Surveys in Crescent Creek)

To support USFWS decisions on the use of OSF storage in Crescent Lake Reservoir as specified in Conservation Measure CC-1, TID will provide the following monitoring. The results of this monitoring will be used solely to assist USFWS with determining the use of OSF storage, and will not result in change in the size or timing of availability of OSF storage, or changes in any other requirement of TID under the DBHCP.

TID will support USFWS with the Oregon spotted frog breeding surveys in Crescent Creek by providing annual funding for two qualified biologists for up to 40 hours each for the term of the DBHCP. Breeding surveys will be coordinated and led by USFWS or another entity designated by USFWS.

Permittees funded two qualified biologists to conduct Oregon spotted frog egg mass counts at Crescent Creek and Little Deschutes River breeding sites. A total of 71.5 hours were funded to support field data collection and data processing (Table 1) under the direction of USFWS.

Oregon spotted frog egg masses were documented at three long-term monitoring sites on Crescent Creek: RM 1.74, RM 21.9, and RM 22.8 and three sites on the Little Deschutes River: High School Sloughs, Leona Park, and Rosland Park. Count data collected by the Permittee-funded biologists was provided to USFWS May 2, 2022 for incorporation into the USFWS database. These data are summarized in detail within the egg mass survey annual report (MHE 2022a; Attachment D) submitted to USFWS with this annual report.

Conservation Measure CC-1 (Stranding Surveys in Crescent Creek)

To support USFWS decisions on the use of OSF storage in Crescent Lake Reservoir as specified in Conservation Measure CC-1, TID will provide the following monitoring. The results of this monitoring will be used solely to assist USFWS with determining the use of OSF storage, and will not result in change in the size or timing of availability of OSF storage, or changes in any other requirement of TID under the DBHCP.

Starting in Year 1 and repeating every 3 years for the term of the DBHCP, TID will provide funding for two qualified biologists for up to 40 hours each (or up to 80 hours total for one biologist) to check known Oregon spotted frog breeding sites along Crescent Creek and Little Deschutes River for rearing Oregon spotted frogs in May/June (early rearing period) to determine if stranding is occurring. USFWS will be notified if there is a situation where stranding is observed. If USFWS determines a change in use of OSF storage is warranted to reduce stranding and improve Oregon spotted frog survival, TID will implement the change within the limits of the OSF storage described in Conservation Measure CC-1.

USFWS did not request assistance from the Permittees' biologist to check known Oregon spotted frog breeding sites along Crescent Creek and Little Deschutes River for frog stranding in May/June (early rearing period) 2022.

Conservation Measure CC-1 (Habitat Suitability Crescent Creek)

To support USFWS decisions on the use of OSF storage in Crescent Lake Reservoir as specified in Conservation Measure CC-1, TID will provide the following monitoring. The results of this monitoring will be used solely to assist USFWS with determining the use of OSF storage, and will not result in change in the size or timing of availability of OSF storage, or changes in any other requirement of TID under the DBHCP.

Starting in Year 1 and repeating every 5 years for the term of the DBHCP, TID will provide funding for two qualified biologists for up to 40 hours each (or up to 80 hours total for one biologist) to conduct Oregon spotted frog habitat suitability analyses at up to three sites along Crescent Creek and/or Little Deschutes River selected by USFWS. The analyses may include, but are not limited to, determining surface water elevations relative to flood plains, monitoring vegetation (including presence of invasive reed canarygrass), monitoring bullfrogs, and conducting drone flights. Methodology will vary by site and will be developed in coordination with USFWS.

Through consultation with USFWS in 2021, the Year 1 analysis was deferred to Year 2 (DBBC 2022). In 2022, the Casey Tract, an 86.5-acre parcel along the Little Deschutes River, was selected for monitoring by USFWS to meet the Permittees' requirements for conducting habitat suitability analyses under both DBHCP Sections 7.2.2.1 (Conservation Measure WR-1) and 7.2.5 (Conservation Measure CC-1). The rationale was that monitoring and analysis on the Casey Tract required significantly more biologist hours and resources than could be accomplished within the scope of DBHCP Section 7.2.5 and would not fulfill the upper Deschutes habitat suitability analysis requirement. Consequently, it was mutually agreed upon by the Permittees and USFWS that completing the analysis on the Casey Tract would fulfill the requirements of both DBHCP Sections 7.2.2.1 and 7.2.5. The biologist hours for those requirements were combined to meet the total 160-hour requirement.

Aerial and habitat surveys were conducted from September 19 - 22, 2022 at five oxbow complexes in the Casey Tract known to support OSF breeding. The goal of this assessment was to map and delineate vegetation community types, breaks, and relative elevations of off-channel breeding habitats. Additionally, this study identified locations and total area of reed canary grass within high-use breeding areas. This effort included three major components:

- (1) UAV remote sensing to capture high-resolution imagery
- (2) Vegetation surveys mapping community types and breaks within selected habitats
- (3) Photogrammetric processing and analysis

The results for this assessment are reported and were submitted to the USFWS as part of this annual report package (MHE 2022c; Attachment D).

Conservation Measure CC-2 (Crescent Dam Ramping Rates)

Daily average flow (cfs) in Crescent Creek below Crescent Lake Dam will be monitored at Hydromet Station CREO (or a comparable replacement) for the term of the DBHCP. TID will use these data to direct day-to-day operation of Crescent Lake Dam in compliance with Measures CC-1, CC-2 and CC-3. Flows outside the compliance allowances specified in Conservation Measures CC-1, CC-2 and CC-3 will be reported to USFWS via email within 12 hours of occurrence. The report will include an explanation for the deviation and the steps being taken to bring flows back within the allowances. TID will assist USFWS in determining the impact of the deviation on the Oregon spotted frog. USFWS will determine what, if any, remedial actions are necessary to mitigate the impacts, and TID will implement those actions.

No later than January 31 of each year, daily average flow data for the preceding water year (October 1 through September 30) will be reported to the Services in Microsoft Excel or other format approved by the Services. In addition, annual reports will identify all flows outside the allowances specified in Measures CC-1, CC-2 and CC-3, explain the reason for each such deviation, and identify any remedial actions identified by USFWS and taken by TID.

The ramping rate below Crescent Dam was out of compliance with the required ranges and allowable ranges of deviation specified in Conservation Measure CC-2 on October 2, 2021 (Attachment A: CrescentLake_WY2022.xlsx). This was a result of difficulty in controlling adjustments to the outflow gates at extremely low water levels. All other changes in flow were within the range of allowable deviation.

Conservation Measure CC-3 (Crescent Lake Reservoir Irrigation Release Season)

Daily average flow (cfs) in Crescent Creek below Crescent Lake Dam will be monitored at Hydromet Station CREO (or a comparable replacement) for the term of the DBHCP. TID will use these data to direct day-to-day operation of Crescent Lake Dam in compliance with Measures CC-1, CC-2 and CC-3. Flows outside the compliance allowances specified in Conservation Measures CC-1, CC-2 and CC-3 will be reported to USFWS via email within 12 hours of occurrence. The report will include an explanation for the deviation and the steps being taken to bring flows back within the allowances. TID will assist USFWS in determining the impact of the deviation on the Oregon spotted frog. USFWS will determine what, if any, remedial actions are necessary to mitigate the impacts, and TID will implement those actions.

No later than January 31 of each year, daily average flow data for the preceding water year (October 1 through September 30) will be reported to the Services in Microsoft Excel or other format approved by the Services. In addition, annual reports will identify all flows outside the allowances specified in Measures CC-1, CC-2 and CC-3, explain the reason for each such deviation, and identify any remedial actions identified by USFWS and taken by TID.

Annual transition from irrigation season flows (≥ 50 cfs) to storage season flows (≥ 10 cfs) at Hydromet Station CREO below Crescent Dam will end no later than October 31 of each year. In Water Year 2022, the transition was completed by October 2, 2021, and was in compliance with this measure.

Whychus Creek Diversion

Compliance and Implementation Monitoring

Three Sisters Irrigation District (TSID) implements, monitors, adaptively manages, and reports on covered activities at Whychus Creek Diversion.

Conservation Measure WC-1 (Whychus Creek Instream Flows: Permanent Instream, Water Rights)

No later than January 31 of each year, TSID will report to the Services all permanent instream transfers of TSID irrigation rights completed during the previous calendar year, along with any other senior downstream water right transfers TSID would be required to pass.

There were no instream water rights transfers in Water Year 2022.

Conservation Measure WC-1 (Whychus Creek Instream Flows: Whychus Creek and TSID Diversion)

Whenever TSID is diverting water at its primary diversion, flow (cfs) will be monitored hourly at the diversion (OWRD Gages 14076001 and 14076010 or comparable replacements) and in Whychus Creek downstream of the diversion (OWRD Gage 14076020 or a comparable replacement). TSID will use these data to direct day-to-day operation of its diversion in compliance with Measures WC-1 and WC-5. Flows lower than those required by Conservation Measures WC-1 will be reported to the Services via email within 12 hours of occurrence. The report will include an explanation for the deviation and the steps being taken to bring flows back to the required level. TSID will assist the Services in determining the impact of the deviation on covered species. The Services will determine what, if any, remedial actions are necessary to mitigate the impacts, and TSID will implement those actions.

No later than January 31 of each year, flow data at each of the above gages for the preceding water year (October 1 through September 30) will be reported to the Services in Microsoft Excel or other format approved by the Services. The report will include the raw data available each day TSID was diverting, as well as the processed data for those same days (preliminary, provisional or published) available from OWRD on September 30. In addition, annual reports will identify all flows lower than those required by Measure WC-1, explain the reason for each such deviation, and identify any remedial actions identified by the Services and implemented by TSID.

Conservation Measure WC-1 requires TSID to pass specified amounts of water at its primary diversion. TSID was unable to rely on OWRD Gages 14076001 and 14076010 for diversion management in Water Year 2022 due to persistent issues with gage telemetry. No data are available from either gage for Water Year 2022.

Instantaneous flow data in Whychus Creek above and below the TSID diversion were available throughout the year from OWRD Gages 14075000 and 14076020, respectively, and were used to guide diversions in compliance with the DBHCP. Hourly flow data from Gages 14075000 and 14076020 are provided in Attachment A: WhychusCreek_WY2022.xlsx submitted with this report. This table also includes the hourly flow being diverted each day TSID was diverting

(calculated as the difference in flow between upstream and downstream gages) and indicates flows lower than those required by Measure WC-1. The complete dates TSID was diverting, explanations/reasons for any deviations from Measure WC-1, and any remedial actions identified by the Services and implemented by TSID are to be provided under separate cover. Mean daily flows at OWRD Gages 14075000 and 14076020 and mean daily flows at TSID's main diversion are provided for the 2022 calendar year in Attachment A: TSIDAnnualDiversion_WY2022.xlsx. Per Conservation Measure WC-1, a digital file containing the raw data available each day TSID was diverting was also submitted with this report (Attachment A: WhychusRaw_WY2022.xlsx). The processed data for those same days (preliminary, provisional, or published) were not available from OWRD on September 30.

The measured flow downstream of the active TSID diversion was below the required 34.18 cfs on one occasion in Water Year 2022 when it was recorded to be 33.40 for three hours on August 4. This amount was negligible and therefore no remedial action was necessary. Further, the flow remained above the 20 cfs instream minimum that would necessitate TSID to reduce their diversions.

Conservation Measure WC-1 (Whychus Creek Instream Flows: Flow and Temperature at Camp Polk Road)

TSID will also provide data on daily average flow and daily maximum water temperature in Whychus Creek at Camp Polk Road available for OWRD Gage 14076100 for all days when TSID is diverting water at its primary diversion. These data will be provided to the Services in Microsoft Excel or other format approved by the Services in the DBHCP annual report no later than January 31 of each year for the preceding water year (October 1 through September 30). Temperature data will be compiled from existing third-party data sources as long as they continue to be available. Should the data cease to be generated by third parties, TSID will fund and/or conduct temperature monitoring consistent with current protocols and include the results in the DBHCP annual report.

