

**CLAIM OF
BENEFICIAL USE
for Surface Water Permits
claiming more than 0.1 cfs**



Oregon Water Resources Department
725 Summer Street NE, Suite A
Salem, Oregon 97301-1266
(503) 986-0900
www.oregon.gov/OWRD

**A fee of \$345 must accompany this form for permits
with priority dates of July 9, 1987, or later.**

Enter the date the priority date of the permit:

May 21, 2020

A separate form shall be completed for each permit.

In cases where a permit has been amended through the permit amendment process, a separate claim for the permit amendment is not required. Incorporate the permit amendment into the claim for the permit.

This form is subject to revision. **Begin each new claim** by checking for a new version of this form at:
<https://www.oregon.gov/OWRD/Forms/Pages/default.aspx>

Go to "Resources for Water Right Examiners (CWRE)" Page
<https://www.oregon.gov/OWRD/programs/WaterRights/COBU/Pages/default.aspx>

The completion of this form is required by OAR 690-014-0100(1) and 690-014-0110(4).

Please type or print in dark ink. If this form is found to contain errors or omissions, it may be returned to you. **Every item must have a response.** If any requested information does not apply to the claim, insert "NA." **Do not delete or alter any section of this form unless directed by the form.** The Department may require the submittal of additional information from any water user or authorized agent.

"Section 8" of this form is intended to aid in the completion of this form and should not be submitted.

If you have questions regarding the completion of this form, please call 503-986-0900.

The Department has a program that allows it to enter into a voluntary agreement with an applicant for expedited services. Under such an agreement, the applicant pays the cost to hire additional staff that would not otherwise be available. This program means a certificate may be issued in about a month. For more information on this program see
<https://www.oregon.gov/OWRD/programs/WaterRights/RA/Pages/default.aspx>

Received
FEB 03 2026
OWRD

**SECTION 1
GENERAL INFORMATION**

1. File Information:

| | | |
|---------------------------------|----------------------------|---------------------------------|
| APPLICATION # S-88820 | PERMIT # S-55289 | PERMIT AMENDMENT # T- |
|---------------------------------|----------------------------|---------------------------------|

2. Property Owner (current owner information):

| | | | | |
|--|--------------------|----------------------------------|---------------------------------|--|
| APPLICANT/BUSINESS NAME Bridge Creek Ranch LLC | | PHONE NO. 503 758-7222 | ADDITIONAL CONTACT NO. | |
| ADDRESS 355 Goodpasture Island Rd | | | | |
| CITY Eugene | STATE OR | ZIP 97401 | E-MAIL mpati@pape.com | |

If the current property owner is not the permit holder of record, it is recommended that an assignment be filed with the Department. *Each permit holder of record must sign this form.*

3. Permit or holder of record (this may, or may not, be the current property owner):

| | | | | |
|--|--------------------|---------------------|--|--|
| PERMIT HOLDER OF RECORD Bridge Creek Ranch LLC | | | | |
| ADDRESS 355 Goodpasture Island Rd | | | | |
| CITY Eugene | STATE OR | ZIP 97401 | | |

| | | | | |
|------------------------------------|-------|-----|-------------|--|
| ADDITIONAL PERMIT HOLDER OF RECORD | | | | |
| Received | | | | |
| FEB 03 2026 | | | | |
| CITY | STATE | ZIP | OWRD | |

4. Date of Site Inspection:

**9/10/25, 4/6/25, 4/15/25,
4/15/23**

5. Person(s) interviewed and description of their association

with the project:

| NAME | DATE | ASSOCIATION WITH THE PROJECT |
|--------------------|---------------|------------------------------|
| Jake Tolton | 4/6/25 | Ranch employee |
| | | |

6. County:

Wheeler

7. If any property described in the place of use of the permit final order is excluded from this report, identify the owner of record for that property (ORS 537.230(5)):

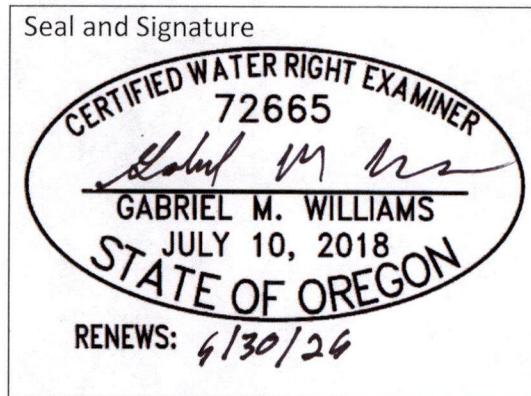
| | | |
|-------------------------------|-------|-----|
| OWNER OF RECORD N/A | | |
| ADDRESS | | |
| CITY | STATE | ZIP |

