2025 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:

U. S. Fish and Wildlife Service

Bend Fish and Wildlife Office

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Submitted by:

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The City of Prineville, OR

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Introduction

U. S. Fish and Wildlife Service (USFWS) issued Incidental Take Permit TE89773D-0 (USFWS Permit) under Section 10(a)(1)(B) of the federal Endangered Species Act of 1973 as amended (ESA) 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. Additionally, the National Marine Fisheries Service (NMFS) (together with USFWS, referred to herein as the Services) issued a separate Incidental Take Permit (resulting from NMFS Consultation No. WCRO 2020-03588) on October 18, 2022 to the Permittees, which covers the incidental take of Middle Columbia River steelhead (*Oncorhynchus mykiss*) resulting from the same lawful activities described above.

All activities covered by the USFWS Permit and NMFS Permit are described in detail in the Deschutes Basin Habitat Conservation Plan (DBHCP) (DBBC 2020a), which was approved by USFWS simultaneous with its permit issuance in December 2020 (USFWS 2020), and further approved by NMFS simultaneous with its permit issuance in October 2022. 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, the USFWS Permit, and the NMFS Permit. The latter involves monitoring to support 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. 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.

Annual reporting of DBHCP implementation requires numerous datasets and additional documentation that is submitted as part of this report package (Table 2). This includes reporting of hydrological data for the surface waters covered by the DBHCP and the hydrologic

parameters used to evaluate compliance. For adaptive management measures, supplemental studies and/or monitoring are required in some years and are submitted as independent reports with this reporting package. Lastly, supplemental attachments also include documentation of correspondence among the Districts and the Services, implementation coordination meeting notes, and leasing and payment information.

Table 1. Monitoring hours funded by the Permittees in 2025.

Requirement Description	DBHCP Conservation Measure	Monitoring Interval	Maximum Required Hours	Available Hours WY25	Qualified Biologist Hours Requested in WY25
Dead Slough Habitat Assessment	WR-1	Annual	80	80	0 [a]
Upper Deschutes River Habitat Suitability Assessment Downstream of Wickiup Dam	WR-1	5 years	80	80	285
Crescent Creek Egg Mass Counts	CC-1	Annual	80	80	52 [a]
Crescent Creek/Little Deschutes Monitoring for Stranding	CC-1	3 years	80	0	0
Crescent Creek/Little Deschutes Habitat Suitability Analyses	CC-1	5 years	80	0	0
Upper Deschutes River OSF Pre-breeding Assessment	OSF-1, WR-1.1	Annual			1 [a]
Upper Deschutes River OSF Egg/Larvae Survival Monitoring	OSF-1, WR-1.2	Annual	240	240	10 [a,b]
Crane Prairie OSF Egg Mass Counts	OSF-1, CP-1.1	Annual			51 [a,c]
Crane Prairie Monitoring for OSF Stranding	CP-1.2	Year 1, 2, and 2 of 10 years thereafter	No max	0	0
Crane Reservoir Wetland Vegetation Monitoring	CP-1.3	5 years	No max	0	0

[a] The remaining hours allocated for monitoring tasks WR-1 (Dead Slough Monitoring), CC-1, WR-1.1, and WR-1.2 were shifted to continue an Upper Deschutes habitat suitability analysis, as directed by USFWS. Hours were only shifted from monitoring activities that are required in the current water year.

[b] A single day fee for a large raft rental ($175) was converted to biologist hours using the billing rate of $150.00 per hour.

[c] As per prior agreement with USFWS, MHE used a boat for crew access for egg mass counts at Crane Prairie Reservoir. A 1.5-day fee for the boat ($1,350.00) was converted to biologist hours using the billing rate of $150.00 per hour.

Table 2. Supplemental attachments for Water Year 2025.

Attachment	Description of Contents
A	Tables (.xlsx) containing specified hydrologic data, monitoring metrics, reporting of values outside the required ranges and allowable ranges of deviation, and explanation of deviations. All tables have metadata tabs with data dictionaries including calculation methods
B	Email correspondence, official letters, or other documentation related to DBHCP compliance and implementation
C	Monthly coordination meeting notes
D	Monitoring reports (effectiveness, Oregon spotted frog breeding, habitat suitability)
E	Payments and leases

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)

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 E). 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 water surface elevations (WSE) for Water Year 2025 are reported in a Microsoft Excel file (Attachment A: CranePrairie_WY2025.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 the provisions of 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 2024), the Permittees did not release the additional 5,000 acre-feet of storage from Crane Prairie Reservoir allowed for under Provision H of Conservation Measure CP-1. Accordingly, COID was not exempt from provisions A, D and E of this conservation measure. The Crane Prairie basin received several large rain-on-snow events that precipitously increased the inflows during Water Year 2025. As a result, COID had to make numerous adjustments to manage the rising WSE, which often exceeded the maximums defined in CP-1. COID reported deviations promptly and responded with real-time outflow adjustments to manage the rising volume. Instances when WSE exceeded the allowable deviations include the following:

- From January 2–13 the WSE of the reservoir exceeded provision E. This was discussed during the January monthly coordination meeting; no remedial actions were requested by the services since COID and OWRD were actively communicating their adjustments and working to reduce the WSE (Attachment B: COID_20250106.pdf; Attachment C: Coord Notes Final_20250116). This period occurred prior to Oregon spotted frog (OSF)

breeding activity, when there was still considerable snow and ice along the reservoir perimeter. Therefore, there was likely no impact on OSF.

- From March 27–April 4 and from April 7–8 the WSE of the reservoir exceeded provision A. During this time access was limited due to snow, and COID relied on assistance from OWRD and its snowcat to access the outlet and make outflow adjustments (Attachment B: CRANE PRAIRIE/COID_20250327.pdf; COID_20250331.pdf, COID_20250409.pdf). MHE conducted an OSF pre-breeding survey on April 6 and confirmed that breeding habitat was open and WSE looked appropriate; no further action was requested by USFWS (Attachment C: Coord Notes Final_20250417).
- From May 10–31 the WSE of the reservoir exceeded provision A due to high runoff events in the basin. During this time COID made almost daily adjustments to the outflow to reduce the increasing WSE in coordination with USFWS (Attachment B: COID_20250512.pdf; Attachment C: Coord Notes Final_20250515). The high water was not likely to have an adverse impact on OSF tadpoles, and no further action was requested by USFWS (Attachment C: Coord Notes Final_20250618).
- From June 30–July 12 the WSE of the reservoir exceeded provision A, due to several storms and subsequent runoff. Following the same directives from May email exchanges, WSEs above the allowable deviation were managed to prevent stranding of OSF larval life stages (Attachment B: CRANE PRAIRIE/COID_20250703.pdf; Attachment C: Coord Notes Final_20250717). The high WSE did not affect OSF egg mass locations, which were oviposited in March and April. Further, these surface elevations remained at the upper end of (or above) the Conservation Measure CP-1 requirement prior to drawdown in mid-July. Consequently, stranding of larvae or juvenile frogs was not a concern.

There were no WSEs that fell below the allowable range of deviation during Water Year 2025. Daily changes in WSE at Crane Prairie Reservoir (provisions B and C) were within the allowable range of deviation throughout the 2025 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 and by email for all 12 months during Water Year 2025 (Attachment C). Participants in these meetings included representatives of USFWS, Bureau of Reclamation, Oregon Water Resources Department (OWRD), AID, COID, LPID, TSID and NUID; meeting notes were provided to the USFWS via email. Lastly, in 2025 Permittees did not release the additional 5,000 acre-feet of storage from Crane Prairie Reservoir allowed under Provision H.

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

Provision F of Conservation Measure CP-1 defines the minimum instream flow in the Deschutes River between Crane Prairie Dam and Wickiup Reservoir. Releases from the reservoir, monitored by the discharge below Crane Prairie Dam (Hydromet Station CRAO), were above the minimum requirement and allowable range of deviation for the entire water year (Figure 3). All

flows for Water Year 2025 are reported in a Microsoft Excel file (Attachment A: CranePrairie_WY2025.xlsx) and were submitted to USFWS as part of this report package. Email notifications regarding compliance (Provision I) and other correspondences are included in supplemental materials, Attachment B.

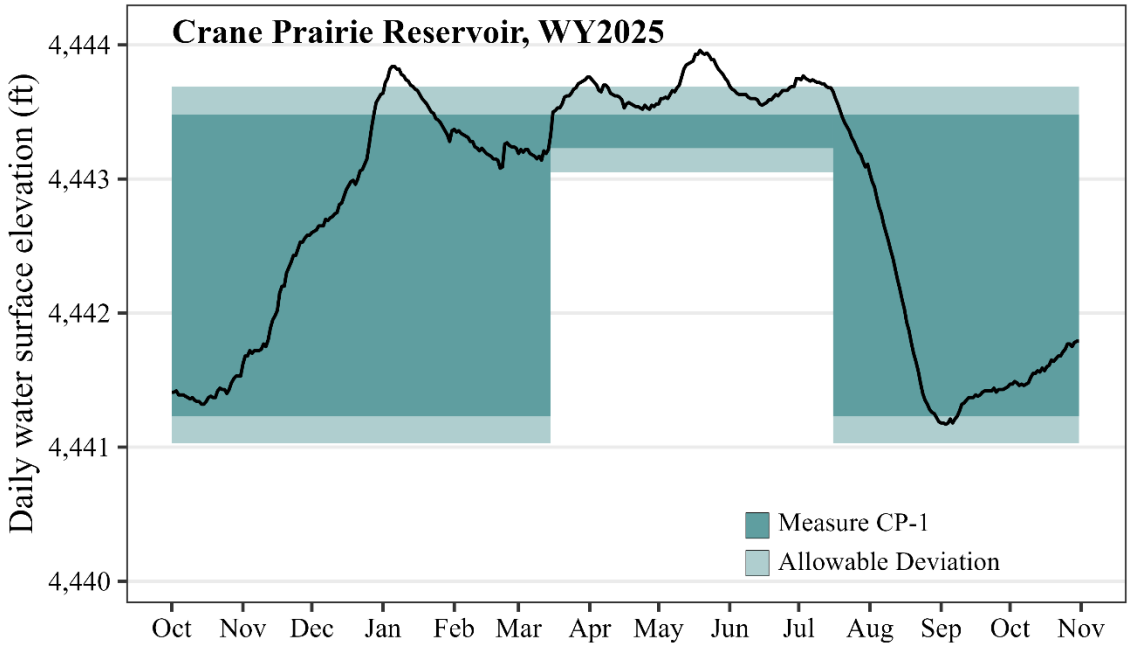


Figure 1: Daily (midnight) water surface elevations (feet) in Crane Prairie Reservoir measured at Hydromet Station CRA (OWRD station ID 14053500). Values outside the shaded areas fall outside the required range and allowable deviation for Conservation Measure CP-1.

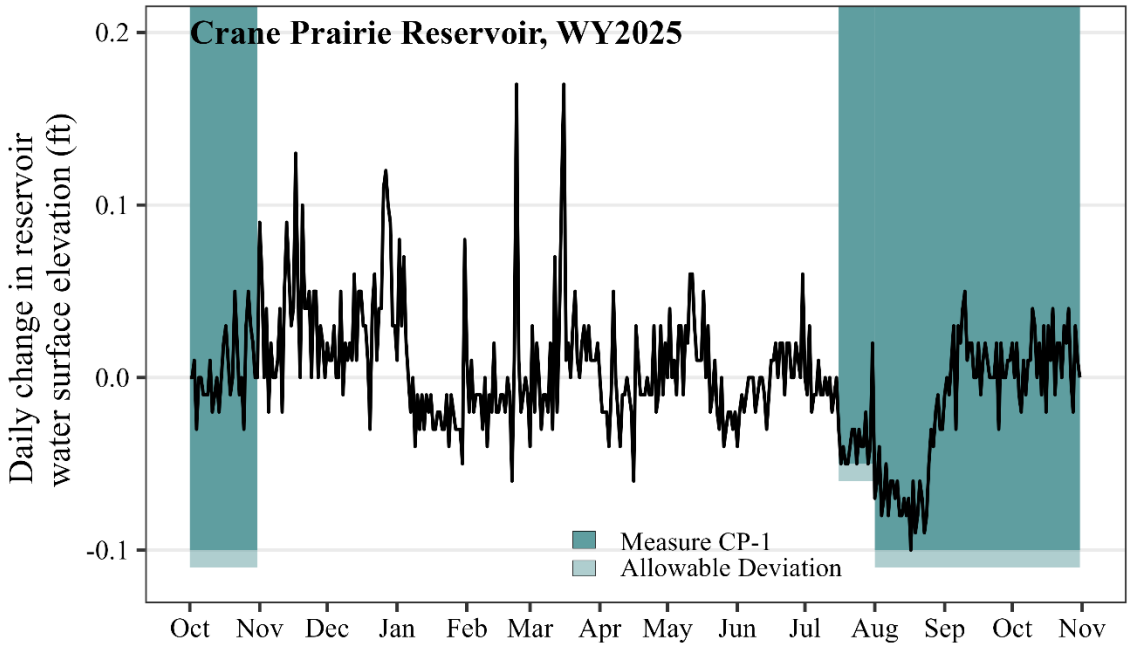


Figure 2: Daily change in reservoir surface elevation (feet) in Crane Prairie Reservoir measured at Hydromet Station CRA (OWRD station ID 14053500). DBHCP requirements apply October 1–31 and July 15–September 30 (shaded blue regions).