Daily average flow and daily maximum water temperature data in Whychus Creek at Camp Polk Road (OWRD Gage 14076100) are provided in this annual reporting package as digital Microsoft Excel file (Attachment A: WhychusCampPolk_WY2022.xlsx) for Water Year 2022. The dates that TSID was diverting water at its primary diversion will be provided under separate cover.

Changed and Unforeseen Circumstances WC-1 (Change in the Status of Whychus Creek)

Change in the Status of Whychus Creek (DBHCP Section 9.10)

For the term of the DBHCP, water temperature in Whychus Creek will be monitored on an hourly basis for at least the months of April through October at RM 6.0, as specified in DBHCP Chapter 7. Water temperature data collected at this location will be used to calculate the 7-day average of the daily maximum water temperature (7-DADM). Monitoring results will be reviewed annually by the Services and TSID beginning in Year 1 of DBHCP implementation to track overall subbasin progress toward reducing the 7-DADM at RM 6.0. If monitoring results do not indicate incremental reduction in peak summer temperatures or there has been limited progress in implementation of projects to ultimately reduce peak summer temperatures or otherwise offset

the effects of high temperatures on steelhead, the Services will identify voluntary measures TSID can implement to advance toward meeting the 10-year target identified in the following paragraph.

Water temperature in Whychus Creek is monitored and managed by the Upper Deschutes Watershed Council (UDWC). Hourly water temperature from the May 13-October 25, 2022 is provided in a Microsoft Excel file (Attachment A: 2022_ContinuousDataDBHCP_WC_006-00.xlsx) submitted with this reporting package. The file includes temperature data and the DEQ QA/QC audits for the data. Although three temperature data loggers were deployed, the UDWC has indicated logger number 20645460 was the only device that met the DEQ criteria. These data will be added to the water quality monitoring data available on the UDWC's website (Mork 2023). The 7DADM was calculated from logger 20645460 (Attachment A: WhychusRM6Temperature_WY2022.xlsx) and is included with this report.

Conservation Measure WC-2 (Whychus Creek Temporary Instream Leasing)

No later than January 31 of each year, TSID will provide the Services with documentation of its contributions to Whychus Creek Temporary Instream Leasing for the previous year.

TSID made a financial contribution to the Deschutes River Conservancy on May 20, 2022 in the amount of \$6,000 for the instream leasing program (Figure 8). Instream leasing documentation is provided in Appendix A.

DESCHUTES RIVER CONSERVANCY PO BOX 1560 Bend, OR 97709		Sales Receipt	
Sold To Deschutes Basin Board of Control PO Box 919 Madras, OR 97741		Date 5/20/2022	Sale No. 4980
		Check No. 5370	Payment Method Check
Description	Qty	Rate	Amount
DBBC HCP Whychus Creek Temporary Instream Leasing Fund		6,000.00	6,000.00

Figure 8. Invoice for direct payment made to the Deschutes River Conservancy in 2022.

Conservation Measure WC-3 (Whychus Creek Diversion Fish Screens and Fish Passage)

TSID will schedule one full day each year for the Services to conduct annual inspection of the Whychus Creek diversion and associated fish screens. TSID personnel will be present for the inspection to provide the Services with full access to the facilities. The date for the annual inspection will be determined by the Services no later than January 31 of each year, and the inspection will occur at least 30 days after TSID has been informed of the date. The Services may also visit the Whychus Creek diversion and fish screens at any time outside the scheduled annual inspection by providing TSID with notice at least 24 hours in advance.

Every 5 years, beginning in Year 5 of the DBHCP, TSID will conduct a detailed evaluation of the Whychus Creek diversion and fish screens. The evaluation, which will be conducted by a qualified professional with appropriate fish screen and fish passage expertise, will include visual examination of the facilities for damage and/or deterioration, as well as measurements of water depths and velocities to verify the facilities are meeting their original design specifications. The evaluation report will identify any deficiencies or malfunctions, and make recommendations to correct those conditions. The evaluation report, along with an action plan for correcting any deficiencies or malfunctions within 90 days of the evaluation, will be provided to the Services no later than January 31 of the year following the evaluation.

No later than January 31 of each year, TSID will report any difficulties/deviations encountered implementing the TSID Diversion Screen Maintenance Plan during the preceding calendar year.

Fish screens were inspected by USFWS on October 28, 2022. There were no issues regarding maintenance, damage, or deterioration reported by the USFWS.

Conservation Measure WC-4 (Piping of Patron Laterals)

No later than January 31 of each year, TSID will report to the Services the miles of patron laterals that were piped and the associated reductions in seepage losses during the preceding calendar year.

TSID piped 9,500 feet of patron laterals during Water Year 2022. An additional 13,400 feet will be piped in 2023. Once that additional piping is completed, the DRC will file a conserved water application with OWRD for 0.33 cfs.

Conservation Measure WC-5 (Whychus Creek Diversion Ramping Rate)

Whenever TSID is diverting water at its primary diversion, flow (cfs) will be monitored hourly at the diversion (OWRD Gages 14076001 and 14076010 or comparable replacements) and in Whychus Creek downstream of the diversion (OWRD Gage 14076020 or a comparable replacement). TSID will use these data to direct day-to-day operation of its diversion in compliance with Measures WC-1 and WC-5. Flows lower than those required by Conservation Measures WC-1 will be reported to the Services via email within 12 hours of occurrence. The report will include an explanation for the deviation and the steps being taken to bring flows back to the required level. TSID will assist the Services in determining the impact of the deviation on covered species. The Services will determine what, if any, remedial actions are necessary to mitigate the impacts, and TSID will implement those actions.

No later than January 31 of each year, flow data at each of the above gages for the preceding water year (October 1 through September 30) will be reported to the Services in Microsoft Excel or other format approved by the Services. The report will include the raw data available each day TSID was diverting, as well as the processed data for those same days (preliminary, provisional or published) available from OWRD on September 30. In addition, annual reports will identify all flows lower than those required by Measure WC-1, explain the reason for each such deviation, and identify any remedial actions identified by the Services and implemented by TSID.

Conservation Measure WC-5 specifies when the flow in Whychus Creek downstream of TSID's diversion (measured at OWRD Gage 14076020) is 30 cfs or less, the amount of water being diverted will not be increased or decreased more than 5 cfs/hour; when the flow is between 30 and 50 cfs, the amount of water being diverted will not be increased or decreased more than 10 cfs/hour.

As with Conservation Measure WC-1, TSID was unable to rely on OWRD Gages 14076001 and 14076010 for diversion management in 2022 due to persistent issues with gage telemetry. No data are available from either gage for the preceding water year (October 1 through September 30). Instantaneous flow data in Whychus Creek above and below the TSID diversion were available throughout the year from OWRD Gages 14075000 and 14076020, respectively, and were used to guide diversions in compliance with this conservation measure.

Ramping rates were evaluated from hourly flow data at OWRD Gages 14076020 and 14075000. All diversions complied with ramping rates specified in WC-5 during Water Year 2022. Hourly flow data is provided in Attachment A: WhychusCreek_WY2022.xlsx, submitted with this report.

Conservation Measure WC-6 (Whychus Creek Habitat Conservation Fund)

No later than January 31 of each year, TSID will provide documentation to the Services of the District's direct financial and in-kind contributions to the Whychus Creek Habitat Conservation Fund during the preceding calendar year. The documentation will include the basis for calculating the financial value of the in-kind services.

TSID will report in-kind riparian channel restoration activity or direct financial contributions to the Whychus Creek Habitat Conservation Fund under separate cover.

Conservation Measure WC-7 (Plainview Dam Removal)

No later than January 31 of the year following the removal of the Plainview Dam, TSID will provide the Services documentation of the removal.

Removal of the Plainview Dam and restoration of the associated reach of Whychus Creek was completed in October 2021.

Crooked River Subbasin

Compliance and Implementation Monitoring

Ochoco Irrigation District (OID), NUID and the City of Prineville implement, monitor and adaptively manage various aspects of the Crooked River diversions including flow conditions in the Crooked River, Ochoco Creek, and McKay Creek; temporary instream flow leasing and permanent water rights transfers; and screening activities that occur at OID patron diversions. Specific compliance and implementation monitoring and reporting to be conducted in the Crooked River basin can be found in Chapter 7 of the DBHCP.

Conservation Measure CR-1 (Crooked River Flow Downstream of Bowman Dam)

Table 7-1. DBHCP flow monitoring requirements for the Crooked River subbasin.

Water Body	Location	Data to be Collected
<i>Crooked River (RM 70.0)</i>	<i>OWRD Gage 14080500 (Hydromet Station PRVO)</i>	<i>Daily average flow</i>
<i>Crooked River (RM 56.5)</i>	<i>Manual staff gage downstream of Crooked River Diversion</i>	<i>Flow at time of change in diversion rate</i>
<i>Crooked River (RM 48.0)</i>	<i>OWRD Gage 14081500 (Hydromet Station CAPO)</i>	<i>Daily average flow</i>
<i>Ochoco Creek (RM 11.2)</i>	<i>OWRD Gage 14085300 (Hydromet Station OCHO)</i>	<i>Hourly average flow</i>
<i>Ochoco Creek (RM 10.2)</i>	<i>Manual staff gage at Red Granary Diversion</i>	<i>Flow at time of change in diversion rate</i>
<i>Ochoco Creek (RM 9.4)</i>	<i>Recording gage with telemetry downstream of Golf Course Dam</i>	<i>Hourly average flow</i>
<i>Ochoco Creek (RM 7.5)</i>	<i>Manual staff gage at Breese Dam</i>	<i>Flow at time of change in diversion rate</i>
<i>Ochoco Creek (RM 5.1)</i>	<i>Recording gage with telemetry at Crooked River Diversion Spill</i>	<i>Hourly average flow</i>
<i>Ochoco Creek (RM 4.7)</i>	<i>Manual staff gage at Ryegrass Diversion</i>	<i>Flow at time of change in diversion rate</i>
<i>McKay Creek (RM 5.8)</i>	<i>Manual staff gage at Jones Dam</i>	<i>Flow at time of change in diversion rate</i>
<i>McKay Creek (RM 3.2)</i>	<i>Manual staff gage at Reynolds Siphon</i>	<i>Flow at time of change in diversion rate</i>
<i>McKay Creek (RM 1.3)</i>	<i>Recording gage with telemetry at Cook Inverted Weir</i>	<i>Daily average flow</i>
<i>McKay Creek (RM 0.6)</i>	<i>Manual staff gage at Smith Inverted Weir</i>	<i>Flow at time of change in diversion rate</i>

Conservation Measure CR-1 specifies that OID will provide live flow and/or storage from its account, as needed, to enable Reclamation to maintain a daily average flow of 50 cfs $\pm 10\%$ allowable deviation at OWRD Gage 14080500 below Bowman Dam (Hydromet Station PRVO) outside the active irrigation season. The typical irrigation season is mid-April to mid-October, but actual dates can vary. From October 1, 2021 until the start of the irrigation season on April 10, 2022, 50 cfs was released from Bowman Dam in accordance with CR-1 (Figure 9). However, Prineville Reservoir's 2022 maximum storage was 47,331 AF, which is approximately 32 percent of the reservoir's 148,633 AF capacity and significantly lower than the previous lowest annual fill level of 78,494 AF that occurred in 1992. This led to ending the 2022 irrigation season on September 15, approximately one month earlier than usual. Moreover, in their Annual Flow Recommendation Memo dated September 12, 2022 (USFWS and NMFS 2022), USFWS and NMFS elected not to release uncontracted storage water for fish and wildlife in the fall of 2022 after irrigation releases ended because *"Increasing flows above 10 cfs would likely have limited benefits since flow releases do not have instream protection in these months [September and October] and may be legally diverted for irrigation. In addition, flows from Prineville Reservoir will likely be warmer than normal due to the reservoir's very low storage level, which will limit their instream benefits to fish species that require cold water such as Chinook, steelhead, and bull trout."*

The record low reservoir fill levels in 2022 were determined to be an Unforeseen Circumstance under the provisions of the DBHCP. In anticipation of the inability to fully support storage season flows, the Permittees consulted with USFWS and NMFS midway through the irrigation season to define a plan for maximizing biological benefits of the limited available stored water. USFWS delivered a letter to OID on September 12, 2022 explaining its preferred approach to fall/winter flow management (USFWS 2022). The letter provided the rationale for postponing the increase to 50 cfs until November 1, 2022. Reclamation therefore bypassed a minimum of 10 cfs from September 15 to 30 (Figure 9; Attachment A: CrookedRiver_WY2022.xlsx).