Add additional tables for owners of record as needed

SECTION 2 SIGNATURES

CWRE Statement, Seal and Signature

The facts contained in this Claim of Beneficial Use are true and correct to the best of my knowledge.



| | | | | |
|--|--------------------|----------------------------------|-----------------------------------|--|
| CWRE NAME Gabriel Williams | | PHONE NO. 541 771-6911 | ADDITIONAL CONTACT NO. | |
| ADDRESS 20340 Empire Ave. Ste E8 | | | | |
| CITY Bend | STATE OR | ZIP 97703 | E-MAIL gabe@rsiengr.com | |

Permit Holder(s) of Record Signature or Acknowledgement

Each permit holder of record must sign this form in the space provided below.

The facts contained in this Claim of Beneficial Use are true and correct to the best of my knowledge. I request that the Department issue a water right certificate.

Received
FEB 03 2026
OWRD

| SIGNATURE | PRINT OR TYPE NAME | TITLE | DATE |
|---|--------------------|--|--------|
|  | Mike Pati | President Pape Properties, Inc., sole member of Bridge Creek Ranch, LLC | 2/1/26 |
| | | | |
| | | | |
| | | | |
| | | | |

Received
FEB 03 2026
OWRD

**SECTION 3
CLAIM DESCRIPTION**

1. Point of diversion name or number:

| |
|---|
| POINT OF DIVERSION (POD) NAME OR NUMBER (CORRESPOND TO MAP) |
| Painted Hills Reservoir – POD 1/ POR 1 |
| |

2. Point of diversion source and tributary:

| POD NAME OR NUMBER | SOURCE | TRIBUTARY |
|-----------------------|--------------------------------|------------|
| POD 1 / POR 1 | Painted Hills Reservoir | N/A |

3. Developed use(s), period of use, and rate for each use:

| POD NAME OR NUMBER | USES | IF IRRIGATION, LIST CROP TYPE | SEASON OR MONTHS WHEN WATER WAS USED | ACTUAL RATE OR VOLUME USED (CFS, GPM, OR AF) |
|-------------------------------------|------------------|----------------------------------|--|--|
| #1 (Dam Outlet) | Fish Life | | June - July | 1.2 – 1.8 cfs |
| Total Quantity of Water Used | | | | 168.42 AF |

4. Provide a general narrative description of the distribution works. This description must trace the water system from each point of diversion to the place of use:

Water is released from the base of the reservoir through the outlet pipe and flows through a fish screen and then into an infiltration gallery near Bridge Creek.

Reminder: The map associated with this claim must identify the location of the point(s) of diversion, Donation Land Claims (DLC), Government Lots (GLot), and Quarter-Quarters (QQ).

5. Variations:

Was the use developed differently from what was authorized by the permit, or permit amendment final order? If yes, describe below.

YES **NO**

(e.g. "The permit allowed three points of diversion. The water user only developed one of the points." or "The permit allowed 40.0 acres of irrigation. The water user only developed 10.0 acres.")

The Bear Creek release (described as POD 2/POR 2 in permit) has not been developed as several wet years in a row have allowed for natural vegetation recruitment in the release area.

6. Claim Summary:

| POD NAME OR # | MAXIMUM RATE AUTHORIZED | CALCULATED THEORETICAL RATE BASED ON SYSTEM | AMOUNT OF WATER MEASURED | USE | # OF ACRES ALLOWED | # OF ACRES DEVELOPED |
|--------------------------|-------------------------------|---|--|------------------|-----------------------|-------------------------|
| POR 1 / POD 1 | 1.52 (+/- 20%) cfs | 3.62 cfs | 168.42 ac-ft total released to date | Fish Life | N/A | N/A |

**SECTION 4
SYSTEM DESCRIPTION**

Are there multiple PODs?

YES NO

If "YES" you will need to copy and complete a separate Section 4 for each POD.

POD Name or Number this section describes (only needed if there is more than one):

POD 1 (Dam Outlet) / POR 1 (Bridge Ck)

A. Place of Use

1. Is the right for municipal use?

YES NO

If "YES" the table below may be deleted.

| TWP | RNG | MER | SEC | QQ | GLOT | DLC | USE | IF IRRIGATION, # PRIMARY ACRES | IF IRRIGATION, # SUPPLEMENTAL ACRES |
|------------------------------|------|------|-----|-------|------|-----|-----------|--------------------------------------|---|
| 10 S | 20 E | W.M. | 25 | NE-SW | | | Fish Life | | |
| Total Acres Irrigated | | | | | | | | | |

Reminder: The map associated with this claim must identify Donation Land Claims (DLC), Government Lots (GLOT), Quarter Quarters (QQ), and if for irrigation, the number of acres irrigated within each projected DLC, GLOT, and QQ.