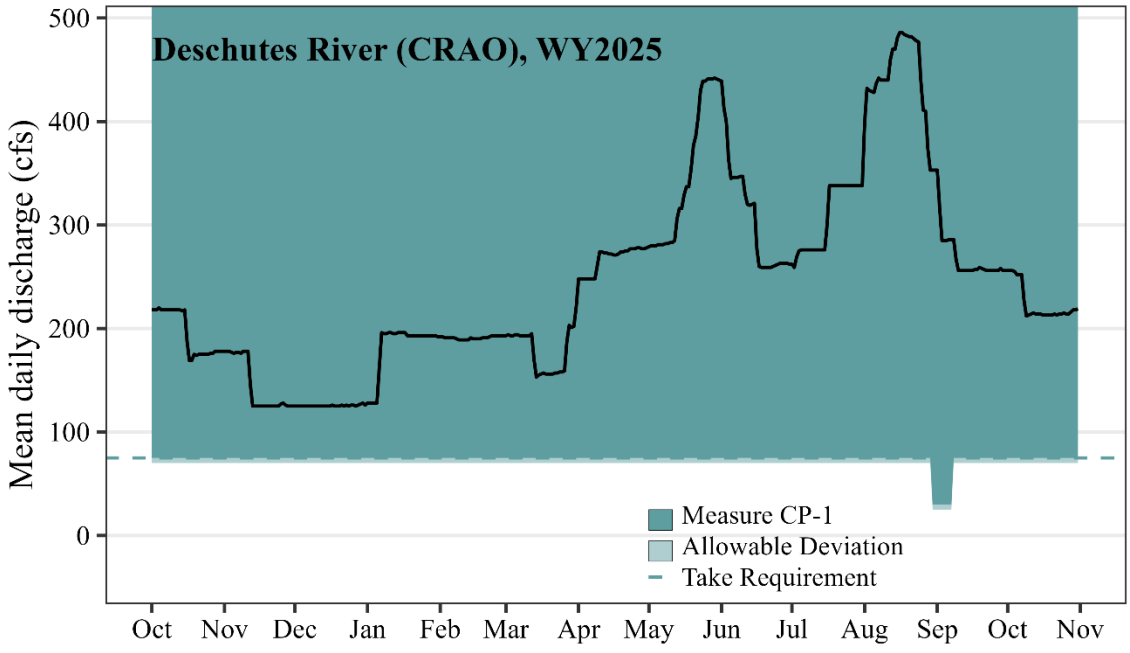


Figure 3: Deschutes River discharge (cfs) below Crane Prairie Reservoir measured at Hydromet Station CRAO (OWRD station ID 14054000). The dashed line indicates the 75 cfs minimum required under the Incidental Take Permit, which drops to 30 cfs when WSE is not met.

Effectiveness Monitoring

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

Permittees provided three qualified biologists to conduct OSF egg mass counts at Crane Prairie Reservoir in close coordination with USFWS in 2025. The number of hours of qualified biologist time that were funded to support Adaptive Management Measure CP-1.1 are shown in Table 1. This includes time for field data collection and data processing under the direction of USFWS. Additionally, the Permittees provided a boat for crew access to the breeding habitat.

The Mount Hood Environmental (MHE) team visited the northern shore near Cow Meadow on April 6 to provide reconnaissance regarding potential breeding activity. No egg masses were observed during that brief survey, but it was established that the breeding habitat was open (ice free). Three MHE staff and three USFWS representatives returned to the north shore via watercrafts on April 24. The survey area included Cultus River to Cultus Creek, NW Bay, and NE Bay. Egg masses were generally in late stages of development or hatched out. Due to the degraded state of many egg masses, the number of masses in each cluster was likely a significant underestimation. All oviposition sites were marked with pin flags and data were reported directly to USFWS via ArcGIS Survey123 using the USFWS egg mass survey form. Submitted data are provided back to MHE following QAQC from USFWS. A detailed report of the annual egg mass survey is submitted with this report in Attachment D: EggMassMonitoringReport_WY2025.pdf.

Adaptive Management Measure CP-1.2 (Drawdown Monitoring)

Crane Prairie drawdown was intensively monitored during the first two years of implementation (2021 and 2022) to document any observations of OSF stranding (DBBC 2022, 2023). Monitoring is required in two of ten years thereafter; however, this task was not requested by USFWS in 2025. Like Water Years 2023 and 2024, this decision was the result of observations made during the spring breeding survey which indicated that there was a very low risk for stranding larval frogs.

Adaptive Management Measure CP-1.3 (Vegetation monitoring)

This task supports adaptive management of the operating regime for Crane Prairie Reservoir in Conservation Measure CP-1 by determining the total area of breeding/rearing/nonbreeding habitat in Crane Prairie Reservoir within the first 5 years of implementation. The interpretation of baseline 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 of habitat or species composition of the vegetation.

In accordance with Adaptive Management Measure CP-1.3, orthophotography and vegetation surveys occurred in 2021 along the northern shoreline of Crane Prairie Reservoir. Vegetation mapping was completed by MHE and Smayda Consulting during 2023 and early 2024. Mapping incorporated data from vegetation surveys, orthophotography, and existing LiDAR to create a baseline assessment of the area and type of wetland habitats present at Crane Prairie Reservoir.

Suitable breeding habitat for the OSF was also mapped and quantified within the operational minimum and maximum surface water elevations that coincide with the OSF breeding and rearing period. Detailed reporting of vegetation mapping was included with the submission of the 2023 and 2024 Annual Reports (DBBC 2024, 2025; Smayda et al. 2024).

During annual OSF monitoring coordination in 2025, USFWS requested that the mapping and vegetation monitoring be deferred to 2027 (Attachment C: OSFMonitoringCoordNotes_20250529.pdf). The rationale was that sufficient time had not passed to detect changes since the baseline conditions from 2021 were reported.

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)

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).

Midnight storage volumes for Wickiup Reservoir (Hydromet Station WIC) along with daily average flow in the Deschutes River downstream of Wickiup Reservoir (Hydromet Stations WICO and BENO) from October 1, 2024 through September 30, 2025 are submitted in supplemental materials, Attachment A: Wickiup_WY2025.xlsx. 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. Flow metrics that were outside the allowable range of deviation for Conservation Measure WR-1 are indicated in Attachment A: Wickiup_WY2025.xlsx, including the rationale or explanation for those deviations and any remedial actions taken. Email notifications of compliance deviations or other operational coordination with USFWS are included in supplemental materials, Attachment B (Wickiup).

Compliance with Item J was determined using a rolling average of water surface elevations (WSE; measured every 15 minutes at Hydromet station WICO) to calculate the rate of change for 4-hour and 12-hour periods (Attachment A: WickiupItemJ_WY2025.xlsx). The rate of change in WSE at WICO exceeded the allowable deviations allowed under Item J of WR-1 during three days during Water Year 2025: April 14, May 22, and May 23. Explanations for each deviation are noted in Attachment A: Wickiup_WY2025.xlsx and are summarized as follows:

- **April 14, 2025**: The rate of increase was > 0.1. As NUID began transitioning from 400 cfs to 600 cfs, the District was only using one outlet tube. During the opening and operation of the second tube, a mechanical problem resulted in Item J (maximum rate of increase) to be outside the allowable deviation for ~1 hour from 7:30–8:30 AM. This issue was swiftly corrected and USFWS was notified via email, and it was discussed during monthly coordination on April 17, 2025.

- **May 22-23, 2025**: On May 22, an increase in outflow was made at 8:25 AM and changes in water surface elevation were > 0.18 ft/4-hour period for the 4-hour period between 7:00 AM and 11:00 AM. On May 23, the period in which the ramping rate exceeded the allowable deviation coincided with the flows becoming > 800 cfs, which is the threshold for when Item J no longer applies. Since there is no clear guidance in the HCP for monitoring ramping rates as flows transition to 800 cfs, ramping rates were discussed in a meeting with USFWS on June 18 (Attachment C: Coord Notes Final_20250618.pdf) followed by a meeting on July 1 to discuss the issue in detail (Attachment C: WR-1J_Coord Meeting Notes_20250701.pdf). Given the OSF life stages present downstream of WIC during the ramping rate deviations, there was no clear biological concern and therefore no remedial actions were requested by USFWS.

Additionally, Item J requires that during the fall ramp-down (September 15–October 31) the flow reduction at WICO must be halted for five days when flows at BENO reach 1,200 and 1,100 cfs. It is noted that this ramp-down period can span consecutive water years and the ramp down flow schedule during October 2024 was reported in the annual report for Water Year 2024 (DBBC 2025) while ramp down flow schedule during October 2025 is included in this report. Flows registered at WICO during the fall period, when ramp down occurs, are generally lower than actual flow due to vegetation die-off and increasing head pressure at the gage (Attachment B: WICKIUP/WIC_20241030.pdf). To reconcile this issue, OWRD conducts measurements at WICO multiple times per month and makes shifts to the station's rating curve. Those shifts are eventually reflected on Hydromet over several months. Due to the retroactive changes to Hydromet data and the timing of the Permittees annual reporting, data reported during the fall ramp down period may be updated after annual report submission. For this reason, the Permittees include data for both October 2024 and October 2025 in Attachment A: Wickiup_WY2025.xlsx.

In October 2025 (Water Year 2026), the fall ramp-down schedule was determined in coordination with USFWS (see Attachment C: September and October meeting notes) and is summarized as follows:

- **October 3-7**: Reduced flows at BENO; held for five days between 1,260 and 1,200 cfs.
- **October 8**: Reduced flows at BENO.
- **October 9-13**: Flows were held for 5 days 1,150 cfs.
- **October 14 -26**: Began ramp down to winter target flow, 103–105 cfs at WICO.
- **October 26**: Target flow of 105 cfs at WICO.

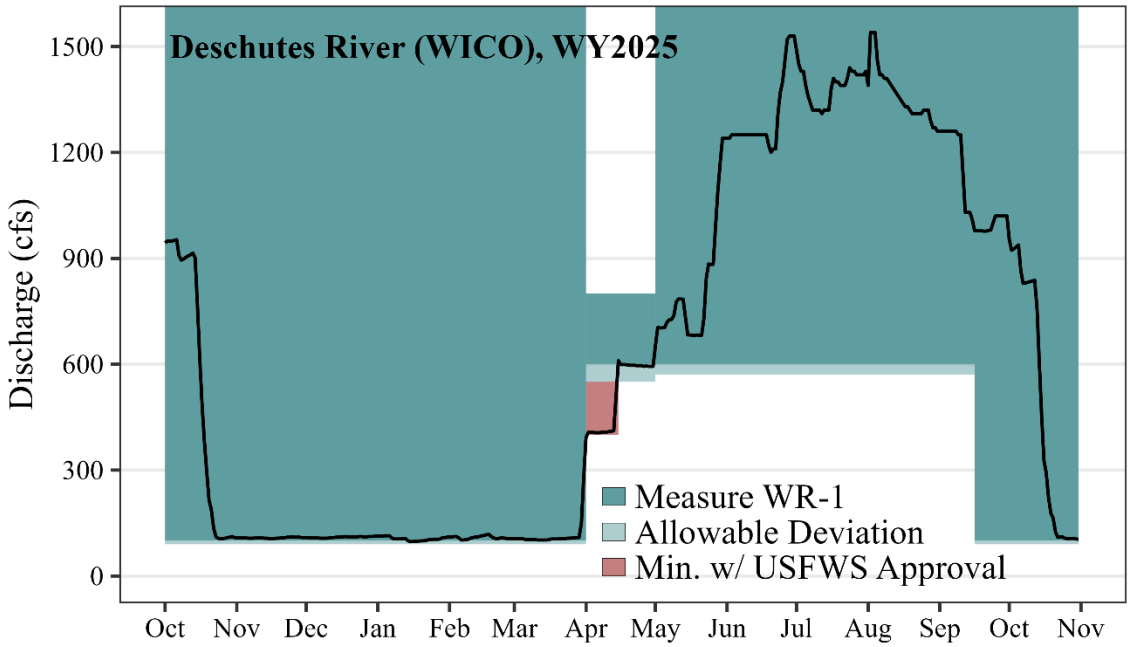


Figure 4. Deschutes River discharge below Wickiup Dam (OWRD station ID 14056500). The minimum flow between April 1 and April 15 can be modified below 600 cfs with USFWS approval.