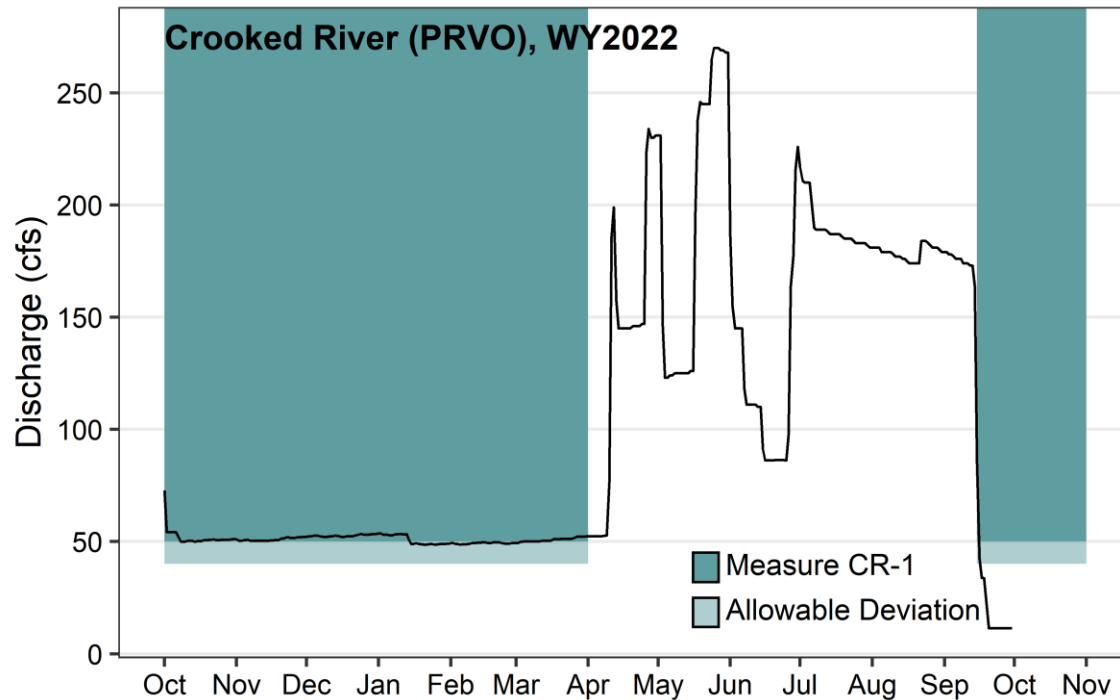


Figure 9. Crooked River discharge below Bowman Dam (OWRD Gage 14080500).

Conservation Measure CR-2 (Ochoco Creek Flow: OID Contributions to Ochoco Creek Flow)

Conservation Measure CR-2 specifies OID will contribute to flow in Ochoco Creek by releasing water from the Ochoco Main Canal downstream of Ochoco Reservoir. Seasonal contributions of 3 or 5 cfs as specified in the DBHCP are additive to any permanent instream water right transfers and/or temporary instream leases secured through the Crooked River Conservation Fund (Measure CR-5) on Ochoco Creek. OID contributions are not made if they require pumping from inactive storage in Ochoco Reservoir (below water surface elevation 3,074.94 feet) unless OID is pumping water from inactive storage for irrigation purposes.

Due to extreme drought conditions, active storage in Ochoco Reservoir was less than 3,500 AF from October 1 until December 31, 2021 and daily average flows at OWRD Gage 14085300 (Hydromet Station OCHO) fell below the required DBHCP minimum for a major portion of Water Year 2022 due to inability to release stored water and reservoir operation complications. Average daily flows in Ochoco Creek remained below 3 cfs from October 1, 2021 until May 3, 2022, increased to greater than 5 cfs on May 7, dropped below 5 cfs on August 13, 2022, and remained below 5 cfs for the remainder of the 2022 water year. Due to unavailability of storage and lack of live flow, OID was not able to make flow contributions to Ochoco Creek from October 1, 2021 until April 7, 2022. There were also periodic shortfalls in Ochoco Creek flow contributions from August 13, 2022 until September 30, 2022 (Figure 10). In mid-August the reservoir was nearing the bottom of active storage (similar to late July of 2021). With falling head pressure and decreasing active flows, OID made daily gate adjustments to maintain flows in Ochoco Creek and the Ochoco Main Canal. On August 22, 2022 OID began deploying a barge

pumping system to access inactive storage for delivery to patrons. Pumping from inactive storage was done until September 8, 2022. OID had originally planned to pump until September 15th, but challenges with operating the barge and maintaining flows could not be continued. Beginning September 9, no active flows from Ochoco Reservoir were possible.

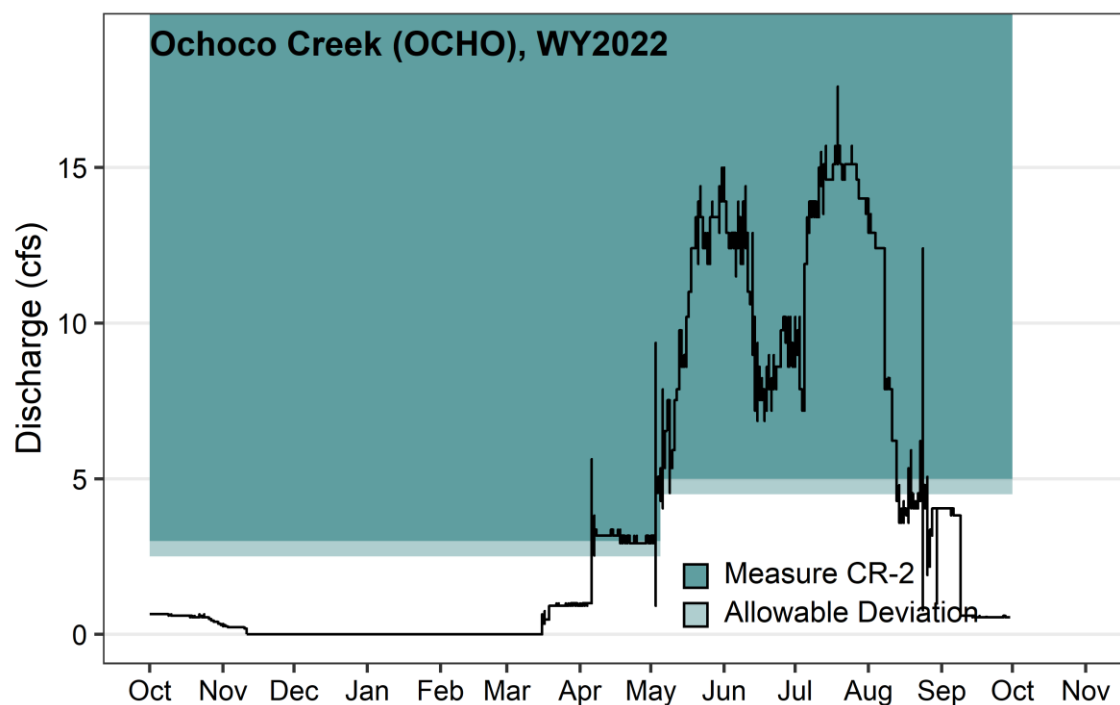


Figure 10. Ochoco Creek hourly discharge below Ochoco Dam (OWRD Gage 14085300).

Conservation Measure CR-2 (Ochoco Creek Flow: Installation of additional monitoring sites)

Flow measurement data for additional sites in Ochoco Creek are unavailable for Water Year 2022 due to unanticipated delays in getting the new gages operational and rated. OID coordinated with OWRD beginning in January 2021 to determine site feasibility and locations for staff gages required by DBHCP Section 7.2.12. OID visited the sites with OWRD in February 2021 and placed staff gages at the required locations on Ochoco Creek based on the recommendation of OWRD. OID also visited sites requiring telemetry with Reclamation to evaluate specific locations and order materials. Delivery of telemetry materials was delayed significantly due to COVID, but all sites became operational in March or April 2021. OWRD revisited the sites in April and June to collect flow measurements for rating the gages. Additional rating of the gages was anticipated in 2022 but did not occur. The only site that was not successfully installed was the Crooked River staff gage below the OID diversion because the site turned out to be unsuitable. OWRD and OID staff are working to identify an alternative location that meets the intent of the measure and is feasible.

Conservation Measure CR-2 (Ochoco Creek Flow: Temporary Instream Leasing and Permanent Water Right Transfers)

No later than January 31 of each year, OID will provide the Services a report on temporary instream leases and permanent water right transfers of Crooked River and Ochoco Creek irrigation rights during the preceding calendar year. The report will identify the quantity of water covered by each temporary or permanent transfer, and the fate of that water (timing and rate of bypass at Bowman Dam or Ochoco Dam). For transfers of OID patron water rights, the report will also identify whether any of the water was temporarily stored by OID.

OID worked with the DRC to implement a dry year lease program and incentivize instream leasing during the exceptional drought of 2022. This program resulted in the temporary instream lease of water rights from 83.9 acres irrigated with Ochoco Creek water, which produced a protected instream flow of 0.746 cfs. This flow was placed instream by OID from June 1 through July 6. The total flow volume was relatively low because Oregon water law sets instream leases at the same rate water is being delivered to farms at the time of the lease. Because 2022 was a poor water year, on-farm deliveries to OID patrons were quite low.

No permanent instream transfers of OID water occurred in 2022. OID and the DRC are surveying a selection of OID patrons to determine a price structure for expanding instream leasing in dry years. The survey results will help guide adjustments to the dry year lease program in 2023.

Conservation Measure CR-3 (McKay Creek Flow: McKay Switch)

No later than January 31 of each year, OID will provide the Services a report on the status of the McKay Creek water switch. The report will identify the amount of McKay Creek irrigation water that was transferred instream during the preceding year, as well as the total amount of water transferred to date through the McKay Creek switch.

Conservation Measure CR-3 specifies OID will report on the status of the McKay Creek water switch including the amount of McKay Creek irrigation water that was transferred instream during the preceding year and the total amount of water transferred to date through the McKay Creek switch. Planning for the McKay Creek water switch continued in 2022. Work was done on the design of structural modifications and improvements that will be necessary to convey Crooked River water to McKay Creek water users, and on securing project power-related agreements for the new pumping plant that will be needed. It is currently anticipated that the project power-related agreements will be finalized and construction on portions of the new conveyance system will begin in 2023.

Conservation Measure CR-3 (McKay Creek Flow: Installation of additional monitoring sites)


Similar to Ochoco Creek, flow measurement data for additional sites in McKay Creek are unavailable for Water Year 2022 due to unanticipated delays in getting the new gages operational and rated. OID coordinated with OWRD beginning in January 2021 to determine site feasibility and locations for staff gages required by DBHCP Section 7.2.12. OID visited the sites

with OWRD in February 2021 and placed staff gages at the required locations on McKay Creek based on the recommendation of OWRD. OID also visited sites requiring telemetry with Reclamation to evaluate specific locations and order materials. All sites became operational in March or April 2021. OWRD revisited the sites in April and June to collect flow measurements for rating the gages. Additional rating of the gages was anticipated in 2022, but did not occur.

Conservation Measure CR-4 (Crooked River Conservation Fund)

No later than January 31 of each year, NUID, OID and the City will provide the Services with documentation of their contributions to the Crooked River Conservation Fund for the previous year.

The DBHCP Permittees' payment to the Crooked River Conservation Fund was dated February 5, 2022. Payment in the amount of \$8,000 was issued by the DBBC, and the DRC issued confirmation of payment on March 3, 2022 (Figure 11).