B. Diversion and Delivery System Information

Provide the following information concerning the diversion and delivery system. Information provided must describe the equipment used to transport and apply the water from the point of diversion to the place of use.

1. Is a pump used?

YES NO

If "NO" items 2 through item 6 may be deleted.

7. Is the distribution system piped?

YES NO

If "NO" items 8 through item 13 may be deleted.

Received
FEB 03 2026
OWRD

8. Mainline Information:

| MAINLINE SIZE | LENGTH | TYPE OF PIPE | BURIED OR ABOVE GROUND |
|---------------|--------|--------------|------------------------|
| 8" from dam | 400' | HDPE | Buried |
| | | | |

9. Lateral or Handline Information:

| LATERAL OR HANDLINE SIZE | LENGTH | TYPE OF PIPE | BURIED OR ABOVE GROUND |
|-----------------------------|--------|--------------|------------------------|
| N/A | | | |
| | | | |
| | | | |

2. Complete the table:

| PIPE SIZE | PIPE TYPE | "C" FACTOR | AMOUNT OF FALL | LENGTH OF PIPE | SLOPE | COMPUTED RATE OF WATER FLOW (IN CFS) |
|-----------|-----------|------------|----------------|----------------|-------|--------------------------------------|
| 8" | HDPE | 140 | 20' | 400' | 5% | 3.62 |

3. Provide calculations:

Use Hazen Williams – solved for Q $Q_{\text{gpm}} = 0.2879 C d_{\text{in}}^{2.63} S^{0.54}$

S = 0.05 ft/ft, C = 140, ID of 8" HDPE (d) = 7.55" plug into above formula, Q = 1,630 gpm (3.62 cfs)

NOTE: flow is always throttled by valve

4. If an actual measurement was taken, provide the following:

| DATE OF MEASUREMENT | WHO MADE THE MEASUREMENT | MEASUREMENT METHOD | MEASURED QUANTITY OF WATER (IN CFS) |
|---------------------|--------------------------|----------------------|-------------------------------------|
| 6/17/25 | Jake Tolton | AG3000 12" flowmeter | 1.23 CFS |

Attach measurement notes.

E. Gravity Flow Canal or Ditch

(THE DEPARTMENT TYPICALLY USES MANNING'S FORMULA FOR CANALS AND DITCHES)

1. Is a gravity flow canal or ditch used to convey the water as part of the distribution system?

YES NO

If "NO", items 2 through 4 relating to this section may be deleted.

F. Additional notes or comments related to the system:

N/A

Received
 FEB 03 2026
 OWRD

Received
 FEB 03 2026
 OWRD

**SECTION 5
 CONDITIONS**

All conditions contained in the permit, permit amendment, or any extension final order shall be addressed. Reports that do not address all performance related conditions will be returned.

1. Time Limits:

Permits and any extension final orders contain any or all of the following dates: the date when the actual construction work was to begin, the date when the construction was to be completed, and the date when the complete application of water to the proposed use was to be completed. These dates may be referred to as ABC dates. Describe how the water user has complied with each of the development timelines established in the permit or permit extension of time:

| | DATE FROM PERMIT | DATE ACCOMPLISHED* | DESCRIPTION OF ACTIONS TAKEN BY WATER USER TO COMPLY WITH THE TIME LIMITS |
|-----------------------------------|------------------|--------------------|---|
| ISSUANCE DATE | 8/28/2020 | | |
| BEGIN CONSTRUCTION (A) | 10/28/2025 | 2022 | The pipelines, fish screen and flowmeters were installed |
| COMPLETE CONSTRUCTION (B) | 10/28/2025 | 2022 | The construction was completed and a final inspection was conducted |
| COMPLETE APPLICATION OF WATER (C) | 10/28/2025 | 7/15/2025 | The 2025 release from Painted Hills Reservoir into Bridge Creek was completed |

* MUST BE WITHIN PERIOD BETWEEN PERMIT OR ANY EXTENSION FINAL ORDER ISSUANCE AND THE DATE TO COMPLETELY APPLY WATER

2. Is there an extension final order(s)?

YES NO

If "NO", items a and b relating to this section may be deleted.