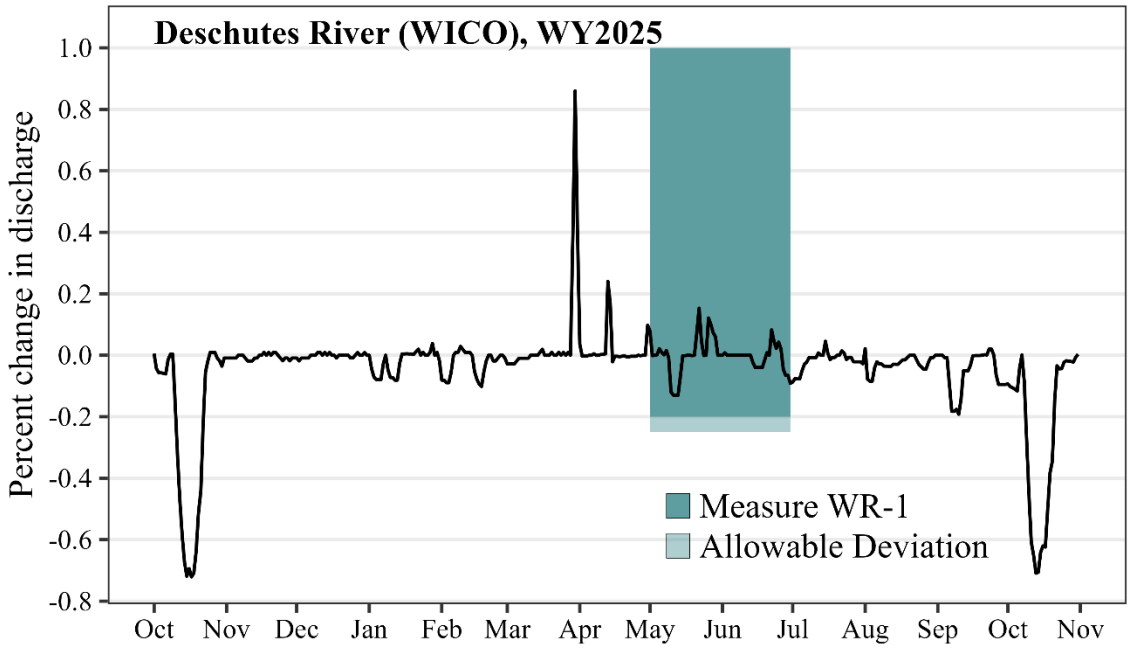


Figure 5. The percent change in Deschutes River discharge below Wickiup Dam (OWRD station ID 14056500).

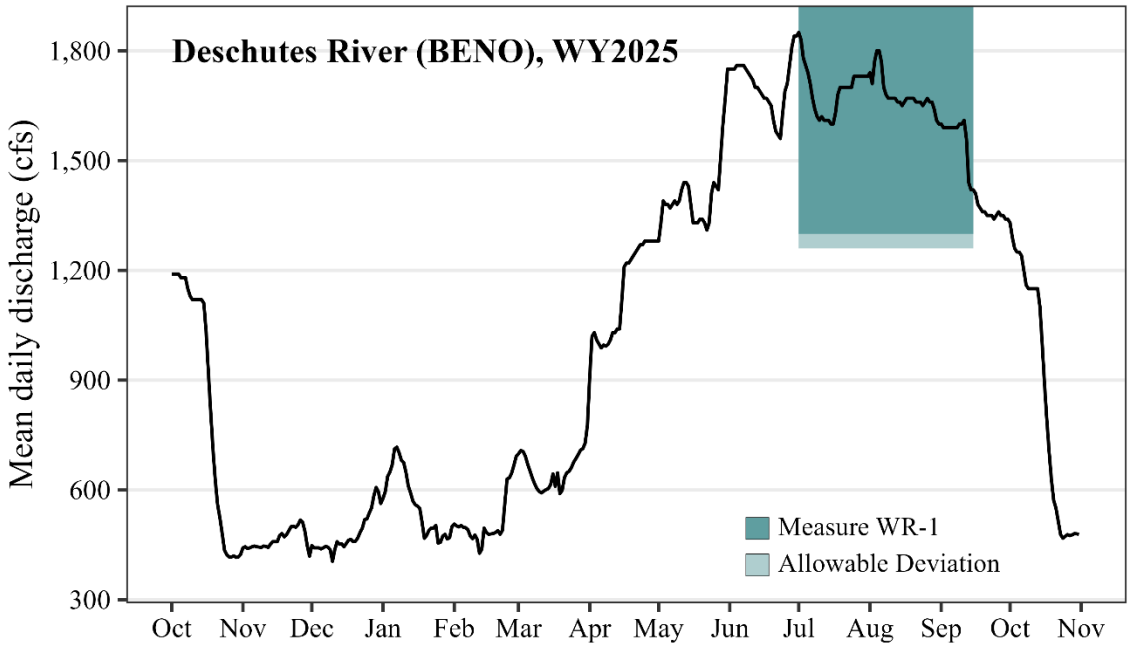


Figure 6. Mean daily discharge (cfs) in the Deschutes River at Benham Falls (OWRD station ID 14064500).

Conservation Measure WR-1 (Conserved Water)

COID's conserved water during the 2024 irrigation season amounted to 7,701 acre-feet of Wickiup Reservoir storage to be made available for OSF purposes in Water Year 2025. OWRD subsequently applied losses to that balance throughout the season that resulted in a total of 6,814 acre-feet (after losses) in its Storage Report for the period 9/1–9/14. Since that report was published 10 days prior to the start of releases from that storage water on 9/24, additional losses were applied to the total such that the final balance available for OSF purposes was 6,696 acre-feet. This stored water was subsequently called on by USFWS and released as instream flows in 2025 from September 24 to September 30 and from October 2 to October 3, when it was depleted (Attachment B: USFWS_20250923).

Conserved water during the 2025 Water Year amounted to 19,223 acre-feet which will be stored during the winter storage season and released in 2026 prior to the end of the 2026 irrigation season in coordination with USFWS.

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 (to support WR-1 Item D). As per USFWS's request in 2023, NUID will notify the Permittees' consultant at least 24 hours before NUID intends to reduce the flow during the period covered in this conservation measure to allow for a site visit to Dead Slough, if needed. 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).

There were no instances during the 2025 water year when the change in flow at WICO (calculated as the rate of change over a rolling five-day period), was outside of the requirement or allowable deviation for Conservation Measure WR-1 Item D (Figure 5). No monitoring requests were made by USFWS to assess the habitat conditions at Dead Slough. Flows and percent change in flow at WICO are included in Attachment A: Wickiup_WY2025.xlsx.

While no monitoring at Dead Slough occurred in 2025, Permittee funding for monitoring tasks WR-1 (Dead Slough Monitoring), CC-1, WR-1.1, and WR-1.2 were used to support habitat suitability analyses along the Deschutes River. The reallocation of funding was decided in coordination with USFWS and to fulfill its request to utilize allocated funding for alternate tasks. *See* DBBC (2024) for additional documentation.

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

Implementation of the Deschutes Basin Habitat Conservation Plan (DBHCP) necessitates Permittees to provide qualified biologists to fulfill specific conservation and adaptive management measures in cooperation and agreement with USFWS. An analysis of OSF habitat suitability along the upper Deschutes River below Wickiup Dam (HCP 7.2.2.1) is required in year 1 (Water Year 2021) and every 5 years thereafter for the term of the DBHCP. Habitat suitability analyses were initially conducted in 2022 (Blackman et al. 2022). USFWS requested that Permittees' funding for DBHCP monitoring tasks WR-1, CC-1, WR-1.1, and WR-1.2 be reallocated to conduct additional habitat suitability analyses. Accordingly, the East Slough and Dead Slough sites, along the Deschutes River, were selected for monitoring by USFWS in 2023 (Blackman and Mackey 2024; Blackman et al. 2024). The East Slough analysis was intended to span multiple years and was expanded in 2024 and 2025 in coordination with USFWS.

The habitat suitability study at East Slough is intended to capture the potential effects of Deschutes River flow changes scheduled in years 1, 8, and 13 of the DBHCP on existing vegetation. There will be four major components to this study: (1) uncrewed aerial vehicle remote sensing to capture high-resolution imagery, (2) vegetation mapping: plant associations and breaks within OSF habitats, (3) photogrammetric processing and analysis, and (4) groundwater monitoring. Using these four components over multiple growing seasons, the Permittees will address the following research questions:

1. What is the baseline condition of OSF habitat at East Slough during the first phase of DBHCP implementation?
2. Is vegetation changing as implementation of the DBHCP proceeds?
    a. What is the relationship between wetland plant associations and Deschutes River flow?

The work conducted in 2025 aimed to refine the vegetation mapping completed in 2023 by improving the precision of spatial data and continue groundwater monitoring via wells installed in select breeding areas. The East Slough habitat suitability report, which includes all preliminary monitoring results, is included in supplemental materials Attachment D (EastSlough_WY2025.pdf).

Effectiveness Monitoring

Adaptive Management Measure WR-1.1 (Pre-breeding Activity Along the Upper Deschutes)

Permittee biologists were available for the field assessment described in Adaptive Management Measure WR-1.1, but it was not requested by USFWS in 2025 (Attachment C: OSFCoordNotes_20250301.pdf). Under prior arrangement, Permittee funding for this measure was then reallocated to support an ongoing habitat suitability analysis at East Slough. OSF survey coordination notes from the May 29, 2025 meeting (Attachment C: OSFCoordNotes_20250529.pdf) document coordination on this task.

Adaptive Management Measure WR-1.2 (Monitoring OSF Egg/Larvae Survival Along the Upper Deschutes River)

Adaptive Management Measure WR-1.2 was developed to be implemented if the Permittees proposed a decrease in flow ≥ 30 cfs when the flows at WICO are above 600 cfs during April. Flows slightly exceeded 600 cfs in mid-April (Figure 4) however there were no proposed or implemented reductions in flow ≥ 30 cfs. USFWS did not request monitoring OSF egg/larvae survival in Water Year 2025. However, the Permittees' biologists were requested to assist in breeding surveys at the East Slough wetland complex. A boat and two qualified biologists assisted USGS personnel survey the large wetland complex on April 17, 2025. Data collected from those surveys were submitted directly to USFWS by USGS. The remaining hours allocated for Adaptive Management Measure WR-1.2 were utilized to support habitat suitability analyses at East Slough.

Adaptive Management Measure WR-1.3 (Variable Flow Tool)

Development of the variable flow tool is required by year 10 of implementation.

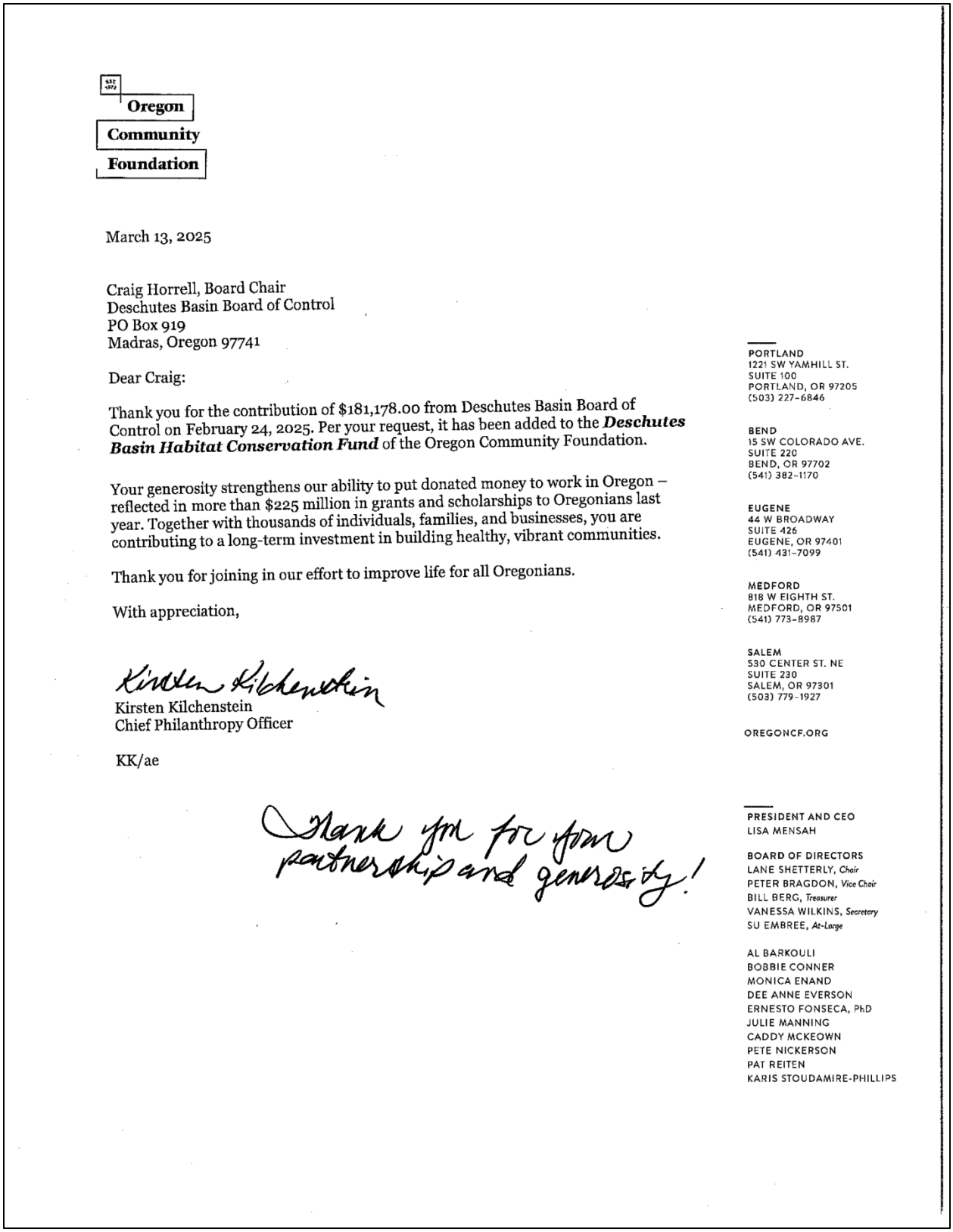
Upper Deschutes Basin

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)

The DBHCP Permittees' contribution to the Upper Deschutes Basin Conservation Fund was posted on February 24, 2025, in the total amount of $181,178 (Figure 7) sent to the Oregon Community Foundation. The Conservation Fund payment was adjusted by +20.785% based on the change in the CPI for all west urban consumers between 2020 and 2024. Inflation adjustments are based on the market basket values in December published by the U.S. Bureau of Labor Statistics (USBLS 2024).