DESCHUTES RIVER
CONSERVANCY

PO BOX 1560
Bend, OR 97709

PAID
03/03/2022

Invoice

Date	Invoice #
3/1/2022	2247

Bill To			
Deschutes Basin Board of Control PO Box 919 Madras, OR 97741			

Description	Qty	Rate	Amount
DBBC HCP Crooked River Conservation Fund		8,000.00	8,000.00
Total			\$8,000.00
Balance Due			\$0.00

Figure 11. Copy of receipt for OID's contribution to the Crooked River Conservation Fund administered by the DRC.

Conservation Measure CR-5 (Screening of Diversion Structures: District Diversions)

OID will schedule one full day each year for the Services to conduct annual inspections of District's diversions and associated fish screens. OID personnel will be present for the inspections to provide the Services with full access to the facilities. The date for the annual inspections will be determined by the Services no later than January 31 of each year, and the inspection will occur at least 30 days after OID has been informed of the date. The Services may also visit OID diversions and fish screens at any time outside the scheduled annual inspection by providing OID with notice at least 24 hours in advance.

Every five years, beginning in Year 5 of DBHCP implementation, OID will conduct detailed evaluations of its diversions and fish screens. The evaluations, which will be conducted by a qualified professional with appropriate fish screen and fish passage expertise, will include visual examinations of the facilities for damage and/or deterioration, as well as measurements of water depths and velocities to verify the facilities are meeting their original design specifications. Evaluation reports will identify any deficiencies or malfunctions, and make recommendations to correct those conditions. Evaluation reports, along with an action plans for correcting any deficiencies or malfunctions within 90 days of the evaluations, will be provided to the Services no later than January 31 of the year following the evaluations.

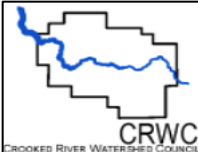
OID and NUID are required to maintain and operate fish screens to prevent the entrainment of juvenile salmonids on all District-controlled diversions accessible to covered fish species.

The DBHCP also specifies that OID will schedule one full day each year for USFWS to inspect the OID's diversions and fish screens. On January 12, 2022, USFWS completed its inspection of OID diversions.

Conservation Measure CR-5 (Screening of Diversion Structures: Patron Diversions)

No later than January 31 of the second through the sixth year of DBHCP implementation, OID will provide the Services with a report on the screening of patron diversions during the preceding calendar year. The report will identify the screening account balance as of December 31, all account activity (deposits and withdrawals), and all screens funded through the account.

No screening projects were funded in 2021. Therefore, the screening account balance at the end of 2021 was \$10,000 (\$5,000 from 2020 and 2021). OID participated in a pilot program with CRWC to evaluate screen options for patrons. In March 2022, the CRWC installed a fish screen on a 300-gpm pump on Greg Huston's Ranch near the mouth of Lytle Creek (approx. River Mile 35). OID's screening account contributed \$10,000 towards the cost of materials and labor for the fish screen installation (Figure 12).



INVOICE

DATE: 11.28.2022
INVOICE # 22-01 FS
FOR: Fin Safe Fish

498 SE Lynn Blvd
 Prineville, OR 97756
 P: 541.447.8567 F: 541.416.2115

Bill To:
 Mr. Bruce Scanlon
 Ochoco Irrigation District
 1001 NW Deer St
 Prineville, OR 97754

DESCRIPTION	AMOUNT
Intake Screens, Inc. fish screen - OID cost-share portion of fish screen installed at Greg Hustons King Ranch (Screen from ISI installed in March 2022)	\$10,000
TOTAL	\$ 10,000.00

Please make all checks payable to: **Crooked River Watershed Council**
 If you have any questions concerning this invoice, contact: Chris Gannon, 541.447.8567
chris@crwc.info

Figure 12. Copy of invoice from CRWC for OID cost share of fish screen at Greg Huston's Ranch.

Conservation Measure CR-6 (Crooked River Flow Downstream of the Crooked River Pumps)

NUID will report diversions at its Crooked River Pumps to USFWS and NMFS as part of the DBHCP annual report. The accounting for each day of pumping will include the number of pumps in operation each day, the estimated daily average rate of diversion (cfs) for all operating pumps combined, the estimated total volume (acre-feet) of water diverted by all pumps combined during the 24-hour period, and the reported flow (cfs) at OWRD Gage 14087300 (Crooked River near Terrebonne) at 7:00 AM of each day. If, during the term of the DBHCP, a recording stream gage with real-time access (e.g., telemetry) is installed and operational upstream of the Crooked River Pumps in a location that reasonably estimates the flow reaching the pumps, the Services may approve a change in required reporting whereby NUID may cease reporting pump diversions to USFWS and NMFS and simply provide an annual report of daily average flows at OWRD Gage 14087300 and the new gage.

In addition, NUID will report to NMFS and USFWS by email within 48 hours whenever the flow measured at OWRD Gage 14087300 falls below the required level specified in Conservation Measure CR-6 concurrent with NUID pumping. The report will specify the flow at Gage 14087300, the number of pumps in operation, and the estimated daily average rate of diversion (cfs) when the flow at Gage 14087300 fell below the required level.

Conservation Measure CR-6 requires that NUID report to NMFS and USFWS by email within 48 hours whenever the flow measured at OWRD Gage 14087300 falls below the required level specified in Conservation Measure CR-6 concurrent with NUID pumping of stored water.

Reporting specifies the flow, the number of pumps in operation, and the estimated daily average rate of diversion (cfs) when flows fell below the required level (Attachment A: CrookedRiverPumps_WY2022.xlsx). The instance where flows were out of compliance with CR-6 in May 2022 resulted from a corrective shift applied by OWRD at the Smith Rock (CRSO) measurement site. Another non-compliance event occurred in June 2022, caused by weed buildup and a technical problem with a sensor at NUID's pumping station. Both issues were corrected in a timely fashion (Attachment B).

Conservation Measure CR-7 (Crooked River Downstream Fish Migration Pulse Flows)

NUID will report diversions at its Crooked River Pumps to USFWS and NMFS as part of the DBHCP annual report. The accounting for each day of pumping will include the number of pumps in operation each day, the estimated daily average rate of diversion (cfs) for all operating pumps combined, the estimated total volume (acre-feet) of water diverted by all pumps combined during the 24-hour period, and the reported flow (cfs) at OWRD Gage 14087300 (Crooked River near Terrebonne) at 7:00 AM of each day. If, during the term of the DBHCP, a recording stream gage with real-time access (e.g., telemetry) is installed and operational upstream of the Crooked River Pumps in a location that reasonably estimates the flow reaching the pumps, the Services may approve a change in required reporting whereby NUID may cease reporting pump diversions to USFWS and NMFS and simply provide an annual report of daily average flows at OWRD Gage 14087300 and the new gage.

In addition, NUID will report to NMFS and USFWS by email within 48 hours whenever the flow measured at OWRD Gage 14087300 falls below the required level specified in Conservation Measure CR-6 concurrent with NUID pumping. The report will specify the flow at Gage 14087300, the number of pumps in operation, and the estimated daily average rate of diversion (cfs) when the flow at Gage 14087300 fell below the required level.

Conservation Measure 7 specifies that OIR and NUID will not divert water from the Crooked River if a spring fish migration pulse flow from uncontracted Prineville Reservoir is issued by Reclamation. Due to the limited availability of storage, no pulse flow was released in 2022.

References

- DBBC. 2020. (Deschutes Basin Board of Control). Deschutes Basin Habitat Conservation Plan. Volume I: Chapters 1-12. 751pp.
- DBBC. 2022. (Deschutes Basin Board of Control). Monitoring Conducted in Compliance with U. S. Fish and Wildlife Service Incidental Take Permit TE89773D-0 and Deschutes Basin Habitat Conservation Plan. 2021 Annual Report.
- MHE. 2022a. (Mount Hood Environmental). Deschutes Basin Habitat Conservation Plan: Oregon Spotted Frog Egg Mass Surveys 2022. Monitoring Conducted in Compliance with ESA Section 10 Incidental Take Permit TE-89773D-0 and Deschutes Basin Habitat Conservation Plan. Report for Deschutes Basin Board of Control. 12pp.
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Appendix A: Instream Leasing

Whychus Creek Diversion

BEFORE THE WATER RESOURCES DEPARTMENT OF THE STATE OF OREGON

In the Matter of Instream Lease Application)	RECONSIDERATION AND SUPERSEDING
IL-1921 and Preliminary and Final Award of)	FINAL ORDER RECORDED IN SPECIAL
Mitigation Credits for Mitigation Project)	ORDER VOLUME 125, PAGES 214-222,
MP-288, Deschutes County)	APPROVING INSTREAM LEASE AND
)	MITIGATION CREDIT PROJECT

Authority

Oregon Revised Statute (ORS) 537.348 establishes the process in which a water right holder may submit a request to lease an existing water right for instream purposes. Oregon Administrative Rule (OAR) Chapter 690, Division 077 implements the statutes and provides the Department's procedures and criteria for evaluating instream lease applications.

OAR 690-521-0100 to 690-521-0600 establishes the process in which anyone may submit a ground water mitigation project to the Department for the purpose of establishing mitigation credits in the Deschutes Ground Water Study Area.

ORS 183.484 and OAR 137-004-0080 describes the process for reconsideration of an order in other than a contested case.

Lessor

Pooled Instream Lease for several water right holders
(described in Findings of Fact No. 5, 7, 9, and 11)

Co-Lessor

Three Sisters Irrigation District (TSID)
PO Box 2230
Sisters, OR 97759
manager@tsidweb.org

Lessee

Deschutes River Conservancy Mitigation Bank (DRCMB)
700 NW Hill Street, Suite 1
Bend, Oregon 97703
gen@deschutesriver.org

Findings of Fact

1. On April 29, 2022, the DRCMB and TSID on behalf of several water right holders, filed an application to lease a portion of Certificates 95971 and 93680 and the entirety of Certificates 93681 and 93683 for instream use. The Department assigned the application number IL-1921.

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.

2. On June 9, 2022, the Department issued a Final Order Approving Instream Lease IL-1921 and Mitigation Project MP-288, as evidenced by Special Order Volume 125, Pages 214-222. Shortly following issuance of the order, the Department determined that the order should be reconsidered due to a technical issue with the Department public notice of May 3, 2022.
3. Notice of the instream lease and mitigation project was published on the Department's weekly notice on July 26, 2022. No comments were filed in response to the notices.
4. This order is issued to supersede the previous order recorded at Special Order Volume 125, Pages 214-222, and to record the date of the Department weekly notice of July 26, 2022.
5. The portion of the first right to be leased is as follows:

Certificate: 95971 Three Sisters Irrigation District (perfected under the Squaw Creek Decree, of record at Salem, in the Order Record of the Water Resources Director, in Volume 1, at Pages 121, 122, 123, 124, 435, 438, 445, 472, and 473)

Priority Date: 1895

Use: Irrigation of 211.0 acres
Pond Maintenance of 0.5 acre equivalent

Quantity: Limit: One-fiftieth of one cubic foot per second (CFS) per acre, or its equivalent for each acre irrigated during the irrigation season of each year.

Source: Whychus Creek, tributary to the Deschutes River

Authorized Point of Diversion (POD):

Twp	Rng	Mer	Sec	Q-Q	Measured Distances
15 S	10 E	WM	21	SW SW	998 FEET NORTH AND 1211 FEET EAST FROM THE SW CORNER OF SECTION 21

Authorized Place of Use:

Twp	Rng	Mer	Sec	Q-Q	Tax Lot	Priority Date	Acres	Lessor
Irrigation Use ~ 211.0 acres total (1895 - Mitigation Acres)								
15 S	11 E	WM	4	NW NE	101	1895	24.3	Karen Swaner
15 S	11 E	WM	4	SW NE	101		38.7	
15 S	11 E	WM	7	NW SE	600		30.5	John Schaad
15 S	11 E	WM	7	NE SE	600		38.5	
15 S	11 E	WM	7	SW SE	600		40.0	
15 S	11 E	WM	7	SE SE	600		39.0	
Total:							211.0	
0.5 acre equivalent of Pond Maintenance (Restoration only)								
15 S	11 E	WM	7	NE SE	600	1895	0.5	John Schaad
Total:							0.5	

6. Certificate 95971 describes the rate limit per acre as 1/50th cubic foot per second per (cfs) acre. Certificate 95971 has been modified by transfers, cancellation, and allocation of conserved water projects. The rate available per acre or rate per acre equivalent has been reduced as a result of previous transactions.