3. Measurement Conditions:

a. Does the permit, permit amendment, or any extension final order require the installation of a meter or approved measuring device?

YES NO

If "NO", items b through f relating to this section may be deleted.

Reminder: If a meter or approved measuring device was required, the COBU map must indicate the location of the device in relation to the point of diversion.

b. Has a meter been installed?

YES NO

c. Meter Information

| POD NAME OR # | MANUFACTURER | SERIAL # | CONDITION (WORKING OR NOT) | CURRENT METER READING | DATE INSTALLED |
|-------------------|--------------|----------|----------------------------|-----------------------|----------------|
| Bridge Ck Release | Seametrics | 03225438 | Working | 168.42 | 2022 |
| Bear Ck Release | Seametrics | 4212389 | Working | 0 | 2022 |

If a meter has been installed, items d through f relating to this section may be deleted.

4. Recording and reporting conditions:

a. Is the water user required to report the water use to the Department? YES NO

If "NO", item b relating to this section may be deleted.

b. Have the reports been submitted? YES NO

If the reports have not been submitted, attach a copy of the reports if available.

5. Fish Screening:

a. Are any points of diversion required to be screened to prevent fish from entering the point of diversion? YES NO

If "NO", items b through e relating to this section may be deleted.

Reminder: If fish screening devices were required, the COBU map must indicate their location in relation to the point of diversion.

b. Has the fish screening been installed? YES NO

c. When was the fish screening installed?

| DATE | BY WHOM |
|-----------------|----------------------------------|
| Aug 2022 | Resource Specialists Inc. |

Reminder: If the permit was issued on or after February 1, 2011, the fish screen is required to be approved by the Oregon Department of Fish and Wildlife regardless of the rate of diversion.

Received
FEB 03 2026
OWRD

d. If the diversion **involves a pump** *and* the **total** diversion rate of all rights at the point of diversion is less than 225 gpm (0.5 cfs) and the permit was issued prior to February 1, 2011:

- Has the self-certification form previously been submitted to the Department? NA YES NO

If not, go to <https://www.oregon.gov/OWRD/Forms/Pages/default.aspx> complete and attach a copy of the 'ODFW Small Pump Screen Self Certification' form to this claim, and send a copy of it to the Oregon Department of Fish and Wildlife (ODFW).

Reminder: Failure to submit evidence of a timely installed fish screen may result in an unfavorable determination. The ODFW self certification form needs to have been previously submitted or be attached to this form.

e. If the diversion does **not involve a pump** *or* the **total** diversion rate of all rights at the point of diversion is 225 gpm (0.5 cfs) or greater:

- Has the ODFW approval been previously submitted? NA YES NO

If not, contact and work with ODFW to ensure compliance. To demonstrate compliance, provide signed documentation from ODFW. A form is available at:

<https://www.oregon.gov/OWRD/Forms/Pages/default.aspx>

Reminder: Failure to submit evidence of a timely installed fish screen may result in an unfavorable determination. In order to receive a favorable approval, the ODFW/WRD "Fish Screen Inspection" form needs to have been previously submitted or be attached to this form.

6. By-pass Devices:

a. Are any points of diversion required to have a by-pass device to prevent fish from entering the point of diversion? YES NO

If "NO", items b and c relating to this section may be deleted.

Reminder: If by-pass devices were required, the COBU map must indicate their location in relation to the point of diversion.

Received
FEB 03 2026
OWRD

7. Other conditions required by some permits, permit amendment final orders, or extension final orders:

- a. Was the water user required to restore the riparian area if it was disturbed? **YES** **NO**
- b. Was a fishway required? **YES** **NO**
- c. Was submittal of a water management and conservation plan required? **YES** **NO**
- d. Other conditions? **YES** **NO**

If "YES" to any of the above, identify the condition and describe the water user's actions to comply with the condition(s) in the box below. If the condition required the approval of a plan, submit documentation that the plan was approved.