Oregon Community Foundation

March 13, 2025

Craig Horrell, Board Chair
Deschutes Basin Board of Control
PO Box 919
Madras, Oregon 97741

Dear Craig:

Thank you for the contribution of $181,178.00 from Deschutes Basin Board of Control on February 24, 2025. Per your request, it has been added to the ***Deschutes Basin Habitat Conservation Fund*** of the Oregon Community Foundation.

Your generosity strengthens our ability to put donated money to work in Oregon – reflected in more than $225 million in grants and scholarships to Oregonians last year. Together with thousands of individuals, families, and businesses, you are contributing to a long-term investment in building healthy, vibrant communities.

Thank you for joining in our effort to improve life for all Oregonians.

With appreciation,

Kirsten Kilchenstein
Chief Philanthropy Officer

KK/ae

Thank you for your partnership and generosity!

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MEDFORD, OR 97501
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Figure 7. Payments from DBHCP 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 station ID 14070500) below Bend.

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

Conservation Measure DR-1 requires reporting on daily average flow data for the preceding November 1 through March 31 at Benham Falls and will identify all daily average flows less than the required 250 cfs and allowable deviation of 225 cfs during stock water runs.

All daily average flows in the Deschutes River below Bend (Hydromet Station DEBO) were within the allowable deviation of 225 cfs from November 1, 2024 through March 31, 2025, including periods when stock water runs were occurring. Therefore, all stock water runs in Water Year 2025 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: MidDeschutes_WY2025.xlsx of this report.

Crescent Creek and Little Deschutes River

Compliance and Implementation Monitoring

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

Conservation Measure CC-1 (Crescent Creek Flow Management: OSF Storage)

The DBHCP Conservation Measure CC-1 specifies volumes of storage in Crescent Lake Reservoir to be made available for OSF conservation (OSF storage). Reporting for this measure includes the volume of water in Crescent Lake Reservoir available for OSF 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).

The total storage volume in Crescent Lake Reservoir on July 1, 2024 was 21,340 acre-feet, resulting in 5,264 acre-feet of Crescent Lake storage to be made available for OSF conservation in Water Year 2025 (DBBC 2025). Storage season releases from the reservoir enabled TID to maintain releases of 50 cfs or more from June 28 through September 23, which supported OSF habitat in lower Crescent Creek and in the Little Deschutes River. USFWS did not call on the OSF water, which has been the case in past years of DBHCP implementation, and directed TID to manage its storage and releases to ensure sufficient water to maintain flow in Crescent Creek during the winter. Additionally, the fall ramp down occurred two weeks after TID patrons had ceased irrigation activities which provided instream flow benefits that supported OSF habitat prior to the transition to storage season from September 19–26.

The total storage volume in Crescent Lake Reservoir on July 1, 2025 was 30,754.33 acre-feet, calculated as the three-day average storage volume between June 29 to July 1. 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 OSF conservation in Water Year 2026. As in past water years, it is possible that low storage volumes in the reservoir will preclude storage releases in 2026.

Conservation Measure CC-1 (Crescent Creek Flow Management)

The DBHCP Conservation Measure CC-1 specifies minimum flows and allowable ranges of deviation for flow in Crescent Creek during both irrigation and storage seasons. The DBHCP requires 10 cfs or more during the storage season (October 1 through June 30) with an allowable deviation of 9 cfs. During the irrigation season (July 1 through September 30), flows below Crescent Dam flow must remain at or above 50 cfs with an allowable deviation of 45 cfs.

During Water Year 2025, flow below Crescent Dam fell below the storage season minimum on 18 days (Attachment A: CrescentLake_WY2025.xlsx, Figure 8). All instances occurred in

October 2024, and flows fell to 8 cfs. During this time OWRD made a gage shift and TID attempted to make adjustments to maintain the instream minimum. Since TID did not know the magnitude of the shift, they were unable to meet the 10 cfs until the new rating curve became available. In November, TID reported to USFWS that (Attachment B: TID_20241120) the gage (station 14060000) was frozen and that flows were below the CC-1 minimum, despite the flow being set at 10 cfs. However, Hydromet data indicates that instream minimums were met. This discrepancy was likely the result of a shift to the rating curve made by OWRD, which subsequently updated the data on Hydromet.

TID maintained releases of 45 cfs or more through the active irrigation season from mid-June through late-September. As with the prior two years, TID proceeded with an early ramp-down and transition to storage season in coordination with USFWS (Attachment C: Coord Notes Final_20250918), beginning on September 19. This earlier start to storage season ensures water would be available for winter releases given the low storage volume. The early transition to storage season accounted for all flows below the irrigation season allowable deviation, which occurred from September 25–30. During the ramp down period, all flows remained above the instream minimum for storage season (10 cfs).

All reported daily average flows in Crescent Creek below Crescent Lake Dam (Hydromet Station CREO) for Water Year 2025 are included in Attachment A: CrescentLake_WY2025.xlsx. This file indicates any flow below the allowable deviations specified in CC-1 and explanations for such deviations.

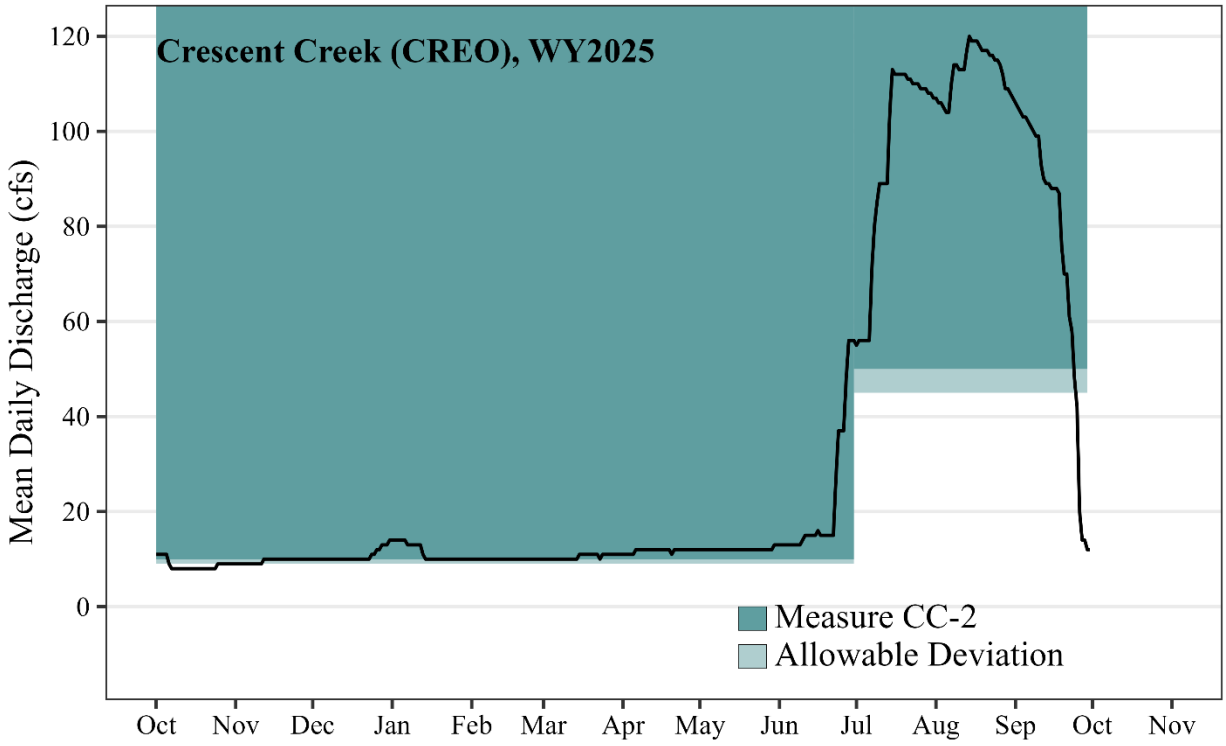

Figure 8. Mean daily discharge (cfs) in Crescent Creek below Crescent Lake. Data provided by Hydromet Station CREO (OWRD station ID: 14060000).

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

The gage downstream of Big Marsh Creek (aka "Highway 58 gage") was not instrumented with the capability to provide real-time data during Water Year 2025. Data was submitted to the Services monthly throughout the water year, except in November, when a solar panel needed to be replaced. Continuous flow measurements are provided in Attachment A: CrescentLake_WY2025.xlsx and summarized in Figure 9.

Due to the gage's reliance on a solar panel for power, it failed to record measurements during periods of heavy snow that covered the panel and subsequently drained the battery. Snow-related battery outages account for missing data between December 2024 and March 2025. Additionally, ice covering the surface of the stream during the winter and early spring resulted in numerous erroneous records. For example, between November 28 and December 4, ice covering the stream caused the gage to register a flow increase from 96 cfs to > 1,289 cfs. Increases in flow at the downstream LAPO gage never exceed 400 cfs during this period, confirming that flows are not accurate at the Big Marsh gage during winter conditions. Given the high-elevation location of the gage, the effects of snow and ice on the data and battery are unavoidable. However, data recorded outside periods of snow and ice should remain reliable.

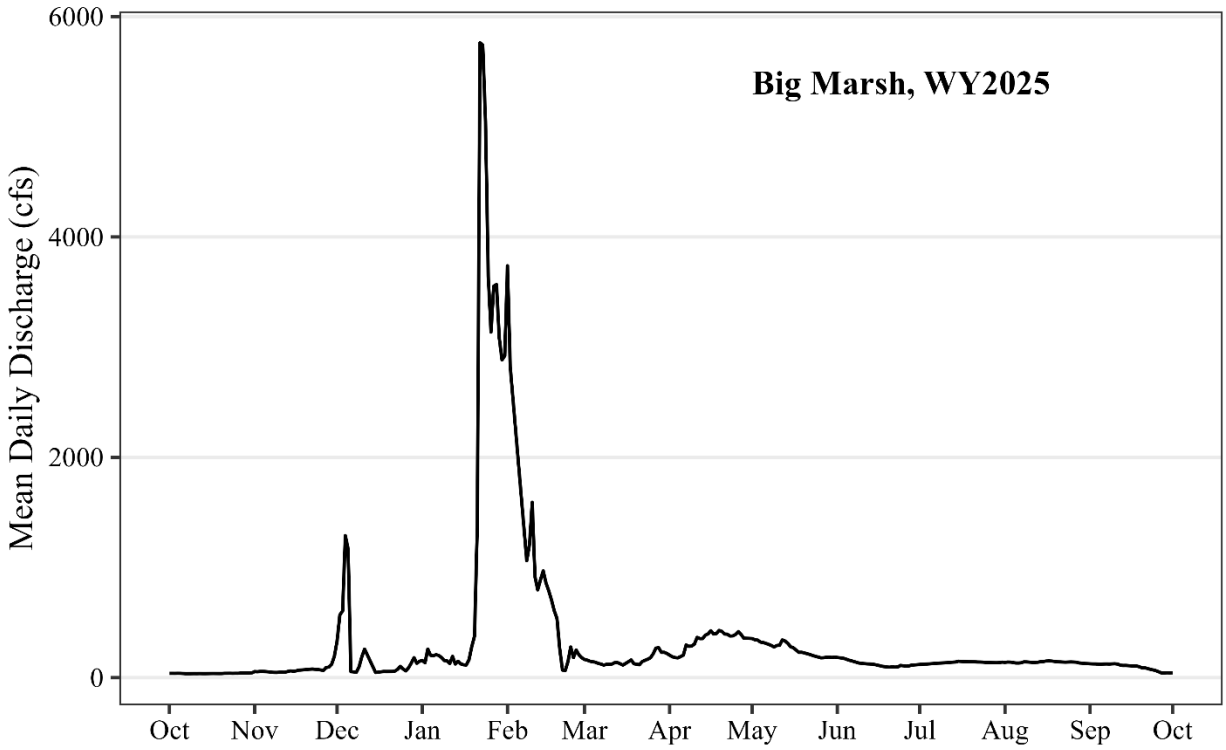

Figure 9. Mean daily discharge (cfs) in Crescent Creek downstream of Big Marsh Creek.