7. The portion of the second right to be leased is as follows:

Certificate: 93680 in the name of City of Sisters (confirmed by decree of the Circuit Court of the State of Oregon for Crook County. The decree is of record at Salem, in the Order Record of the Water Resources Director in Volume 1 at Page 120)

Priority Date: 1880

Use: Irrigation of 59.9 acres

Quantity: **Rate:** 1.07 Cubic Foot per Second (CFS)

Volume: 179.70 Acre-Feet (AF)

Limit: The amount of water to which this right is entitled is limited to an amount actually used beneficially and shall not exceed 1.07 cubic feet per second, (if available at the original point of diversion) or its equivalent in case of rotation, if available at the original point of diversion.

Source: Whychus Creek, tributary to the Deschutes River

Original Point of Diversion (POD):

Twp	Rng	Mer	Sec	Q-Q	Measured Distances
15 S	10 E	WM	21	SW SW	140 FEET NORTH AND 1190 FEET EAST FROM THE SW CORNER OF SECTION 21

Authorized Point of Diversion (POD):

Twp	Rng	Mer	Sec	Q-Q	Measured Distances
15 S	10 E	WM	21	SW SW	998 FEET NORTH AND 1211 FEET EAST FROM THE SW CORNER OF SECTION 21

Authorized Place of Use:

Twp	Rng	Mer	Sec	Q-Q	Tax Lot	Acres
15 S	10 E	WM	10	NE SW	704	18.0
15 S	10 E	WM	10	NW SW	704	0.3
15 S	10 E	WM	10	SW SW	704	1.0
15 S	10 E	WM	10	SE SW	704	8.0
15 S	10 E	WM	10	NW SE	704	2.4
15 S	10 E	WM	10	SW SE	704	15.2
15 S	10 E	WM	10	SE SE	704	4.2
15 S	10 E	WM	15	NE NE	200	10.8
Total:						59.9

8. Certificate 93680 does not include a rate limitation: Certificate 93680 has been modified by an allocation of conserved water project. The rate available per acre or rate per acre equivalent has been reduced as a result of previous transactions. The rate per acre for this water right is approximately 1/56th cfs per acre.

9. The third right to be leased is as follows:

Certificate: 93681 in the name of City of Sisters (confirmed by decree of the Circuit Court of the State of Oregon for Crook County. The decree is of record at Salem, in the Order Record of the Water Resources Director in Volume 1 at Page 120)

Priority Date: 1881

Use: Irrigation of 35.5 acres
Quantity: **Rate:** 0.554 Cubic Foot per Second (CFS)
Volume: 106.5 Acre-Feet (AF)
Limit: The amount of water to which this right is entitled is limited to an amount actually used beneficially and shall not exceed 0.554 cubic feet per second, (if available at the original point of diversion) or its equivalent in case of rotation, measured at the point of diversion.
Source: Whychus Creek, tributary to the Deschutes River

Original Point of Diversion (POD):

Twp	Rng	Mer	Sec	Q-Q	Measured Distances
15 S	10 E	WM	21	SW SW	UNCLE JOHN DITCH: 140 FEET NORTH AND 1190 FEET EAST FROM THE SW CORNER OF SECTION 21

Authorized Point of Diversion (POD):

Twp	Rng	Mer	Sec	Q-Q	Measured Distances
15 S	10 E	WM	21	SW SW	998 FEET NORTH AND 1211 FEET EAST FROM THE SW CORNER OF SECTION 21

Authorized Place of Use:

Twp	Rng	Mer	Sec	Q-Q	Tax Lot	Acres
15 S	10 E	WM	15	NE NE	200	6.6
15 S	10 E	WM	15	NW NE	200	28.9
Total:						35.5

10. Certificate 93681 does not include a rate limitation. Certificate 93681 has been modified by an allocation of conserved water project. The rate available per acre or rate per acre equivalent has been reduced as a result of previous transactions. The rate per acre for this water right is approximately 1/64th cfs per acre.

11. The fourth right to be leased is as follows:

Certificate: 93683 in the name of City of Sisters (confirmed by decree of the Circuit Court of the State of Oregon for Crook County. The decree is of record at Salem, in the Order Record of the Water Resources Director in Volume 1 at Page 120)
Priority Date: 1886
Use: Irrigation of 7.0 acres
Quantity: **Rate:** 0.109 Cubic Foot per Second (CFS)
Volume: 21.0 Acre-Feet (AF)
Limit: The amount of water to which this right is entitled is limited to an amount actually used beneficially and shall not exceed 0.109 cubic feet per second, (if available at the original point of diversion) or its equivalent in case of rotation, if available at the original point of diversion.
Source: Whychus Creek, tributary to the Deschutes River

Original Point of Diversion (POD):

Twsp	Rng	Mer	Sec	Q-Q	Measured Distances
15 S	10 E	WM	21	SW SW	UNCLE JOHN DITCH: 140 FEET NORTH AND 1190 FEET EAST FROM THE SW CORNER OF SECTION 21

Authorized Point of Diversion (POD):

Twsp	Rng	Mer	Sec	Q-Q	Measured Distances
15 S	10 E	WM	21	SW SW	998 FEET NORTH AND 1211 FEET EAST FROM THE SW CORNER OF SECTION 21

Authorized Place of Use:

Twsp	Rng	Mer	Sec	Q-Q	Tax Lot	Acres
15 S	10 E	WM	15	NW NE	200	7.0
Total:						7.0

12. Certificate 93683 does not include a rate limitation. Certificate 93683 has been modified by an allocation of conserved water project. The rate available per acre or rate per acre equivalent has been reduced as a result of previous transactions. The rate per acre for this water right is approximately 1/64th cfs per acre.
13. Certificates 95971, 93680, 93681 and 93683 do not specify the irrigation season. Nor is an irrigation season specified by Basin Program or Decree. For the purposes of instream leasing, an irrigation season of March 1 through October 31, consistent with OAR 690-250, shall be used to establish when water may be protected instream.
14. The lease application includes the information required under OAR 690-077-0076(3). The Department provided notice of the lease application pursuant to OAR 690-077-0077(1). No comments were received.
15. The applicant has requested the instream use begin at the authorized point of diversion. The point of diversion is located within a known losing reach on Whychus Creek. The losing reach extends from the point of diversion located at approximately River Mile (RM) 24.5 to the OWRD gaging station 14076050 located in Sisters, at approximately RM 20.7. Therefore, to prevent enlargement of the water right, the instream use will be conditioned as set forth in Finding of Fact No. 18.
16. The instream use will be conditioned to allow less water to be protected instream below the point of diversion based upon instream measurements conducted by Department staff or others approved by the Department, which may show lower or higher levels of loss and allow the instream flows to be adjusted accordingly. The instream quantity may not exceed the instream quantity identified at the point of diversion.
17. The lease application requests to protect water instream from Whychus Creek into the Deschutes River. An instream reach is generally from the point of diversion to the mouth of the source stream (Whychus Creek) but may be protected further if measurable in the receiving stream (the Deschutes River) (OAR 690-077-0015 (8)). The quantity that may be

leased instream from Whychus Creek is measurable into the Deschutes River and may be protected instream in the Deschutes River.

18. The instream use is as follows:

Whychus Creek, tributary to the Deschutes River

Instream Reach No. 1: At the POD (as described in Findings of Fact No's. 5, 7, 9, and 11), to the mouth of Whychus Creek into Deschutes River to the Madras Gage

Certificate	Priority Dates	Use	Instream Rate (CFS)	Instream Volume (AF)	Instream Period
95971	1895*	Irrigation	2.955	633.00	June 15 - September 30
95971	1895**	Pond Use	0.007	1.50	
93680	1880*	Irrigation	0.839	179.70	
93681	1881*	Irrigation	0.497	106.50	
93683	1886*	Irrigation	0.098	21.00	
Totals:			4.396	941.70	

*Instream flows for mitigation purposes

**Instream flows for restoration purposes

Instream Reach No. 2: From the Madras Gage to the mouth of the Deschutes River

Certificate	Priority Dates	Use	Instream Rate (CFS)	Instream Volume (AF)	Instream Period
95971	1895**	Pond Use	0.007	1.50	June 15 - September 30
Totals:			0.007	1.50	

**Instream flows for restoration purposes

19. The amount and timing of the proposed instream flow is allowable within the limits and use of the original water right.

20. The protection of flows within the proposed reach is appropriate, considering:

- The instream water use begins at the recorded point of diversion;
- The location of confluences with other streams downstream of the point of diversion.
- The known areas of natural loss of streamflow to the river bed downstream from the point of diversion; and
- Any return flows resulting from the exercise of the existing water right would re-enter the river downstream of the reach of the instream water right.

21. Instream water rights, with a senior priority date, created through an instream lease generally replace portions of other instream water rights, which carry junior priority dates, established through minimum flow conversion or the state agency application process to establish new instream water rights. On Whychus Creek, during the period April 1 through September 30, the total quantities of water to be protected instream under the existing and proposed instream rights within a portion of the reach from approximately T15S, R10E, Section 21 (approximately River Mile (RM) 24.5) to the confluence with Indian Ford Creek (just upstream from RM 20) will exceed the quantities identified as necessary for instream use for various fish life stages under Certificate 73224, which was created under ORS 537.341, an application process for state agencies to establish new instream water rights.

During the period June 1 through October 31, the total quantities of water to be protected instream under the existing and proposed instream rights within another portion of the reach from T14S, R10E, Section 26 (approximately RM 16) to the mouth of Whychus Creek will exceed the quantities identified as necessary for instream use for various fish life stages under Certificate 73223, which was also created under ORS 537.341. However, the Department has identified that this instream lease will provide an additional beneficial purpose. The Oregon Department of Fish and Wildlife has identified that Whychus Creek is a high priority for flow restoration. In addition, the original instream flows established under Certificates 73224 and 73223 were based on flow needs for resident redband trout and did not account for flows necessary to support reintroduction of Mid-Columbia summer steelhead trout and spring Chinook salmon.

22. The Department has identified that during the term of this lease, the quantities protected instream may be additive to other existing instream water rights established within the same reach under ORS 537.341, 537.346, 537.348 or 537.470 during the period of June 30 through October 15 for the portion of the reach extending from approximately T15S, R10E, Section 21 (approximately RM 24.5) to the confluence with Indian Ford Creek (just upstream from RM 20)] and during the period June 30 through October 15 for the portion of the reach extending from T14S, R10E, Section 26 (approximately RM 16) to the mouth of Whychus Creek. In other portions of the identified reach, the quantities protected instream may be additive to other existing water rights established under ORS 537.348 and 537.470 and may replace a portion of existing water rights established under ORS 537.341 or 537.346 with an earlier priority date, unless otherwise specified in an order approving a new instream water right under these statutes.
23. If approved, this instream lease is not reasonably expected to significantly affect land use as prescribed by ORS 197.180, OAR Chapter 660, Divisions 30 and 31, and OAR Chapter 690, Division 5.
24. Based upon review of the application, information provided by the Department's Watermaster, and other available information, the Department finds that the lease will not result in injury or enlargement. The order approving this instream lease may be modified or revoked under OAR 690-077-0077 if the Department later finds that the lease is causing injury to any existing water right or enlargement of the original right.
25. If a right which has been leased is later proposed to be leased again, transferred and/or reviewed under an allocation of conserved water, a new injury review shall be required. For example, instream transfers will be subject to a full and complete review to determine consistency with the requirements of OAR Chapter 690, Division 380 and Division 077. Approval of this lease does not establish a precedent for approval of any future transactions.
26. The Lessor and Lessee have requested that the lease terminate on October 31, 2022. The lease commenced on June 9, 2022.