Other conditions:
-Notify OWRD of ODFW's water year type determination of each year (see attached Water Year Type email PDF)
-Water temperature condition
-Release conditions requiring notice to the watermaster in any year when full volume is released into Bridge Ck
-Fishway: see attachments described in Sec. 6

**SECTION 6
ATTACHMENTS**

Provide a list of any additional documents you are attaching to this report:

| ATTACHMENT NAME | DESCRIPTION |
|---|---|
| COBU Map | Layout of water infrastructure |
| ODFW Fish Screening and Passage Letters | Letters from ODFW dated 1/25/2021 and 12/16/2025 |
| 2025 water use reports | Water use reports detailing released water amounts by year and month. |
| 2023 Painted Hills Release Temperature Monitoring | Evidence of compliance with temperature condition for the 2023 release. |
| 2024 Painted Hills Release Temperature Monitoring | Evidence of compliance with temperature condition for the 2024 release. |
| 2025 Painted Hills Release Temperature Monitoring | Evidence of compliance with temperature condition for the 2025 release. |
| 2023 - Water Year Type and Release Condition Notification | Evidence of Water Year Type and Release Condition notification for the 2023 release. |
| 2024 & 2025 Water Year Type and Release Condition Notification | Evidence of Water Year Type and Release Condition notification for the 2024 and 2025 releases. |

Received
FEB 03 2026
OWRD

SECTION 7

CLAIM OF BENEFICIAL USE MAP

The Claim of Beneficial Use Map must be submitted with this claim. Claims submitted without the Claim of Beneficial Use map will be returned. The map shall be submitted on poly film at a scale of 1" = 1320 feet, 1" = 400 feet, or the original full-size scale of the county assessor map for the location.

Provide a general description of the survey method used to prepare the map. Examples of possible methods include, but are not limited to, a traverse survey, GPS, or the use of aerial photos. If the basis of the survey is an aerial photo, provide the source, date, series and the aerial photo identification number.

The map was prepared from GPS surveys and UAV orthophotos collected 6/8/23.