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

Permittees funded two qualified biologists to conduct OSF egg mass counts at Crescent Creek and Little Deschutes River breeding sites during Water Year 2025. The total hours that were funded to support field data collection and data processing are shown in Table 1.

OSF egg masses were surveyed at two long-term monitoring sites on Crescent Creek (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 was collected by the Permittee-funded biologists and uploaded directly to USFWS via Survey123 for incorporation into the USFWS regional database. These data are summarized in detail within the 2025 egg mass survey report submitted to USFWS with this annual report (Attachment D: EggMassMonitoringReport_WY2025.pdf).

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

Starting in Year 1 (2021) and repeating every 3 years for the term of the DBHCP, TID is required to fund qualified biologists to check known OSF breeding sites along Crescent Creek and Little Deschutes River for rearing OSF in May/June (early rearing period) to determine if stranding is occurring. In 2023, Permittee-funded biologists monitored for stranding and reported results directly to USFWS. Monitoring will proceed on the regular 3-year interval and will resume in 2027, unless directed otherwise by USFWS.

Conservation Measure CC-1 (Habitat Suitability Crescent Creek)

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 OSF habitat suitability analyses at up to three sites selected by USFWS along Crescent Creek and/or Little Deschutes River. 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 results from that assessment were reported in DBBC (2023) and Blackman et al. (2022).

Monitoring for this conservation measure will be conducted in 2026 on Crescent Creek at an OSF breeding site near Highway 58 and will include an analysis of the hydrographs from Big Marsh and Crescent Creek. This site was selected by USFWS in 2025 (Attachment C: OSFCoordNotes_20250529.pdf) to establish baseline conditions.

Conservation Measure CC-2 (Crescent Dam Ramping Rates)

Conservation Measure CC-2 specifies that TID will not increase the flow below Crescent Dam (as measured at OWRD Gage 14060000) more than 30 (±2) cfs per 24-hour period or decrease the flow more than 20 (±2) cfs per 48-hour period, except under emergency conditions.

The ramping rate below Crescent Dam was outside the required ranges of allowable deviation specified in Conservation Measure CC-2 on September 26 and September 27, 2025 (Attachment A: CrescentLake_WY2025.xlsx). The rapid decrease in flow occurred during the scheduled ramp down and was the result of an electrical problem with the gate. That issue caused a brake failure which continued dropping the gate. The gate was repaired on September 29 during the annual inspection and USFWS was notified of the issue and repair via email (Attachment B: CREEK/TID_20250929.pdf).

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

The 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.

TID notified the USFWS that it intended to end the irrigation season by September 26 and begin ramping down on September 19 (Attachment B: CRESCENT CREEK/TID_20250915.pdf). The ramp down and transition to storage season occurred September 19–29. Ramp down was completed by September 29, 2025, and the winter releases were set at 10 cfs.

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)

Conservation Measure WC-1 requires reporting of 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 permanent instream transfers of TSID irrigation rights completed during the 2025 calendar year.

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

Conservation Measure WC-1 requires TSID to pass specified amounts of water at its primary diversion that are determined by the proportionality calculator developed by TSID and the Deschutes River Conservancy (DRC). Compliance with this Conservation Measure was evaluated using instream flow minimums determined by the DRC.

During Water Year 2023, an alternate proportionality calculator tool was developed by the DRC and MHE and approved by USFWS to improve the transparency and availability of instream flow calculations. This application was designed to provide daily instream flow minimums based on the active permanent and temporary leases. However, the DRC did not utilize the new calculator in 2024 or in 2025 and instead used its previous method, “Quickcheck” spreadsheets. Those spreadsheets contained instream flow minimums that were subsequently approved by USFWS throughout the 2025 water year. As a result, compliance with Conservation Measure WC-1 was evaluated using the “Quickcheck” instream flow minimums.

As with previous years, flow data was not available for OWRD station ID’s 14076001 and 14076010 to use for diversion management in Water Year 2025. Instantaneous flow data in Whychus Creek above and below the TSID diversion were available throughout the year from OWRD station ID’s 14075000 and 14076020, respectively, and were used to guide diversions in compliance with the DBHCP. Hourly flow data from station ID’s 14075000 and 14076020 are provided in Attachment A: WhychusCreek_WY2025.xlsx, submitted with this report.

Flows below the TSID diversion fell below 23 cfs on 49 instances (hours) during Water Year 2025. All those instances occurred in October and November during 2024, prior to the implementation of TSID’s low-flow alarm system (Attachment B:

WHYCHUS/TSID_20241203.pdf). Of those deviations, only 12 instances were > 1 cfs below the 23 cfs instream minimum. When required instream minimums were > 23 cfs, there were 39 instances (hours) when flows in Whychus Creek fell below the minimums. All but one hour of those deviations were related to a faulty modem affecting the availability of SCADA data from July 16–20 as well as on August 14 while repairs were being completed. Instream minimum violations related to the modem were communicated to USFWS via email (Attachment B: WHYCHUS/TSID_20250721.pdf) and during a monthly coordination meeting (Attachment C: Coord Notes Final_20250821.pdf). In total, hourly flows below TSID's main diversion were below the DRC instream minimum on 88 of the 8,766 total hours in Water Year 2025, a significant improvement from past years. 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 in Attachment A: WhychusCreek_WY2025.xlsx.

Per Conservation Measure WC-1, a digital file containing the raw 15-minute data from OWRD station ID's 14075000 and 14076020 was also submitted with this report (Attachment A: WhychusCreekRaw_WY2025.xlsx). The processed instantaneous data for those same days (preliminary, provisional, or published) were not available from OWRD on September 30. The Permittees note that both raw 15-minute data and hourly data from these gages are missing flow values on some dates. For dates with missing hourly data, compliance was evaluated using the mean daily flows published by OWRD.

On November 20, 2024 TSID's president, vice-president, and acting general manager received a letter from the Services regarding implementation of the DBHCP (Attachment B: WHYCHUS/USFWS NMFS FINAL letter to TSID.pdf). Specifically, this letter summarized TSIDs instances of non-compliance with the terms and conditions of the Endangered Species Act incidental take permit (ITP) and the associated Deschutes River Basin Habitat Conservation Plan (HCP) and further summarized the remedial measures that TSID agreed to take during the discussions and correspondence that occurred during water years 2023 and 2024. Since the 2022 reporting year, TSID reporting and compliance violations have been discussed regularly and documented in all annual reporting. Additionally, TSID began regularly participating in the monthly coordination meetings in 2025, even though that is not a requirement of the DBHCP or the associated ITPs. Meetings are summarized below:

- **March 16, 2023** – TSID provided an update on annual reporting and remedial efforts to Implementation Team
- **June 29, 2023** – Meeting with the Services and TSID to discuss reporting and compliance violations
- **January 4, 2024** – Meeting with the Services and TSID to discuss status of annual report
- **February 15, 2024** – TSID provided an update on annual reporting and remedial efforts to Implementation Team
- **April 3, 2024** – Meeting with Services and TSID to discuss remedial solutions for compliance
- **August 22, 2024** – TSID provided an update on remedial efforts to Implementation Team

- **February 12, 2025** – Meeting with Services and TSID to discuss violation letter
- **August 21, 2025** – TSID provided an update on conservation measures and compliance
- **September 10, 2025** – USFWS met with TSID to conduct the annual screen inspection and discuss the status of conservation measures in the context of the non-compliance letter

TSID provided a response to the compliance letter from the Services on December 11, 2024 (Attachment B: WHYCHUS/Response to USFWS-NMFS FINAL letter to TSID.pdf) including an update on the actions being implemented to resolve compliance and reporting issues. As follow up to the discussion on February 12, 2025, TSID sent a summary of operational changes and infrastructure updates that were made in water years 2024 and 2025 to improve implementation to the Services on July 16, 2025 (Attachment B: WHYCHUS/TSID_Letter_20250708.pdf, Protocols for TSID Fish Screen Diversion Final.pdf). During the annual fish screen and passage inspection site visit, additional discussion and recommendations were made by USFWS regarding compliance and reporting issues identified in the non-compliance letter sent in November (Attachment B: WHYCHUS/TSID FWS Site Visit Memo Sept 2025.pdf). The recommendations relevant to WC-1 were to communicate with USFWS on the status of data access improvements and automated alert capabilities prior to the 2026 irrigation season.

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

Daily average flow and daily maximum water temperature data in Whychus Creek at Camp Polk Road (OWRD station ID 14076100) during Water Year 2025 are provided in supplemental materials, Attachment A: Whychus_CampPolk_WY2025.xlsx.

Changed and Unforeseen Circumstances WC-1 (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. Water temperature data collected at this location will be used to calculate the 7-day average of the daily maximum water temperature (7-DADM).

Water temperature in Whychus Creek at RM 6.0 is monitored by the Upper Deschutes Watershed Council (UDWC). Hourly water temperatures in Whychus Creek near RM 6.0 for the period April 2– October 17, 2025, are provided in Attachment A: WhychusTempData_006-00_UDWC.xlsx. This file was created by the UDWC and includes monitoring locations, hourly temperature data, and the DEQ QA/QC audits for the data. Both temperature data loggers that were deployed met the DEQ criteria and will be added to the water quality monitoring data available on the UDWC's website (Mork 2025). The 7-DADMs were calculated from both loggers (using whichever logger had the highest daily temperature each day) and are reported in Attachment A: WhychusRM6_Temp_WY2025.xlsx.

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

TSID made a financial contribution to the Deschutes River Conservancy on March 4, 2025, in the amount of $7,247.12 for the Temporary Instream Leasing Fund program. Instream leasing documentation and payment to the Deschutes River Conservancy are provided in Attachment E.

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

TSID is required to schedule one full day each calendar year for the Services to conduct annual inspection of the Whychus Creek diversion and associated fish screens. Every 5 years, beginning in Year 5 (2025) of the DBHCP, TSID will schedule a detailed evaluation of the Whychus Creek diversion and fish screens to be conducted by a qualified professional with appropriate fish screen and fish passage expertise who will provide visual examination of the facilities for damage and/or deterioration and measure water depth and velocity to verify the facilities are meeting their original design specifications. Additionally, TSID will report any difficulties/ deviations encountered implementing the TSID Diversion Screen Maintenance Plan during the preceding calendar year.

USFWS conducted the annual fish screen inspection on September 10, 2025. (Attachment B: WHYCHUS/TSID FWS Site Visit Memo Sept 2025.pdf). During the annual inspection, TSID personnel indicated that sediment that is removed at least annually from the diversion, and stockpiled near the site, will be put back into the stream channel at the diversion to mitigate channel incision from reduced sediment load. This action is being coordinated between the U.S. Forest Service (USFS) and TSID per the TSID Diversion Screen Maintenance Plan (DBBC 2020b). USFWS also recommended additional discussion between TSID and the USFS fish biologist to identify an appropriate location for stream access with large equipment and placing this material back instream in lieu of stockpiling.

The 5-year detailed inspection did not occur in 2025. TSID notified USFWS that it was planning to schedule the inspection in April of 2026, when flows were more suitable.

Conservation Measure WC-4 (Piping of Patron Laterals)

TSID must report to the Services the miles of patron laterals that were piped and the associated reductions in seepage losses during the preceding calendar year.

In 2025, TSID continued piping the Cloverdale Ditch. This work was included as part of an application for the allocation of conserved water with OWRD (application CW-137). That application resulted in conserved water in the amount of 0.33 cfs to be issued by OWRD as an instream water right on April 22, 2024. There is currently one mile remaining of the 65 total miles that will be piped for this project.

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

Conservation Measure WC-5 specifies when the flow in Whychus Creek downstream of TSID's diversion (measured at OWRD station ID 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 station ID's 14076001 and 14076010 for diversion management in 2025 and no data is 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 station ID's 14075000 and 14076020, respectively, and were used to guide diversions in compliance with this conservation measure.