Preliminary Award of Deschutes Basin Mitigation Credits

27. The Lessee, a mitigation bank chartered by the Water Resources Commission, has requested that a portion of the right to be protected instream be used to generate mitigation credits.
28. The Department assigned this mitigation credit project number MP-288.
29. The Department provided notice of the mitigation credit project pursuant to OAR 690-521-0300 (6). The Department also provided notice of the mitigation credit project to the Oregon Department of Fish and Wildlife, Oregon Department of Environmental Quality, Oregon Parks and Recreation Department, Oregon Department of State Lands, the Oregon Department of Agriculture, and the Department's Watermaster pursuant to OAR 690-521-0300 (7) and OAR 690-505-0630 (2). No comments were received.
30. The Department finds that 564.1 mitigation credits may be awarded to this mitigation credit project and assigned to the DRC Mitigation Bank. The mitigation credits may be used to mitigate for ground water permit applications and existing conditioned ground water permits and certificates, providing mitigation pursuant to the Deschutes Ground Water Mitigation Rules, OAR Chapter 690, Division 505, within the **Whychus Creek and General** Zones of Impact.
31. The mitigation credits expire on December 31, 2022.
32. The use and maintenance of the mitigation credits is subject to the terms and conditions of the DRC Mitigation Bank Charter.
33. The Department shall award final mitigation credits upon completion of the approved project by the applicant and verification by the Department that the project is complete. The issuance of the Final Order approving the proposed instream lease shall result in completion of the project and verification that the project is complete.
34. No precedent is set by this Final Order as to the amount of mitigation credits that may be generated by a subsequent mitigation credit project.

Conclusions of Law

The Department concludes that the lease will not result in injury or enlargement, OAR 690-077-0077. The lease conforms to the applicable provisions of OAR 690-077-0015.

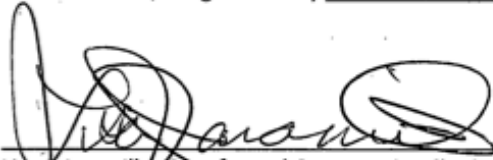
This mitigation project results in mitigation credits pursuant to ORS 537.746 and OAR 690-521-0300 and 690-521-0400.

Now, therefore it is ORDERED:

1. The Lease as described herein is APPROVED.

2. This order supersedes the previous order recorded at Special Order Volume 125, Pages 214-222.
3. During the term of the lease, the former place of use will no longer receive water as part of these rights, any supplemental rights, or any other layered irrigation water rights, including ground water registrations and permits.
4. The term of the lease commenced June 9, 2022 and terminates on October 31, 2022.
5. **Final Award of Deschutes Basin Mitigation Credits:** Issuance of this Final Order results in completion of the project and verification by the Department that the project is complete. The Department concludes that the mitigation credit project is awarded mitigation credits, as described above, pursuant to OAR 690-521-0400 and ORS 537.746. Mitigation Credits, in the amount of **564.1** credits, as described herein, are awarded to this mitigation project and assigned to the DRC Mitigation Bank. Mitigation Credits may be used to satisfy a mitigation obligation of a ground water permit applicant and/or ground water permit/certificate holder in the **Whychus Creek and General Zones of Impact**.
6. Mitigation credits are valid until used (or until they expire or are terminated) to satisfy a mitigation obligation of a ground water permit applicant and/or ground water permit/certificate holder within the Deschutes Ground Water Study Area pursuant to the Deschutes Ground Water Mitigation Rules. Mitigation credits are used when a person submits to the Department documentary evidence that valid credits have been obtained and assigned to satisfy a mitigation obligation.
7. The mitigation credits shall expire on December 31, 2022.
8. The use and maintenance of the mitigation credits shall be subject to the terms and conditions of the DRC Mitigation Bank Charter.

Dated at Salem, Oregon this day AUG 17 2022.



Lisa J. Jaramilla, Transfer and Conservation Section Manager, for
Thomas M. Byler, Director, Oregon Water Resources Department

Mailing date: AUG 18 2022

This document was prepared by Sarah
Henderson. If you have any questions,
please call 503-979-9872.

**BEFORE THE WATER RESOURCES DEPARTMENT
OF THE
STATE OF OREGON**

In the Matter of Instream Lease Application)	RECONSIDERATION AND SUPERSEDING
IL-1922 and Preliminary and Final Award of)	FINAL ORDER RECORDED IN SPECIAL
Mitigation Credits for Mitigation Project)	ORDER VOLUME 125, PAGES 223-230,
MP-289, Deschutes County)	APPROVING INSTREAM LEASE AND
)	MITIGATION CREDIT PROJECT

Authority

Oregon Revised Statute (ORS) 537.348 establishes the process in which a water right holder may submit a request to lease an existing water right for instream purposes. Oregon Administrative Rule (OAR) Chapter 690, Division 077 implements the statutes and provides the Department's procedures and criteria for evaluating instream lease applications.

OAR 690-521-0100 to 690-521-0600 establishes the process in which anyone may submit a ground water mitigation project to the Department for the purpose of establishing mitigation credits in the Deschutes Ground Water Study Area.

ORS 183.484 and OAR 137-004-0080 describes the process for reconsideration of an order in other than a contested case.

Lessor

Pooled Instream Lease for several water right holders
(described in Findings of Fact No's. 6, 8, 9 and 10)

Co-Lessor

Three Sisters Irrigation District (TSID)
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Lessee

Deschutes River Conservancy Mitigation Bank (DRCMB)
700 NW Hill Street, Suite 1
Bend, Oregon 97703
gen@deschutesriver.org

Findings of Fact

1. On April 29, 2022, the DRCMB and TSID on behalf of several water right holders, filed an application to lease a portion of Certificates 95971 and the entirety of Certificates 93689, 93690, and 93692 for instream use. The Department assigned the application number IL-1922.

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.

2. During May 23, 2022 through May 26, 2022, the Department worked with the Lessors and Lessee to fix a deficiency in the application that included 10.5 acres in Certificate 95971. On May 31, 2022, the Lessee requested the 10.5 acres in Certificate 95971 be removed from the lease application.
3. On June 9, 2022, the Department issued a Final Order Approving Instream Lease IL-1922 and Mitigation Project MP-289, as evidenced by Special Order Volume 125, Pages 223-230. Shortly following issuance of the order, the Department determined that the order should be reconsidered due to a technical issue with the Department public notice of May 3, 2022.
4. Notice of the instream lease and mitigation project was published on the Department's weekly notice on July 26, 2022. No comments were filed in response to the notices.
5. This order is issued to supersede the previous order recorded at Special Order Volume 125, Pages 223-230, and to record the date of the Department weekly notice of July 26, 2022.
6. The portion of the first right to be leased is as follows:

Certificate: 95971 Three Sisters Irrigation District (perfected under the Squaw Creek Decree, of record at Salem, in the Order Record of the Water Resources Director, in Volume 1, at Pages 121, 122, 123, 124, 435, 438, 445, 472, and 473)

Priority Date: 1895, 1899, 1903, 1904

Use: Irrigation of 188.1 acres, being 41.6 acres under the 1895 priority date; 24.1 acres under the 1899 priority date; 85.4 acres under the 1903 priority date; 37.0 acres under the 1904 priority date;

Quantity: Limit: One-fiftieth of one cubic foot per second (CFS) per acre, or its equivalent for each acre irrigated during the irrigation season of each year.

Source: Whychus Creek, tributary to the Deschutes River

Authorized Point of Diversion (POD):

Twsp	Rng	Mer	Sec	Q-Q	Measured Distances
15 S	10 E	WM	21	SW SW	998 FEET NORTH AND 1211 FEET EAST FROM THE SW CORNER OF SECTION 21

Authorized Place of Use:

Twsp	Rng	Mer	Sec	Q-Q	Tax Lot	Priority Date	Acres	Lessor
Irrigation Use – 188.1 acres total (1895 - Mitigation Acres)								
15 S	10 E	WM	24	NW NW	200	1895	32.0	Kerith Springs Lodge, Inc.
15 S	10 E	WM	24	SW NW	200	1895	9.6	Kerith Springs Lodge, Inc.
Sub Total:							41.6	
14 S	11 E	WM	30	NE SW	4701 (800)	1899	24.1	Paul Drake, Diane Tozman
Sub Total:							24.1	
15 S	10 E	WM	11	SW NE	1200	1903	4.6	David Helm
15 S	10 E	WM	11	NW SE	1200	1903	15.3	David Helm
15 S	10 E	WM	11	NE SE	1200	1903	2.5	David Helm
15 S	10 E	WM	11	NW SE	1400	1903	1.0	Circle of Trees, Lazy Z East

Twp	Rng	Mer	Sec	Q-Q	Tax Lot	Priority Date	Acres	Lessor
15 S	10 E	WM	11	SW SE	1400	1903	28.7	Circle of Trees, Lazy Z East
15 S	10 E	WM	11	SE SE	1400	1903	17.9	Circle of Trees, Lazy Z East
15 S	10 E	WM	14	NW NE	1800	1903	15.1	Circle of Trees, Lazy Z East
15 S	10 E	WM	14	NE NE	1800	1903	0.3	Circle of Trees, Lazy Z East
Sub Total:							85.4	
15 S	10 E	WM	24	SW SE	501	1904	26.0	Janet Herring
15 S	10 E	WM	24	SE SE	501	1904	9.0	Janet Herring
15 S	10 E	WM	24	SE SE	501	1904	2.0	Janet Herring
Sub Total:							37.0	
Grand Total:							188.1	

7. Certificate 95971 describes the rate limit per acre as 1/50th cubic foot per second per (cfs) acre. Certificate 95971 has been modified by transfers, cancellation, and allocation of conserved water projects. The rate available per acre or rate per acre equivalent has been reduced as a result of previous transactions.

8. The second right to be leased is as follows:

Certificate: 93689 in the name of Willits, LLC (perfected under the Squaw Creek Decree, of record at Salem, in the Order Record of the Water Resources Director, in Volume 1, at Page 471)

Use: Irrigation of 5.0 acres

Priority Date: 1908

Quantity: **Rate:** 0.078 Cubic Foot per Second (CFS)

Volume: 15.0 Acre-Feet (AF)

Source: Whychus Creek, tributary to the Deschutes River

Authorized Point of Diversion (POD):

Twp	Rng	Mer	Sec	Q-Q	Measured Distances
15 S	10 E	WM	21	SW SW	ORIGINAL POD - UNCLE JOHN DITCH - 140 FEET NORTH AND 1190 FEET EAST FROM THE SW CORNER OF SECTION 21
15 S	10 E	WM	21	SW SW	NEW POD - 998 FEET NORTH AND 1211 FEET EAST FROM THE SW CORNER OF SECTION 21

Authorized Place of Use:

Twp	Rng	Mer	Sec	Q-Q	Tax Lot	Acres	Lessor
15 S	10 E	WM	10	SW NW	800	1.3	Willits LLC
15 S	10 E	WM	10	NW SW	800	3.7	
Total Acres						5.0	

9. The third right to be leased is as follows:

Certificate: 93690 in the name of R & B Ranch, LLC, c/o Barbara Morrow (perfected under the Squaw Creek Decree, of record at Salem, in the Order Record of the Water Resources Director, in Volume 1, at Page 471)

Use: Irrigation of 23.7 acres

Priority Date: 1908

Quantity: **Rate:** 0.37 Cubic Foot per Second (CFS)
Volume: 71.1 Acre-Feet (AF)
Source: Whychus Creek, tributary to the Deschutes River

Authorized Point of Diversion (POD):

Twp	Rng	Mer	Sec	Q-Q	Measured Distances
15 S	10 E	WM	21	SW SW	ORIGINAL POD - UNCLE JOHN DITCH – 140 FEET NORTH AND 1190 FEET EAST FROM THE SW CORNER OF SECTION 21
15 S	10 E	WM	21	SW SW	NEW POD – 998 FEET NORTH AND 1211 FEET EAST FROM THE SW CORNER OF SECTION 21

Authorized Place of Use:

Twp	Rng	Mer	Sec	Q-Q	Tax Lot	Acres	Lessor
15 S	10 E	WM	11	SW NE	1200	5.6	David Helm
15 S	10 E	WM	11	SE NE	1200	5.5	
15 S	10 E	WM	11	NE SE	1200	12.4	
15 S	10 E	WM	11	SE SE	1200	0.2	
Total Acres						23.7	

10. The fourth right to be leased is as follows:

Certificate: 93692 in the name of R & B Ranch, LLC, c/o Barbara Morrow (perfected under Permit E-176)

Use: Irrigation of 14.9 acres

Priority Date: October 7, 1912

Quantity: **Rate:** 0.148 Cubic Foot per Second (CFS)

Volume: 44.7 Acre-Feet (AF)

Source: Whychus Creek, tributary to the Deschutes River

Authorized Point of Diversion (POD):

Twp	Rng	Mer	Sec	Q-Q	Measured Distances
15 S	10 E	WM	21	SW SW	ORIGINAL POD - UNCLE JOHN DITCH – 140 FEET NORTH AND 1190 FEET EAST FROM THE SW CORNER OF SECTION 21
15 S	10 E	WM	21	SW SW	NEW POD – 998 FEET NORTH AND 1211 FEET EAST FROM THE SW CORNER OF SECTION 21

Authorized Place of Use:

Twp	Rng	Mer	Sec	Q-Q	Tax Lot	Acres	Lessor
15 S	10 E	WM	11	SW NE	1200	10.8	David Helm
15 S	10 E	WM	11	SE NE	1200	4.1	
Total Acres						14.9	

11. Certificates 95971, 93689, 93690 and 93692 do not specify the irrigation season. Nor is an irrigation season specified by Basin Program or Decree. For the purposes of instream leasing, an irrigation season of March 1 through October 31, consistent with OAR 690-250, shall be used to establish when water may be protected instream.