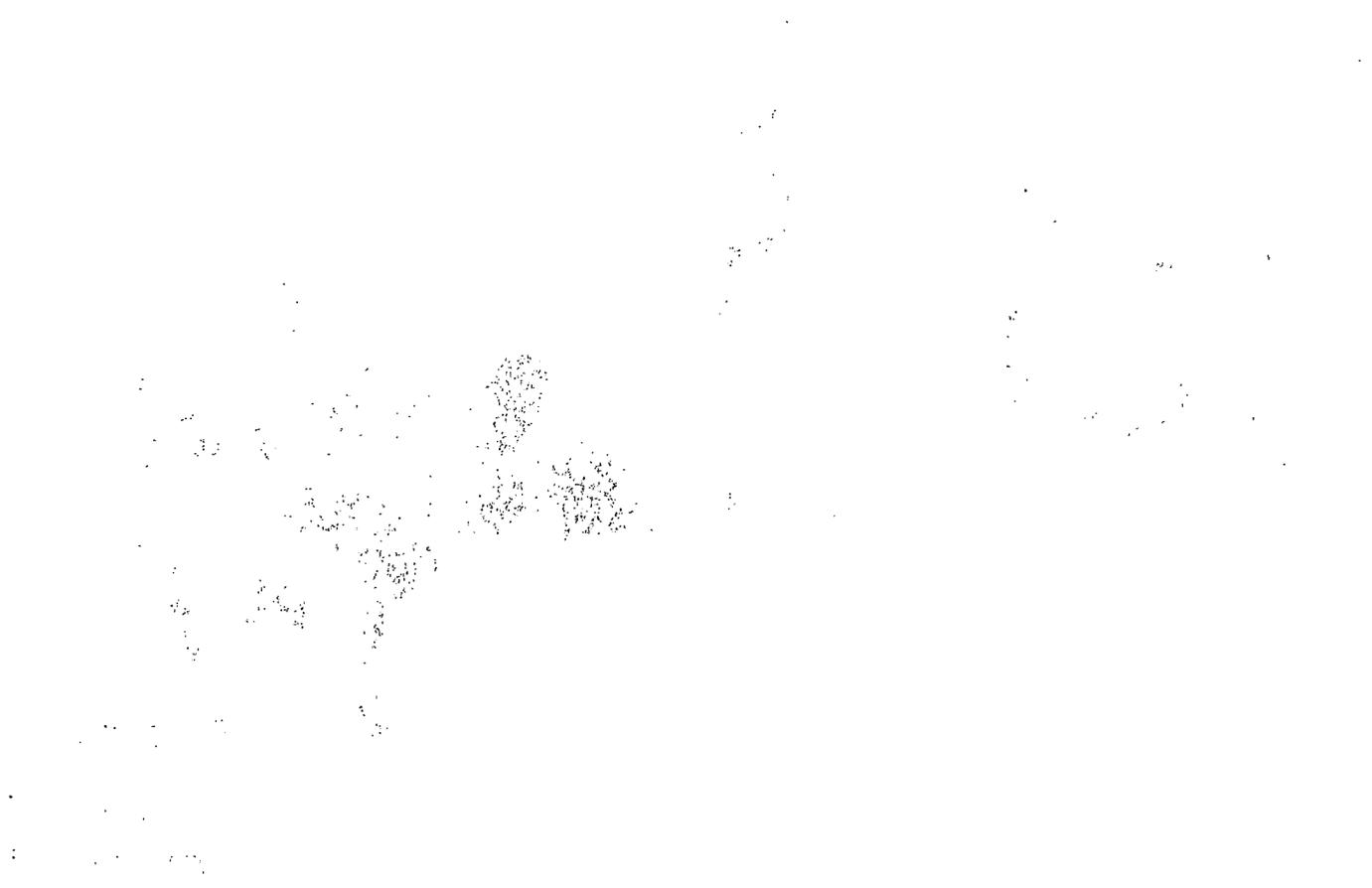
Map Checklist

Please be sure that the map you submit includes ALL the items listed below.

(Reminder: Incomplete maps and/or claims may be returned.)

- Map on polyester film
- Appropriate scale (1" = 400 feet, 1" = 1320 feet, or the original full-size scale of the county assessor map)
- Township, Range, Section, Donation Land Claims, and Government Lots
- If irrigation, number of acres irrigated within each projected Donation Land Claims, Government Lots, Quarter-Quarters
- Locations of fish screens and/or fish by-pass devices in relationship to point of diversion
- Locations of meters and/or measuring devices in relationship to point of diversion or appropriation
- Conveyance structures illustrated (pumps, reservoirs, pipelines, ditches, etc.)
- Point(s) of diversion or appropriation (illustrated and coordinates)
- Tax lot boundaries and numbers
- Quarter-Quarters illustrated and named (NE NE, NW NE, etc.)
- Source illustrated if surface water
- Disclaimer ("This map is not intended to provide legal dimensions or locations of property ownership lines")
- Application and permit number or transfer number
- North arrow
- Legend
- CWRE stamp and signature

Received
FEB 03 2026
OWRD



Attachments

Application S-88820, Permit S-55289

Received
FEB 03 2026
OWRD



Oregon

Kate Brown, Governor

Department of Fish and Wildlife
John Day Field Office
PO Box 9
John Day, OR 97845
Voice: 541-575-1167
Fax: 541-575-0948
<http://www.dfw.state.or.us>

01/25/2021

Oregon Water Resources Department
725 Summer Street NE, Suite A
Salem, OR 97301-1266



Subject: Painted Hills Reservoir Fish
passage R-84459

To Whom It Many Concern,

The Oregon Department of Fish and Wildlife is submitting this letter to confirm that under current circumstances, there are no fish passage barriers currently in place at the Bear Creek diversion (S-55289). In addition, there are no conditions for fish passage at the Painted Hills Reservoir as this impoundment is off-channel.

To note, the water user has the ability to construct a push-up dam or other temporary artificial obstruction at this diversion site that could be a passage barrier to sensitive fish species, however no such structure may be constructed during the April 1st – April 14th time period as a condition to this permit. If an artificial obstruction were constructed in the future, this would be a trigger for fish passage and the owner/operator is responsible for providing fish passage should the structure be channel spanning in Bear Creek as per ORS 509.585.

ODFW also recommends the installation of a headgate to better manage and control withdrawals from Bear Creek, although it is currently not a mandatory condition to this permit.

Sincerely,

Stephan Charette
John Day District Fish Biologist
Oregon Department of Fish and Wildlife

Cc: Mike Pati, Property Manager
Gordon Tolton, Ranch Manager
Alan Ritchey, ODFW Fish Screen and Passage Manager
Greg Apke, ODFW Fish Passage Coordinator

Received
FEB 03 2026
OWRD



Oregon

Tina Kotek, Governor

Department of Fish and Wildlife

Fish Division

4034 Fairview Industrial Drive SE

Salem, OR, 97302

(503) 947-6201

www.dfw.state.or.us/

December 16, 2025

Bridge Creek Ranch, LLC
355 Goodpasture Island Rd
Eugene, OR 97401

Received

FEB 03 2026

OWRD

RE: ODFW Certification of Fish Screen and Passage Conditions for OWRD Permits R-15535 and S-55289, and Transfers T-14170 and T-14158.

To whom it may concern,

The Oregon Department of Fish and Wildlife (ODFW) is submitting this letter regarding the fish screening and fish passage conditions contained in permits R-15535 and S-55289, and transfers T-14170 and T-14158.

Water right transfers file numbers T-14170 and T-14158.