Ramping rates were evaluated from average hourly flow data at OWRD station ID's 14076020 and 14075000 and reported in Attachment A: WhychusCreek_WY2025.xlsx. There were six total instances (hours) during Water Year 2025 when ramping rates exceeded 10 cfs below the TSID diversion when flows were between 30 cfs and 50 cfs. Of those instances when ramping rates exceeded 10 cfs, five instances were due to the fish screen being blocked with debris and then clearing suddenly; in all cases the issue was resolved as soon as the screen blockage was removed. The remaining instance was due to a combination of late-season low-flow conditions and operational diversion adjustments during fall shoulder season which resulted in a one-hour rate-of-change deviation. Conditions stabilized as adjustments were completed.

There were four instances (hours) when ramping rates exceeded 5 cfs while flows below the TSID diversion were < 30 cfs; all of which occurred in October 2024. These deviations were also due to a combination of late-season low-flow conditions and operational diversion adjustments during fall shoulder season and stabilized as adjustments were completed.

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

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. These contributions will total $10,000 (adjusted annually for inflation), which amounts to $12,079 in 2025. Under prior agreement with USFWS, TSID may use a two-year rolling average of its direct financial and in-kind contributions to meet the requirements for Conservation Measure WC-6, acknowledging that in-kind work is often opportunistic.

In 2025, in-kind riparian channel restoration work near Camp Polk included 16 hours of labor and 20 hours of equipment rental and materials to mitigate erosion in Whychus Creek near Runco. This work amounted to a financial value of $1,726, which was calculated using the equipment rental and labor costs, paid by TSID. Rates for labor, rentals, and material are provided in Attachment E: TSID_InKind_WY2025.pdf. Additionally, several projects that will

address flooding that occurred in 2025 will be initiated in 2026. That work will be coordinated with UDWC and USFS.

Conservation Measure WC-7 (Plainview Dam 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.

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

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

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

Conservation Measure CR-1 specifies that OID will provide live flow and/or storage from its account, as needed. This will enable Reclamation to maintain a daily average flow of 50 cfs ±10% allowable deviation at OWRD station ID 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.

Daily average flow was above 50 cfs at Hydromet Station PRVO for the entire 2025 water year (Figure 10). Discharge data at PRVO for the water year is reported in Attachment A: CrookedR_CR1_WY2025.xlsx, submitted with this report. The Services (USFWS and NMFS) jointly proposed an annual release schedule for the uncontracted (fish and wildlife) storage account and contracted City of Prineville groundwater mitigation account for the period between June 10, 2024 and April 14, 2025 (Attachment B: CROOKED RIVER/CR_FlowRec_20240723.pdf) per the Crooked River Collaborative Water Security and Jobs Act of 2014 (Crooked River Act). The recommended instream flow targets to be maintained at CAPO were 60 cfs from October 1–14, 2024 and 100 cfs from October 15, 2024–April 14, 2025 (storage season). From October 1–14, releases from Bowman Dam were above 60 cfs (range 68–196 cfs) and ramping toward 100 cfs began October 15. From October 16, 2024–April 14, 2025, releases from Bowman Dam maintained the flow at CAPO at or above 99 cfs. It is noted that there is no DBHCP conservation measure or reporting requirement associated with the Crooked River Act; however, implementation of the flow recommendations is intended to have substantial benefit to the covered fish species.

In their final recommendation for the 2025 irrigation season, the Services advised maintaining a flow of approximately 80 cfs as measured at the CAPO gage near the City of Prineville until irrigation ends (on or about October 15) and then maintain approximately 100 cfs at CAPO during the storage season, roughly October 16, 2025 through April 14, 2026 (Attachment B: CROOKED RIVER/CR_FlowRec_20250630.pdf). This recommendation is intended to provide spring Chinook, steelhead, and redband trout habitat during the irrigation and storage seasons.

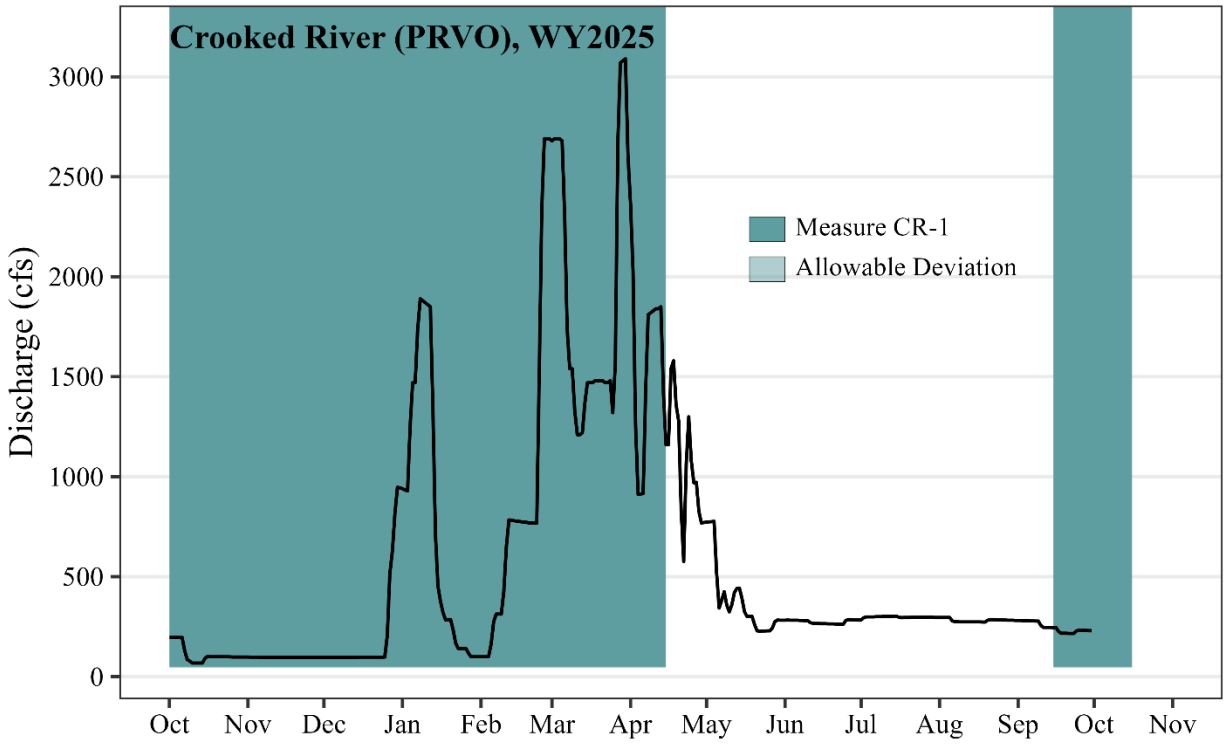

Figure 10. Crooked River discharge below Bowman Dam (OWRD station ID 14080500).

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 OID requires 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.

During the 2025 water year, sufficient storage was available in Ochoco Reservoir to contribute the required hourly flows per measure CR-2 (Figure 11). Flow at OCHO fell below the allowable deviation of 2.7 cfs for several hours on October 21, 23, and 24, 2024 due to a gage malfunction. USFWS was notified via email, and the issue was swiftly addressed (Attachment B: CROOKED RIVER/OID_20241021.pdf). For roughly five hours on December 10, 2024 the flow at OCHO fell below the allowable deviation of 2.7 cfs due to a technical issue with the gage. The momentary drop was reported to USFWS via email during the event (Attachment B: CROOKED RIVER/OID_20241210.pdf) and required maintenance by OWRD (Attachment C: Coord Notes Final_20241219.pdf). For all other dates, reservoir volumes were sufficient and OID met the requirements of Conservation Measure CR-2.

In accordance with monitoring and reporting requirements for Measure CR-2, average hourly flows at OCHO (OWRD station ID 14085300) and daily flows for river mile (RM) 4.7 are provided in Attachment A: CrookedR_CR2 _WY2025.xlsx.

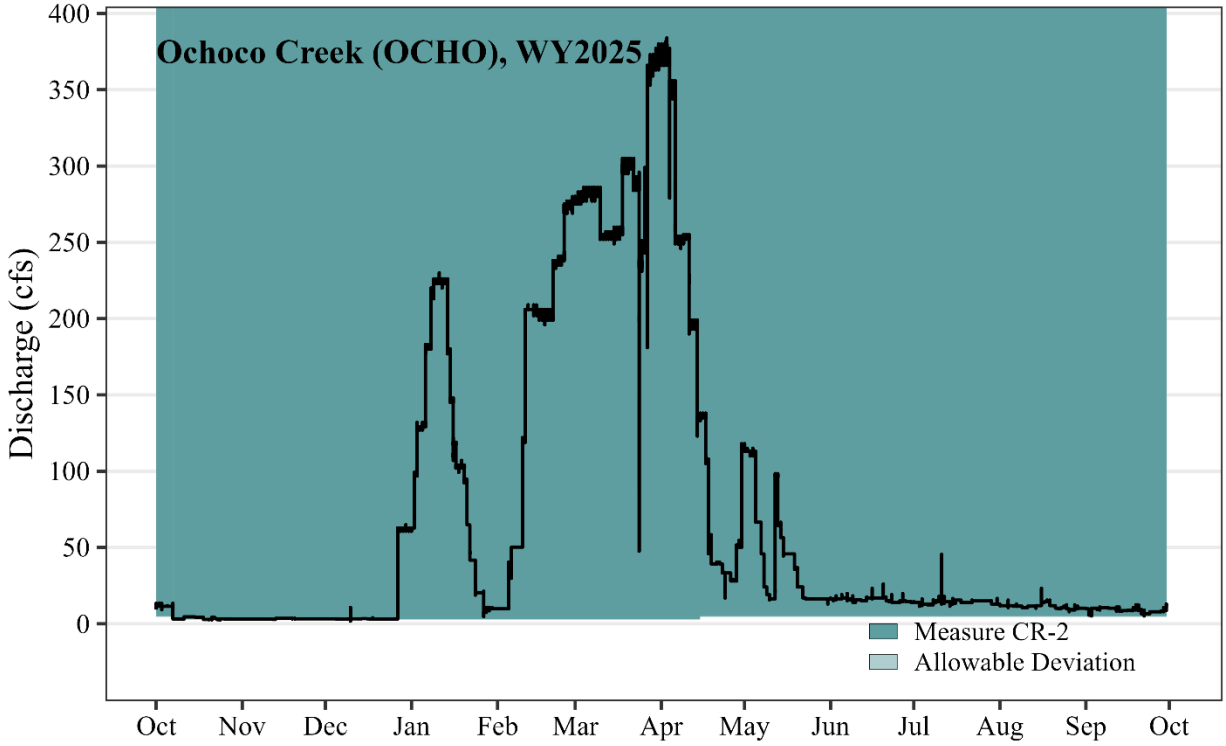

Figure 11. Ochoco Creek hourly discharge below Ochoco Dam (OWRD station ID 14085300).

Conservation Measure CR-2 (Flow Monitoring)

CR-2 specifies that OID monitor and report stream flow at specified diversion and return sites within the Ochoco Creek subbasin. In addition to Hydromet stations within the basin, stream flow is monitored at manual staff gages that were established in coordination with Oregon Water Resources Department (OWRD) in January 2021. It was understood that OWRD would collect flow measurements for rating those gages, however, OWRD has since been unable to revisit sites and update rating curves. In lieu of OWRD rating curves, OID revisited all the manual staff gage sites in 2023 and provided updated rating curves (MHE 2023).

During Water Year 2024, OID developed a flow monitoring plan (see Annual Report for Water Year 2024) describing the monitoring approach and rationale for the inclusion and exclusion of select gage sites. This resulted in OID selectively monitoring Ochoco Creek at RM 9.4 and RM 4.7 to confirm that flow measurements still fell on the 2023 rating curves developed for those sites. The same approach was used in 2025 because the rating curves were not expected to change given the channel stability in those locations (i.e., below concrete weir and dam

structures) and because of the excellent fit of the 2024 measurements. USFWS indicated that it would like to continue discussions and provide suggestions on the approach to monitoring gage sites for CR-2 (Attachment C: Coord Notes Final_20241219.pdf). On January 14, 2025, USFWS provided follow up questions, which OID responded to via email (Attachment B: CROOKED RIVER/OID_20250114.pdf). USFWS noted in a December 2025 coordination meeting that it would like to follow up on OID gaging prior to the 2026 irrigation season.

A flow measurement taken on May 24, 2025 indicated that the 2023 rating curve at Ochoco Creek at RM 4.7 was still a good fit (Figure 12). Gage heights were manually recorded on nine different days throughout the irrigation season when there was a change in diversion rate; on all occasions discharge was > 5 cfs or at flood stage (i.e., discharge was too high to estimate from the rating curve). Therefore, daily average flows at RM 4.7 during the active irrigation season met the required 5 cfs minimum contribution by OID.