12. The lease application includes the information required under OAR 690-077-0076(3). The Department provided notice of the lease application pursuant to OAR 690-077-0077(1). No comments were received.

13. The applicant has requested the instream use begin at the authorized point of diversion. The point of diversion is located within a known losing reach on Whychus Creek. The losing reach extends from the point of diversion located at approximately River Mile (RM) 24.5 to the OWRD gaging station 14076050 located in Sisters, at approximately RM 20.7. Therefore, to prevent enlargement of the water right, the instream use will be conditioned as set forth in Finding of Fact No. 16.
14. The instream use will be conditioned to allow less water to be protected instream below the point of diversion based upon instream measurements conducted by Department staff or others approved by the Department, which may show lower or higher levels of loss and allow the instream flows to be adjusted accordingly. The instream quantity may not exceed the instream quantity identified at the point of diversion.
15. The lease application requests to protect water instream from Whychus Creek into the Deschutes River. An instream reach is generally from the point of diversion to the mouth of the source stream (Whychus Creek) but may be protected further if measurable in the receiving stream (the Deschutes River) (OAR 690-077-0015 (8)). The quantity that may be leased instream from Whychus Creek is measurable into the Deschutes River and may be protected instream in the Deschutes River.

16. The instream use is as follows:

Whychus Creek, tributary to the Deschutes River

Instream Reach No. 1: At the POD (as described in Findings of Fact No's. 6, 8, 9, and 10), to the mouth of Whychus Creek into Deschutes River to the Madras Gage

Certificate	Priority Dates	Use	Instream Rate (CFS)	Instream Volume (AF)	Instream Period
95971	1895*	Irrigation	0.655	124.8	May 1 – August 4
95971	1899**	Irrigation	0.380	72.3	
95971	1903**	Irrigation	1.345	256.2	
95971	1904**	Irrigation	0.583	111.0	
93689	1908**	Irrigation	0.078	15.0	
93690	1908**	Irrigation	0.370	71.1	
93692	10/7/1912**	Irrigation	0.148	44.7	
Totals:			3.559	695.1	

*Instream flows for mitigation purposes

**Instream flows for restoration purposes

Instream Reach No. 2: From the Madras Gage to the mouth of the Deschutes River

Certificate	Priority Dates	Use	Instream Rate (CFS)	Instream Volume (AF)	Instream Period
95971	1899**	Irrigation	0.380	72.3	May 1 – August 4
95971	1903**	Irrigation	1.345	256.2	
95971	1904**	Irrigation	0.583	111.0	
93689	1908**	Irrigation	0.078	15.0	
93690	1908**	Irrigation	0.370	71.1	
93692	10/7/1912**	Irrigation	0.148	44.7	
Totals:			2.904	570.3	

**Instream flows for restoration purposes

17. The amount and timing of the proposed instream flow is allowable within the limits and use of the original water right.
18. The protection of flows within the proposed reach is appropriate, considering:
 - a. The instream water use begins at the recorded point of diversion;
 - b. The location of confluences with other streams downstream of the point of diversion.
 - c. The known areas of natural loss of streamflow to the river bed downstream from the point of diversion; and
 - d. Any return flows resulting from the exercise of the existing water right would re-enter the river downstream of the reach of the instream water right.
19. Instream water rights, with a senior priority date, created through an instream lease generally replace portions of other instream water rights, which carry junior priority dates, established through minimum flow conversion or the state agency application process to establish new instream water rights. On Whychus Creek, during the period April 1 through September 30, the total quantities of water to be protected instream under the existing and proposed instream rights within a portion of the reach from approximately T15S, R10E, Section 21 (approximately River Mile (RM) 24.5) to the confluence with Indian Ford Creek (just upstream from RM 20) will exceed the quantities identified as necessary for instream use for various fish life stages under Certificate 73224, which was created under ORS 537.341, an application process for state agencies to establish new instream water rights. During the period June 1 through October 31, the total quantities of water to be protected instream under the existing and proposed instream rights within another portion of the reach from T14S, R10E, Section 26 (approximately RM 16) to the mouth of Whychus Creek will exceed the quantities identified as necessary for instream use for various fish life stages under Certificate 73223, which was also created under ORS 537.341. However, the Department has identified that this instream lease will provide an additional beneficial purpose. The Oregon Department of Fish and Wildlife has identified that Whychus Creek is a high priority for flow restoration. In addition, the original instream flows established under Certificates 73224 and 73223 were based on flow needs for resident redband trout and did not account for flows necessary to support reintroduction of Mid-Columbia summer steelhead trout and spring Chinook salmon.
20. The Department has identified that during the term of this lease, the quantities protected instream may be additive to other existing instream water rights established within the same reach under ORS 537.341, 537.346, 537.348 or 537.470 during the period of June 30 through October 15 for the portion of the reach extending from approximately T15S, R10E, Section 21 (approximately RM 24.5) to the confluence with Indian Ford Creek (just upstream from RM 20)] and during the period June 30 through October 15 for the portion of the reach extending from T14S, R10E, Section 26 (approximately RM 16) to the mouth of Whychus Creek. In other portions of the identified reach, the quantities protected instream may be additive to other existing water rights established under ORS 537.348 and 537.470 and may replace a portion of existing water rights established under ORS 537.341 or 537.346 with an earlier priority date, unless otherwise specified in an order approving a new instream water right under these statutes.

21. If approved, this instream lease is not reasonably expected to significantly affect land use as prescribed by ORS 197.180, OAR Chapter 660, Divisions 30 and 31, and OAR Chapter 690, Division 5.
22. Based upon review of the application, information provided by the Department's Watermaster, and other available information, the Department finds that the lease will not result in injury or enlargement. The order approving this instream lease may be modified or revoked under OAR 690-077-0077 if the Department later finds that the lease is causing injury to any existing water right or enlargement of the original right.
23. If a right which has been leased is later proposed to be leased again, transferred and/or reviewed under an allocation of conserved water, a new injury review shall be required. For example, instream transfers will be subject to a full and complete review to determine consistency with the requirements of OAR Chapter 690, Division 380 and Division 077. Approval of this lease does not establish a precedent for approval of any future transactions.
24. The Lessor and Lessee have requested that the lease terminate on October 31, 2022. The lease commenced on June 9, 2022.

Preliminary Award of Deschutes Basin Mitigation Credits

25. The Lessee, a mitigation bank chartered by the Water Resources Commission, has requested that a portion of the right to be protected instream be used to generate mitigation credits.
26. The Department assigned this mitigation credit project number MP-289.
27. The Department provided notice of the mitigation credit project pursuant to OAR 690-521-0300 (6). The Department also provided notice of the mitigation credit project to the Oregon Department of Fish and Wildlife, Oregon Department of Environmental Quality, Oregon Parks and Recreation Department, Oregon Department of State Lands, the Oregon Department of Agriculture, and the Department's Watermaster pursuant to OAR 690-521-0300 (7) and OAR 690-505-0630 (2). No comments were received.
28. The Department finds that **74.9** mitigation credits may be awarded to this mitigation credit project and assigned to the DRC Mitigation Bank. The mitigation credits may be used to mitigate for ground water permit applications and existing conditioned ground water permits and certificates, providing mitigation pursuant to the Deschutes Ground Water Mitigation Rules, OAR Chapter 690, Division 505, within the **Whychus Creek and General Zones of Impact**.
29. The mitigation credits expire on December 31, 2022.
30. The use and maintenance of the mitigation credits is subject to the terms and conditions of the DRC Mitigation Bank Charter.

31. The Department shall award final mitigation credits upon completion of the approved project by the applicant and verification by the Department that the project is complete. The issuance of the Final Order approving the proposed instream lease shall result in completion of the project and verification that the project is complete.
32. No precedent is set by this Final Order as to the amount of mitigation credits that may be generated by a subsequent mitigation credit project.

Conclusions of Law

The Department concludes that the lease will not result in injury or enlargement, OAR 690-077-0077. The lease conforms to the applicable provisions of OAR 690-077-0015.

This mitigation project results in mitigation credits pursuant to ORS 537.746 and OAR 690-521-0300 and 690-521-0400.

Now, therefore it is ORDERED:

1. The Lease as described herein is APPROVED.
2. This order supersedes the previous order recorded at Special Order Volume 125, Pages 223-230.
3. During the term of the lease, the former place of use will no longer receive water as part of these rights, any supplemental rights, or any other layered irrigation water rights, including ground water registrations and permits.
4. The term of the lease commenced June 9, 2022 and terminates on October 31, 2022.
5. **Final Award of Deschutes Basin Mitigation Credits:** Issuance of this Final Order results in completion of the project and verification by the Department that the project is complete. The Department concludes that the mitigation credit project is awarded mitigation credits, as described above, pursuant to OAR 690-521-0400 and ORS 537.746. Mitigation Credits, in the amount of **74.9** credits, as described herein, are awarded to this mitigation project and assigned to the DRC Mitigation Bank. Mitigation Credits may be used to satisfy a mitigation obligation of a ground water permit applicant and/or ground-water permit/certificate holder in the **Whychus Creek and General Zones of Impact**.
6. Mitigation credits are valid until used (or until they expire or are terminated) to satisfy a mitigation obligation of a ground water permit applicant and/or ground water permit/certificate holder within the Deschutes Ground Water Study Area pursuant to the Deschutes Ground Water Mitigation Rules. Mitigation credits are used when a person submits to the Department documentary evidence that valid credits have been obtained and assigned to satisfy a mitigation obligation.
7. The mitigation credits shall expire on December 31, 2022.

8. The use and maintenance of the mitigation credits shall be subject to the terms and conditions of the DRC Mitigation Bank Charter.

Dated at Salem, Oregon this day AUG 17 2022



Lisa J. Jaramillo, Transfer and Conservation Section Manager, for
Thomas M. Byler, Director, Oregon Water Resources Department

Mailing date: AUG 18 2022

*This document was prepared by Sarah
Henderson. If you have any questions,
please call 503-979-9872.*

Crooked River

BEFORE THE WATER RESOURCES DEPARTMENT OF THE STATE OF OREGON

In the Matter of Instream Lease Application)	CORRECTING AND SUPERSEDING FINAL
IL-1930 and Preliminary and Final Award of)	ORDER ON INSTREAM LEASE and
Mitigation Credits for Mitigation Project)	MITIGATION CREDIT PROJECT
MP-290, Crook County)	

Authority

Oregon Revised Statute (ORS) 537.348 establishes the process in which a water right holder may submit a request to lease an existing water right for instream purposes. Oregon Administrative Rule (OAR) Chapter 690, Division 077 implements the statutes and provides the Department's procedures and criteria for evaluating instream lease applications.

OAR 690-521-0100 to 690-521-0600 establishes the process in which anyone may submit a ground water mitigation project to the Department for the purpose of establishing mitigation credits in the Deschutes Ground Water Study Area.