These transfers require the installation of a fish screen at the new point of diversion (POD) located near GPS coordinates: 44.6518, -120.2475. The POD is now screened with a 6'x6'x30" dual-bay rotary drum screen system built and installed by ODFW on October 30, 2024. The screen was inspected and meets ODFW criteria for a diversion rate up to 11.67 CFS. This screen is equipped with a criteria compliant bypass pipe to return fish to Bridge Creek. All screen configurations meet ODFW criteria at the time of inspection; any changes or modifications to the configurations will not be covered by this certification letter.

Permit R-15535 called "Painted Hills Reservoir."

The permit requires a fish screen and/or bypass device at the new POD and a fishway at the obstruction to provide adequate upstream and downstream passage for fish. The permit allows the permittee to submit evidence that the ODFW had determined screens and/or a fishway are not necessary.

There are two points of diversion associated with the reservoir:

1. POD #1 from Bear Creek near coordinates 44.658973, -120.293287, is screened with a fish screen installed by ODFW in 2013. The screen is a four-bay solar belt system and meets ODFW's fish screening criteria up to a diversion rate of 12.5 CFS.
2. POD #2 (the new point of diversion) on Bridge Creek is screened with a fish screen located at 44.6518, -120.2475, and installed by ODFW on October 30, 2024. This screen meets ODFW's fish screening criteria up to 11.67 CFS.

Since the reservoir is off-channel, and there are no artificial obstructions associated with permit R-15535, ODFW has determined that a fishway is not necessary. Fish passage is currently being provided at the PODs. Any new construction associated with the points of diversion may constitute a fish passage trigger and may require a fish passage approval.

Water right permit S-55289. The water diversion from the Painted Hills Reservoir (R-15535).

The water right requires the water user to install, maintain, and operate fish screening and fish passage devices consistent with ODFW standards at each POD from the reservoir. The water user may submit

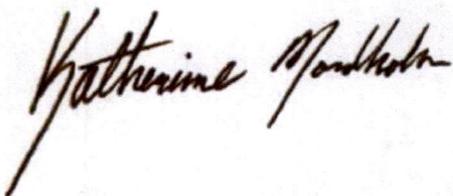
evidence in writing that ODFW has determined that screening and/or passage devices are not necessary. Since the reservoir is off-channel and fish screens are installed at the PODs into the reservoir, ODFW has determined that fish passage and/or screening are not necessary for S-55289.

As a reminder, although ODFW has determined that fish screening is not necessary for the release of stored water, the permittee shall not stock fish in the reservoir without first obtaining a Fish Transport Permit issued by the Oregon Department of Fish and Wildlife (ODFW). As part of the Fish Transport Permit process, the permittee may be required to screen the outlet of the reservoir to ensure that fish cannot escape into public waters and/or to keep wild fish from entering the reservoir.

In conclusion, ODFW has determined that the water user is in compliance with all fish screening and passage conditions contained in permits R-15535 and S-55289, and transfers T-14170 and T-14158.

Please contact me at Katherine.E.Nordholm@odfw.oregon.gov if you have any questions regarding this letter.

Sincerely,

A handwritten signature in black ink that reads "Katherine Nordholm". The signature is written in a cursive style with a large initial 'K'.

Katherine Nordholm
Fish Screens and Passage Coordinator
Oregon Department of Fish and Wildlife

CC: Nathaniel Ashley, ODFW Fish Screening Coordinator

Received
FEB 03 2026
OWRD

Facility Water Use Report

X

**POR 1 BRIDGE CREEK
Report ID: 68507**

POR 1 BRIDGE CREEK;
3090 FEET SOUTH AND 2540 FEET EAST FROM NW CORNER, SECTION 25
10S-20E-25-NE SW;
Permit: S 55289 *

BRIDGE CREEK RANCH LLC

Records per Page:

| Water Year | Reporter | Type of Measurement | Unit | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Irrigated Acres |
|------------|--------------------|---------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-------|------|-----|-----|-----------------|
| 2025 | Gabriel M Williams | FMT | A | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 34.2 | 34.0 | 0.0 | 0.0 | |
| 2024 | Gabriel M Williams | FMT | A | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 40.75 | 0.0 | 0.0 | 0.0 | |
| 2023 | Gabriel M Williams | FMT | A | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 39.25 | 0.0 | 0.0 | 0.0 | |
| 2022 | Gabriel M Williams | STG | A | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| 2021 | Gabriel M Williams | STG | A | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |

If corrections are needed send a message to: owrd.waterusereporting@water.oregon.gov or call 971-345-7489.