At Ochoco Creek at RM 9.4, the gage height exceeded the range of values that the 2023 rating curve could predict when the field measurement was recorded on May 24, 2025 (and during most of the spring runoff period). High flows were not measured when developing rating curves because safety concerns prevent measuring flows when the stream is at flood stage. Nevertheless, gage height values recorded above the limits of the current rating curves almost certainly reflect discharge values that exceed the 2023 maximum shown in Figure 13, but are not estimated. Estimated flows for Ochoco Creek at RM 9.4 and RM 4.7 are reported in Attachment A: CrookedR_CR2 _WY2025.xlsx.

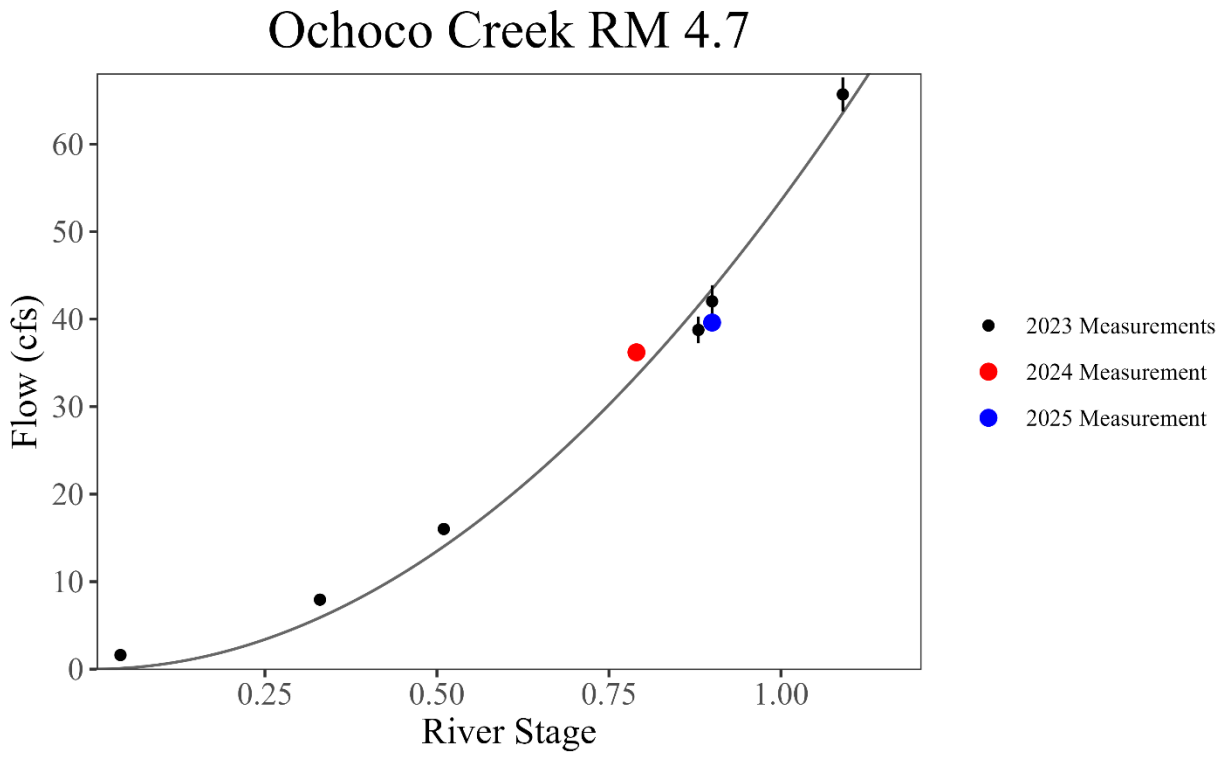

Figure 12. Ochoco Creek rating curve (black line) at river mile 4.7 with rating curve measurements from 2023 (black dots) and single measurements from 2024 (red) and 2025 (blue).

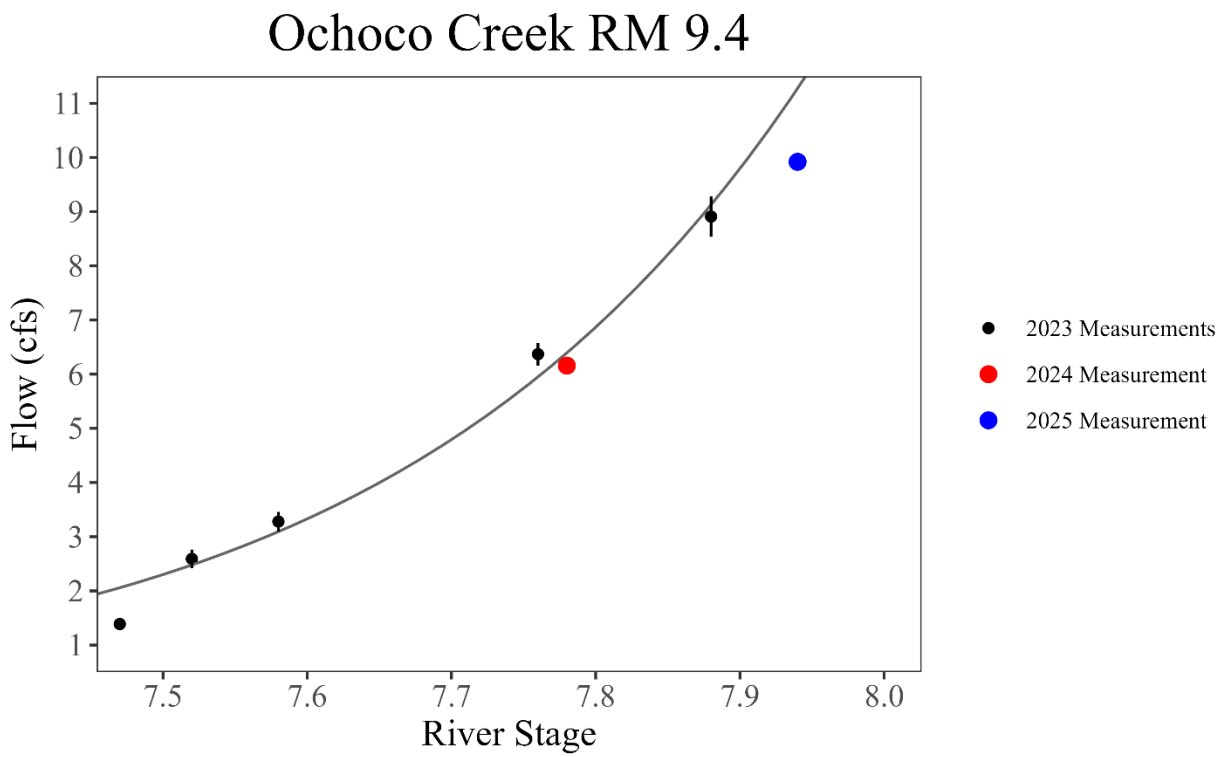

Figure 13. Ochoco Creek rating curve (black line) at river mile 9.4 with rating curve measurements from 2023 (black dots) and single measurements from 2024 (red) and 2025 (blue).

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

CR-2 requires reporting on temporary instream leases and permanent water right transfers of Crooked River and Ochoco Creek irrigation rights during the preceding calendar year. Reporting 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 Deschutes River Conservancy (DRC) to implement the Short-term Instream Leasing Program, which resulted in protected instream flows in Ochoco Creek and the Crooked River (Attachment E: OID_Leasing_WY2025.pdf) as summarized below:

1. Certificate 82246
    a. Flow of 3.799 cfs from April 15–October 15, 2025 was placed instream by OID from the POD (Ochoco Feed Canal) to the mouth of Ochoco Creek.
    b. Flow of 3.42 cfs from April 15–October 1, 2025 was placed instream by OID from the mouth of Ochoco Creek to Lake Billy Chinook.
2. Certificate 82247

   a. Flow of 2.415 cfs from April 15–October 1, 2025 was placed instream by OID from POD to Lake Billy Chinook.
3. Certificate 82248
   a. Flow of 0.74 cfs from April 15–October 15, 2025 was placed instream by OID from POD (Ochoco Feed Canal) to confluence with the Crooked River.
   b. Flow of 0.67 cfs from April 15–October 15, 2025 was placed instream by OID from the mouth of Ochoco Creek to Lake Billy Chinook.

No permanent instream transfers of OID water occurred in 2025.

Conservation Measure CR-3 (McKay Creek Flow: McKay 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.

OID and its partner DRC continue to make significant progress towards completion of the McKay Switch. During 2024, the district completed phase one construction of the CRPS#1 and secured additional funding for the McKay pump station and pipeline. Phase two of the OID Infrastructure Modernization Plan was completed in 2025 with the Ironhorse piping project. Contractors broke ground on the next phase of the plan, CRPS#2 construction, and are targeting a completion date of April 2026. Additionally, in 2025, the final plans for the new Cox Pump Station and McKay Pipeline were completed and the project went out to bid. The construction contract was awarded to K & E Excavating in September 2025, and work is scheduled to begin in January 2026. The substantial completion date is set for spring 2027.

Conservation Measure CR-3 (McKay Creek Flow)

Flow monitoring and reporting is required at four locations on McKay Creek (Table 3) and daily minimum instream flows in McKay Creek are required during the active irrigation season at Jones Dam (RM 5.8), Reynolds Siphon (RM 3.2), and Cook Inverted Weir (RM 1.3). The minimum flows will shift after the full implementation of the McKay switch, which is currently in progress. In 2021, staff gages were installed at the required locations on McKay Creek, based on the recommendation of OWRD. However, OWRD has not revisited those sites to update rating curves.

In lieu of OWRD rating curves, OID contracted with Mt. Hood Environmental (MHE) to develop rating curves for staff gages with flow monitoring requirements under Conservation Measure CR-3 during the 2023 water year. Due to high-flow events during the spring, staff gages have been lost on Smith Weir, Norms Weir (formerly the Cook Inverted Weir), and Reynolds Siphon. Consequently, discharge measurements were not possible at those locations and high flow events continued to prevent the re-installation of those sites in 2024 and 2025. In 2023, a rating curve was initially established for Jones Dam (MHE 2023) to estimate discharge and

evaluate compliance. In coordination with USFWS, OID developed a flow monitoring plan (DBBC 2025) to selectively monitor McKay Creek at RM 5.8 to confirm that the 2023 rating curve was still accurate in 2024. McKay Creek experienced very high flows during Water Year 2025 and a measurement of the manual staff gage at Jones Dam on May 2, 2025 indicated that the channel morphology changed since the 2023 rating curve was developed. On August 19, 2025 flow was measured at multiple gage heights by manipulating the flow at the OID canal return. A new rating curve was developed from these measurements (Figure 14), which applied a positive ("plus") shift on the 2023 rating curve.

Between May 23, 2025 and September 27, 2025, the flow below Jones Dam was estimated to be above the 2.0 cfs instream minimum during all stage height measurements (Attachment A: CrookedR_CR3_WY2025.xlsx).

Table 3. Minimum instream flows and reporting for McKay Creek during the active irrigation season.