Lessor

Pooled Instream Lease on
behalf of three water users
(As described in Finding of Fact No. 2)

Co-Lessor

Ochoco Irrigation District (OID)
1001 NW Deer Street
Prineville, OR. 97754
ochocoid@crestviewcable.com

Lessee

Deschutes River Conservancy Mitigation Bank (DRCMB)
700 NW Hill Street, Suite 1
Bend, Oregon 97703
gen@deschutesriver.org

Findings of Fact

1. On June 7, 2022, the DRCMB and OID on behalf of three water users filed an application to lease a portion of Certificate 82246 for instream use. The Department assigned the application number IL-1930.
2. On July 15, 2022, the Department issued an order approving Instream Lease IL-1930 and Mitigation Project MP-290, as evidenced by Special Order Volume 125, Page 424. Following issuance of the order, a scrivener's error was identified in the amount of mitigation awarded. This order is being issued to correct the error.

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.

3. The portion of the right to be leased has been modified from the lease application and is as follows:

Certificate: 82246 in the name of Ochoco Irrigation District (perfected under Permit S-5426)

Use: Irrigation of 83.9 acres

Priority Date: August 10, 1917

Quantity: **Rate:** 1.049 Cubic Foot per Second (CFS)
Volume: 335.6 Acre-Feet (AF)
Limit: The amount of water used for irrigation together with the amount secured under any other right existing for the same lands is limited to a diversion of one-eightieth of one cubic foot per second (or its equivalent) for each acre irrigated and shall be further limited to 4.0 acre feet for each acre irrigated during the irrigation season of each year.

Source: Ochoco Creek and Ochoco Reservoir constructed under R-528, tributary to the CROOKED RIVER

Authorized Point of Diversion (POD):

POD#	Twp	Rng	Mer	Sec	Q-Q	Survey Coordinates
1	15 S	17 E	WM	5	SW NW	OCHOCO FEED CANAL: 500 FEET NORTH AND 250 FEET EAST FROM THE W1/4 CORNER OF SECTION 5

Authorized Place of Use:

Irrigation						Supplemental Information	
Twp	Rng	Mer	Sec	Q-Q	Acres	Tax lot	Water User
14 S	15 E	WM	25	NW SE	5.0	1200	Kathleen Lieser
14 S	15 E	WM	25	SW SE	3.4	1200	Kathleen Lieser
14 S	15 E	WM	36	NE NE	3.1	1900	Dave Molony
14 S	15 E	WM	36	SE NE	2.4	1900	Dave Molony
14 S	15 E	WM	36	SE NE	3.1	1800	Dave Molony
14 S	16 E	WM	28	NW SW	16.3	1600	City of Prineville
14 S	16 E	WM	28	SW SW	31.2	1600	City of Prineville
14 S	16 E	WM	29	NE SE	6.6	1600	City of Prineville
14 S	16 E	WM	29	SE SE	12.8	1600	City of Prineville
Total					83.9		

4. The maximum duty for the right is set at 4.0 acre-feet per acre; however, for the purpose of this lease the District has set the duty to 3.0 acre-feet per acre, calculations will be made using 3.0 acre-feet per acre as requested.
5. Certificate 82246 does not specify the irrigation season; The Crooked River Decree specifies the Irrigation Season as February 1 through December 1.
6. There is a supplemental irrigation water right, Certificate 82247, appurtenant to all or a portion of the lands described in Finding of Fact No. 3. The Lessors and Lessee have requested that this water right not be included as part of this lease application. During the term of the lease, water use under this right will also be suspended.

7. The lease application includes the information required under OAR 690-077-0076(3). The Department provided notice of the lease application pursuant to OAR 690-077-0077(1). No comments were received.
8. The lease application requests to protect water instream from Ochoco Creek into the Crooked River. An instream reach is generally from the point of diversion to the mouth of the source stream (Ochoco Creek) but may be protected further if measurable in the receiving stream (the Crooked River) (OAR 690-077-0015 (8)). The quantity that may be leased instream from Ochoco Creek is measurable into the Crooked River and may be protected instream in the Crooked River.
9. The instream use has been modified from the lease application to prevent injury and enlargement and is as follows:
Ochoco Creek, tributary to the Crooked River

Instream Reach #1: From the POD (as described in Finding of Fact No. 3) to the mouth of Ochoco Creek, into Crooked River to Lake Billy Chinook

Certificate	Priority Date	Instream Rate (CFS)	Instream Volume (AF)	Period Protected Instream
82246	8/10/1917	0.746	251.7	April 15 through October 1

10. Other conditions to prevent injury and enlargement are:
When live flow is no longer available, Ochoco Irrigation District shall begin releasing stored water from Ochoco Reservoir to satisfy the instream use described in Finding of Fact No. 9 for the duration of the instream period. The Irrigation District shall keep a record of the amount and timing of water released from Ochoco Reservoir on a monthly basis and provide that that information to the Watermaster upon request. If determined necessary, the Watermaster may require the Irrigation District to report to the Department the amount and timing of storage releases. The Watermaster shall account for the water released from storage at the Smith Rock State Park gage.
11. The amount and timing of the proposed instream flow is allowable within the limits and use of the original water right.
12. The protection of flows within the proposed reach is appropriate, considering:
 - a. The instream water use begins at the recorded point of diversion;
 - b. The location of confluences with other streams downstream of the point of diversion.
 - c. There are no known areas of natural loss of streamflow to the river bed downstream from the point of diversion; and
 - d. Any return flows resulting from the exercise of the existing water right would re-enter the river downstream of the reach of the instream water right.
13. The total monthly quantities of water to be protected under the existing and proposed instream rights in the reach will provide for a beneficial purpose.

14. The total monthly quantities of water to be protected instream under existing and proposed instream rights in the reach do not exceed the estimated average natural flow.
15. If approved, this instream lease is not reasonably expected to affect land use significantly as prescribed by ORS 197.180, OAR Chapter 660, Divisions 30 and 31, and OAR Chapter 690, Division 5.
16. Based upon review of the application, information provided by the Department's Watermaster, and other available information, the Department finds that the lease will not result in injury or enlargement. The order approving this instream lease may be modified or revoked under OAR 690-077-0077 if the Department later finds that the lease is causing injury to any existing water right or enlargement of the original right.
17. If a right which has been leased is later proposed to be leased again, transferred and/or reviewed under an allocation of conserved water, a new injury review shall be required. For example, instream transfers will be subject to a full and complete review to determine consistency with the requirements of OAR Chapter 690, Division 380 and Division 077. Approval of this lease does not establish a precedent for approval of any future transactions.
18. The Lessors and Lessee have requested that the lease terminate on October 31, 2022. The lease may commence on the date this final order is signed.

Preliminary Award of Deschutes Basin Mitigation Credits

19. The Lessee, a mitigation bank chartered by the Water Resources Commission, has requested that the portion of the right to be protected instream be used to generate mitigation credits.
20. The Department assigned this mitigation credit project number MP-290.
21. The Department provided notice of the mitigation credit project pursuant to OAR 690-521-0300 (6). The Department also provided notice of the mitigation credit project to the Oregon Department of Fish and Wildlife, Oregon Department of Environmental Quality, Oregon Parks and Recreation Department, Oregon Department of State Lands, the Oregon Department of Agriculture, and the Department's Watermaster pursuant to OAR 690-521-0300 (7) and OAR 690-505-0630 (2). No comments were received.
22. The Department finds that **83.9** mitigation credits may be awarded to this mitigation credit project and assigned to the DRC Mitigation Bank. The mitigation credits may be used to mitigate for ground water permit applications and existing conditioned ground water permits and certificates, providing mitigation pursuant to the Deschutes Ground Water Mitigation Rules, OAR Chapter 690, Division 505, within the General and Crooked River Zones of Impact.
23. The mitigation credits expire on December 31, 2022.
24. The use and maintenance of the mitigation credits is subject to the terms and conditions of the DRC Mitigation Bank Charter.

25. The Department shall award final mitigation credits upon completion of the approved project by the applicant and verification by the Department that the project is complete. The issuance of the Final Order approving the proposed instream lease shall result in completion of the project and verification that the project is complete.
26. No precedent is set by this Final Order as to the amount of mitigation credits that may be generated by a subsequent mitigation credit project.

Conclusions of Law

The Department concludes that the lease will not result in injury or enlargement, OAR 690-077-0077. The lease conforms to the applicable provisions of OAR 690-077-0015.


This mitigation project results in mitigation credits pursuant to ORS 537.746 and OAR 690-521-0300 and 690-521-0400.

Now, therefore it is ORDERED:

1. The Lease as described herein is APPROVED.
2. During the term of the lease, the former place of use will no longer receive water as part of these rights, any supplemental rights, or any other layered irrigation water rights, including ground water registrations and permits.
3. The term of the lease will commence upon approval of the instream lease and terminate on October 31, 2022.
4. This correcting order supersedes Special Order Volume 125, Page 424.
5. **Final Award of Deschutes Basin Mitigation Credits:** Issuance of this Final Order results in completion of the project and verification by the Department that the project is complete. The Department concludes that the mitigation credit project is awarded mitigation credits, as described above, pursuant to OAR 690-521-0400 and ORS 537.746. Mitigation Credits, in the amount of **83.9** credits, as described herein, are awarded to this mitigation project and assigned to the DRC Mitigation Bank. Mitigation Credits may be used to satisfy a mitigation obligation of a ground water permit applicant and/or ground water permit/certificate holder in the General and Crooked River Zones of Impact.
6. Mitigation credits are valid until used (or until they expire or are terminated) to satisfy a mitigation obligation of a ground water permit applicant and/or ground water permit/certificate holder within the Deschutes Ground Water Study Area pursuant to the Deschutes Ground Water Mitigation Rules. Mitigation credits are used when a person submits to the Department documentary evidence that valid credits have been obtained and assigned to satisfy a mitigation obligation.
7. The mitigation credits shall expire on December 31, 2022.

8. The use and maintenance of the mitigation credits shall be subject to the terms and conditions of the DRC Mitigation Bank Charter.


Dated at Salem, Oregon this day OCT 05 2022.



Lisa J. Jaramillo, Transfer and Conservation Section Manager, for
Douglas E. Woodcock, Acting Director, Oregon Water Resources Department

Mailing date: OCT 06 2022

*This document was prepared by Sarah
Henderson. If you have any questions,
please call 503-979-9872.*

EXHIBIT B										9/20/2022	
Ochocho Irrigation District 2022 - Special Drought Instream Leasing											
Duty in 2022: 1.0 A\$/Ac - estimated Paper Duty: 4.0 A\$/Ac Typical Duty: 3 A\$/Ac Bid: \$7.00 (normally) \$60.00 for drought year leasing											
Crooked River = 10 % reduction of Ochocho Creek rate & duty											
Lease#	Lease Term	Lessor	Landowner	Reach	3111 Acres	Paper A\$/Ac	3.0 A\$/Ac	Estimated duty per Lessor	Rate Seasons 1-3	2022 Bid \$/Ac	Amount
1900 MP-290	1-yr	Pooled District lease - 3 lessors	Shive Lister Dave Molony CIO - IronHorse-City of Prineville	Ocho/Crook Ocho/Crook Ocho/Crook	83.90 8.40 8.60 66.90	Paper 251.70		3.36 3.44 26.76	Paper 0.746	60.00 \$ 60.00 \$ 60.00 \$	524.00 516.00 4,014.00
					Totals	83.90	251.70	33.6	0.746	\$	5,034.00
Leases with an unaddressed weed complaint or with a public entity are not paid, leases of less than 5 acres paid with DRC approval. District: Please note on this page if any landowners have known weed complaints against them or have been non-compliant, sign and date. Weed complaints: No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> (if yes, mark on sheet or list) Lease compliance: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (if no, mark on sheet)											
Payment pass through: Patrons eligible for payment receive credit against their account at the district _____ or receive payment in form of check from district <input checked="" type="checkbox"/> Other (please describe): _____											
 District Signatory										Date 10/5/2022	
Lease Payment Notes Drought year special per acre pricing. Mitigation leases with public entities or district water rights are only paid when the mitigation credits are paid.											

10/3/2022

1. Leasing Exhibit B, 2022