Stream Reach	**Before McKay Switch**	**After McKay Switch**	**Reporting Requirement**
Jones Dam (RM 5.8)	2.0 cfs (1.8 cfs)	Equal to flow immediately upstream of Jones Dam, to a maximum of 11.2 cfs	Flow at time of change in diversion rate; deviations from instream minimum
Reynolds Siphon (RM 3.2)	3.0 cfs (1.7 cfs)	Equal to flow immediately upstream of Jones Dam, to a maximum of 12.2 cfs	Flow at time of change in diversion rate; deviations from instream minimum
Inverted Weir (RM 1.3)	5.0 cfs (4.5 cfs)	Equal to flow immediately upstream of Jones Dam, to a maximum of 14.2 cfs	Daily average flow; deviations from instream minimum
Smith Weir (RM 0.6)	NA	NA	Flow at time of change in diversion rate

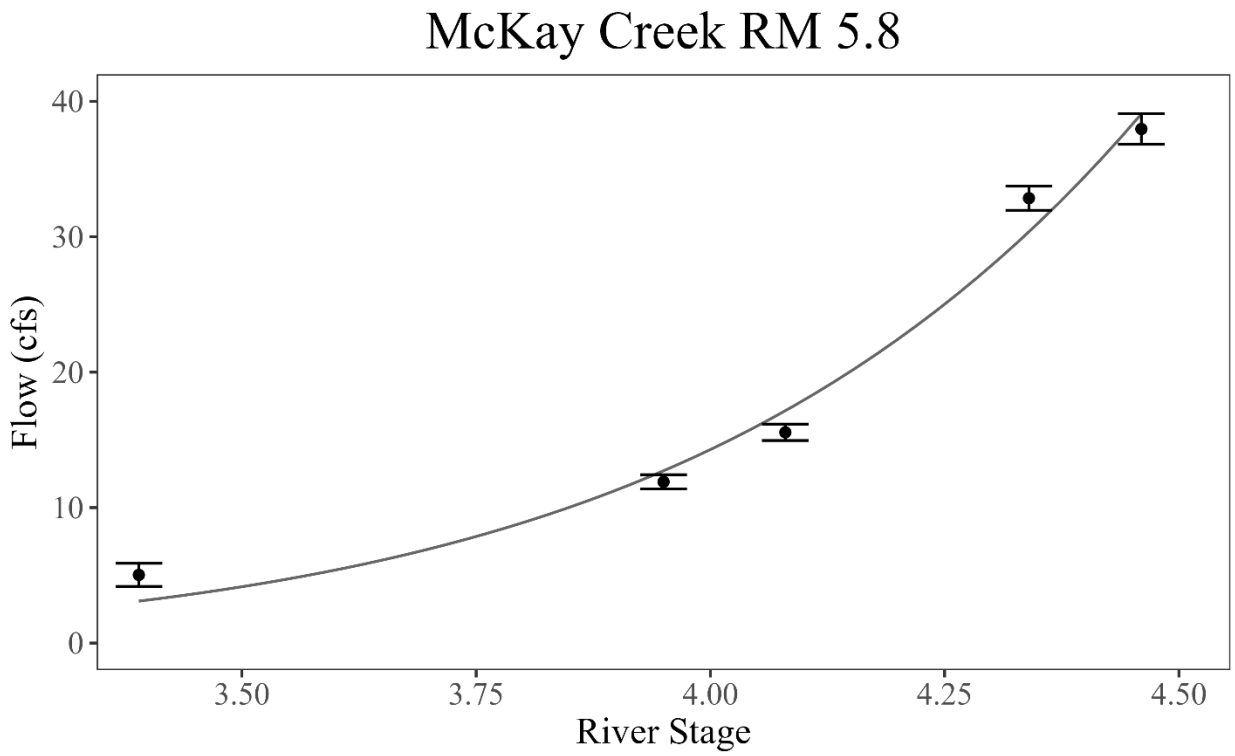

Figure 14. McKay Creek 2025 rating curve at river mile 5.8

Conservation Measure CR-4 (Crooked River Conservation Fund)

The DBHCP Permittees' payment, adjusted for inflation, to the Crooked River Conservation Fund was made in February 2024. Confirmation of payment to the DRC in the amount of $9,662.83 was received by the DBBC on February 20, 2025 (Attachment E).

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

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 OID's diversions and fish screens.

A detailed screen inspection was conducted by Black Rock Consulting on September 2, 2025, and December 9, 2025. This inspection evaluated the current condition of the physical screen and wiping mechanisms, as well as reviewed current operating criteria relative to standards provided by NOAA Fisheries (NOAA Fisheries WCR Anadromous Salmonid Design Manual, 2023) and BOR specifications for the Crooked River Diversion Fish Screen. The final report confirmed screen hydraulic performance was within the guidance criteria for the screen operation (Attachment B: CROOKED RIVER/Screen Inspection_2025.pdf). Several minor recommendations were identified by the inspector: 1) install SS carriage bolt in screen face, 2) remove all loose silicone caulking from vertical screen gaps and replace in like kind with smoothing at surface to match adjacent screen faces, and 3) remove organic debris layer on the

back side of the screens on an annual basis. USFWS was present during the inspection and agreed that it was sufficient to cover the requirement for both the annual screen inspection and the 5-year detailed inspection, given the thoroughness.

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

OID is required to provide the Services with a report on the screening of patron diversions during the preceding calendar year (for years 2–6 only). 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.

Since the first year of DBHCP implementation, OID has contributed a total of $25,000 to the screening account. The Crooked River Watershed Council (CRWC) has partnered with OID in implementing screening projects. The initial $10,000 contribution from OID was used in the purchase and installation of new screens on the Huston Property. The second $10,000 contribution from OID will be used to fund the design, purchase, and installation of a new point of delivery for Ochoco Lumber Company on Ochoco Creek. The work was postponed in 2025 due to delays in water right transfers and acquisitions. The final $5,000 contribution to the screening account was made by OID during fall 2025 to CRWC (Attachment E: Fish Screening Invoice.OID.pdf). The screening account balance is currently $15,000; projects targeted for these funds include the Ochoco Lumber Company, Silva Ranch, and Butler Ranch properties. Work is scheduled to occur during 2026.

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

Conservation Measure CR-6 requires that NUID will report diversions at its Crooked River Pumps to NMFS and USFWS by email within 48 hours whenever the flow measured at OWRD station ID 14087300 falls below the required level specified in Conservation Measure CR-6 concurrent with NUID pumping of stored water. This measure specifies that flow requirements downstream of NUID's pumps are based on the declaration of a "Dry" or "Non-dry" year by OWRD or BOR in March of the current Water Year. Additionally, NUID will install equipment at the pumps to automate diversion rate adjustment and starting no later than January 1, 2025, the daily average and hourly average flows shall both be no less than the specified minimums.

Conservation Measure CR-6 allows for OWRD to revise the dry-year declaration metric if conditions change. In Water Year 2025, the Deschutes River Conservancy (DRC) and NUID submitted a joint petition to modify the minimum bypass flows and revise the "Dry" or "Non-dry" year determination criteria. The rationale for the proposed change was:

- *Crooked River water management has changed significantly with the passage of the Crooked River Act in 2014, as well as with flow management provisions being implemented as part of the Habitat Conservation Plan and the corresponding Incidental Take Permits issued under Section 10 of the Endangered Species Act.*

- *The basin has experienced more frequent drought conditions over the last four years than the historic baseline period of record that was used in developing the agreement flow rates. For example, 8 out of the last 11 years have been designated as dry years versus the target 3 out of 10 years originally envisioned for the agreement.*

- *The Dry Year/Non-Dry Year determination criteria have proven ineffective in forecasting the type of water year that will be experienced in the forthcoming irrigation season. In some years, the reservoir filled completely after a Dry Year determination was made by OWRD; in other years, the basin experienced drought conditions after a Non-Dry Year determination was made by OWRD.*

OWRD subsequently issued an order to authorize the proposed modifications to the minimum bypass flows; the revised flows were implemented during the 2025 irrigation season. The original Dry/Non-Dry Year minimum instream flows and revised flows are shown in Table 4, and a full description of the agreement can be found in Attachment B: CROOKED RIVER/Addendum to attachment 3-final draft.pdf.

Table 4. Dry/Non-Dry Year minimum instream flows and revised flows implemented in 2025.

Month	Dry Year Bypass Flow (cfs)	Non-Dry Year Bypass Flow (cfs)	Revised Bypass Flow (cfs)
April	121.79	182.59	152.2
May	47.45	99.25	73.4
June	59.69	91.39	75.5
July	57.13	67.13	62.1
August	63.15	74.455	68.8
September	61.24	117.86	89.6
October	122.55	152.25	137.4

When NUID is diverting at the Crooked River Pumps, CR-6 specifies reporting flows, the number of pumps in operation, and the estimated daily average rate of diversion (cfs), 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 station ID 14087300 (Crooked River near Terrebonne) at 7:00 AM. Daily metrics are provided in Attachment A: CrookedR_CR6_WY2025.xlsx and hourly metrics in CrookedR_CR6_Hourly_WY2025.xlsx. Daily flow fell below the minimum requirement on a single day. Hourly flows fell below the minimum requirement for 59 total hours, while NUID was diverting. Specific deviations to requirements are summarized below:

- On June 12 the mean daily flow at CRSO was below the required 75.5 cfs
- On May 29 and 31 mean hourly flow at CRSO was below the required 73.4 cfs (13 total hours)

- On June 12-14, 17, and 26-28, mean hourly flow at CRSO was below the required 75.5 cfs (46 total hours)

If, during the term of the DBHCP, a recording stream gage with real-time access 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 NUID to cease reporting pump diversions and instead provide an annual report of daily average flows at OWRD station ID 14087300 and the new gage. In 2025, OWRD began monitoring the "O'Neil Gage" (above NUID's diversion). Although this gage was routinely flooded out during the spring (Attachment C: Coord Notes Final 20250618.pdf), it appeared to be closely matching the expected volume in the Crooked River during July and August based on the sum of NUID pumping data and OWRD Gage 14087300 (Attachment C: Coord Notes Final 20250821.pdf). The O'Neil Gage is currently not available for real-time access but may provide an alternative to NUID pumping data in the future, pending approval from the Services.

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

Conservation Measure 7 specifies that OID and NUID will not divert water from the Crooked River that is part of a downstream fish migration pulse flow, where such flow is defined as a quantity of uncontracted Prineville Reservoir storage that is determined by Reclamation, in consultation with NMFS and USFWS, to be released above and beyond the base release of uncontracted storage for the purpose of facilitating downstream migration of young anadromous salmonids in the Crooked River.

Based on the 2024/2025 annual flow recommendation issued by USFWS and NMFS, storage quantities available for release as instream flows to benefit fish and wildlife were (1) 60,055 AF of uncontracted storage and (2) 4,899 AF of Prineville groundwater mitigation storage; totaling 64,954 AF. These storage amounts were lower than those available during previous years of full reservoir fill due to Reclamation's accounting for reservoir storages losses from sedimentation and evaporation; those losses are currently being applied across all storage accounts. USFWS indicated that the storage quantities could be used to supplement Storage Season flows and/or provide water for "pulse flows" to assist spring Chinook and steelhead smolts migrating out of the Crooked River system in late winter/early spring of 2025. It was also noted that pulse flow releases would consider the best available real-time information on river conditions, smolt out-planting dates, and other habitat and climate conditions at the time. Finally, the annual flow recommendation noted that if Reclamation were to conduct flood control operations during the spring of 2025, the Services requested that Reclamation cease all releases from uncontracted storage until those operations were concluded.

High snowpack and spring precipitation resulted in a rapid refilling of Prineville Reservoir storage throughout the winter and spring in 2025, requiring numerous flood risk management operations at Bowman Dam (Figure 10). Those flood control spills were not done in coordination with ODFW's annual smolt releases in the Crooked River. However, during April and May, spills were contemporaneous with a portion of the downstream migration period of steelhead

smolts, which typically occurs from April to mid-June. As a result, there were no explicit migration pulse flow releases. NUID began diverting live flow at its pumps on May 10.

Changed and Unforeseen Circumstances

In accordance with the federal No-Surprises Rule (USFWS and NMFS 1989), Chapter 9 of the DBHCP provides guidance for changes in circumstances affecting a species or geographic area covered by a (habitat) conservation plan that can reasonably be anticipated by plan developers and the Service and that can be planned for (e.g., the listing of new species, or a fire or other natural catastrophic event in areas prone to such events). The No-Surprises Rule also defines unforeseen circumstances as, "changes in circumstances affecting a species or geographic area covered by an HCP that could not reasonably have been anticipated by plan developers or the Services at the time of the HCP's negotiation and development, and that result in a substantial and adverse change in the status of a covered species."

Emergency Actions (Search and Rescue/Recovery)

Neither Chapter 9 (*Changed and Unforeseen Circumstances*) nor Chapter 3 (*Scope of the DBHCP*) provide guidance for short-term emergency operations that are not related to maintenance of the storage dams and reservoirs, diversions, pumps, intakes, and other related facilities. One such action is a reduction to dam outflows to aid search and rescue efforts. Under Oregon law, the sheriff of each Oregon county is responsible for search and rescue activities within their county.

In late July of 2025 the Deschutes County Sheriff's Office requested that NUID reduce outflow at Wickiup Reservoir to assist state officials in the recovery of human remains in the Deschutes River. Coordination among OWRD, NUID, COID, USFWS, and the DRC resulted in a flow reduction at WICO of 300 cfs in a single step which was meant to last 6-12 hours. The flow reductions made for this operation were allocated between the DRC and District storage accounts (NUID 200 cfs, COID 50 cfs, DRC 50 cfs) and agreed to prior to the drop in flow. Approximately seven hours after the ramp down and the successful recovery operation, WICO flows were restored in two, 200 cfs steps. While there were no deviations to Conservation Measure WR-1 because of this operation, USFWS communicated that it was not requesting that WR-1 flows requirements be met during the operation because this was carried out for human health and safety purposes (Attachment B: WICKIUP/WIC_20250731.pdf).

New Listing of a Species Not Covered by the DBHCP (Section 9.6.1)

In 2021 the Department of the Interior released its 90 day-finding that its review of the petition to list the western ridged mussel (*Gonidea angulata*) presented substantial scientific or commercial information indicating that the petitioned actions may be warranted. The status review for the western ridged mussel was expected to be released in 2025 but has been delayed. The western ridged mussel is known to occur in the Crooked River basin. If the mussel becomes a candidate for listing, is proposed for listing, or is the subject of an emergency listing under the ESA, the Permittees will survey potential habitat for the species on the covered lands or take other appropriate steps to determine whether the species and/or its habitat(s) are present and

proceed with the necessary steps to secure incidental take coverage under the DBHCP as may be warranted and appropriate.

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