Add data for this point of diversion for selected year:

[View/Print/Download Report for this Report ID](#)

[Return to the list of all reporting IDs](#)

Facility Water Use Report

X

**POR 2 BEAR CREEK
Report ID: 68508**

POR 2 BEAR CREEK;
1310 FEET SOUTH AND 1080 FEET EAST FROM NW CORNER, SECTION 25
10S-20E-25-NW NW;
Permit: S 55289 *

BRIDGE CREEK RANCH LLC

Records per Page:

| Water Year | Reporter | Type of Measurement | Unit | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Irrigated Acres |
|------------|--------------------|---------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----------------|
| 2025 | Gabriel M Williams | FMT | A | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| 2024 | Gabriel M Williams | FMT | A | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| 2023 | Gabriel M Williams | FMT | A | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| 2022 | Gabriel M Williams | STG | A | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| 2021 | Gabriel M Williams | STG | A | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |

If corrections are needed send a message to: owrd.waterusereporting@water.oregon.gov or call 971-345-7489.

Add data for this point of diversion for selected year:

[View/Print/Download Report for this Report ID](#)

[Return to the list of all reporting IDs](#)

Received
FEB 03 2026
OWRD



20340 Empire Ave. Ste E8
 Bend, OR 97703
 (541) 771-6911

Memorandum

Date: July 27th, 2023
 From: Benn Eilers, Resource Specialists Inc. (benn@rsiengr.com)
 Re: Temperature monitoring of Painted Hills Reservoir release into Bridge Creek

In accordance with Permit S-55289, Bridge Creek Ranch LLC is required to release 25% of additionally stored water in Painted Hills Reservoir. The timing and release rate into Bridge Creek varies depending on an Oregon Department of Fish and Wildlife (ODFW) determination of a “normal” or “dry” flow year and is stipulated in the permit as seen below:

VOLUME AND RATE OF RELEASE FOR – BRIDGE CREEK:

| Normal Year Release | | |
|--|--------------------------------------|--|
| Period of Release | June 15 — July 15 (up to 31 days) | July 16 — August 15 (up to 31 days) |
| Maximum Volume Released in Each Period | 93.75 ACRE-FEET | 21.25 ACRE-FEET |
| Rate of Release (CFS) (+/- 20%) | 1.52 CFS | 0.34 CFS |

| Dry Year Release | | |
|--|-------------------------------------|---------------------------------------|
| Period of Release | June 1 — July 15 (up to 45 days) | July 16 — August 5 (up to 21 days) |
| Maximum Volume Released in Each Period | 93.75 ACRE-FEET | 21.25 ACRE-FEET |
| Rate of Release (+/- 20%) | 1.05 CFS | 0.51 CFS |

VOLUME/RATE OF RELEASE – BEAR CREEK:

| ALL WATER YEAR TYPES | |
|--|-----------------------------------|
| Period of Release | June 1-September 15 (101 days) |
| Maximum Volume Released in Each Period | 10.0 ACRE-FEET |
| Rate of Release (+/- 20%) | 0.05 CFS |

Received
 FEB 03 2026
 OWRD

ODFW determined 2023 to be a “normal” year, and the release into Bridge Creek began on June 15th. The purpose of the release into Bear Creek was for vegetation establishment, however flows in Bear Creek were still high enough during the release period that additional water was not necessary to supplement the vegetation.

During the storage period of 2023, Bridge Creek Ranch was able to store an additional 157 acre-ft of water in Painted Hills Reservoir. The amount of water needing to be released to Bridge Creek was

calculated to be 39.25 acre-ft (25%). On June 15th at approximately 11 am, the outflow from the reservoir was opened and adjusted to discharge rate of approximately 725 GPM (1.615 CFS). Flow was measured with an inline Seametrics flowmeter at the base of the dam.

The release proceeded until June 27th 7:40 pm at which point the total volume on the flowmeter read 39.25 ac-ft (Figure 1).



Figure 1 - Flowmeter at completion of release

Water temperature was measured at three points on Bridge Creek and at the release point near the base of the dam. The monitoring locations are labeled T1 – T4 as seen in Figure 2. The lower most monitoring location (T4) is located very near the property boundary, approximately 1 mile downstream of T3. Temperature was recorded using Hobo Tidbit V2 temperature loggers at 30 minute intervals. Data were downloaded from the sensors for analysis and plotting.

Flow rates in Bridge Creek were examined over the release period and show that the discharge was approximately double the long term average (Figure 3).

Received
FEB 03 2026
OWRD

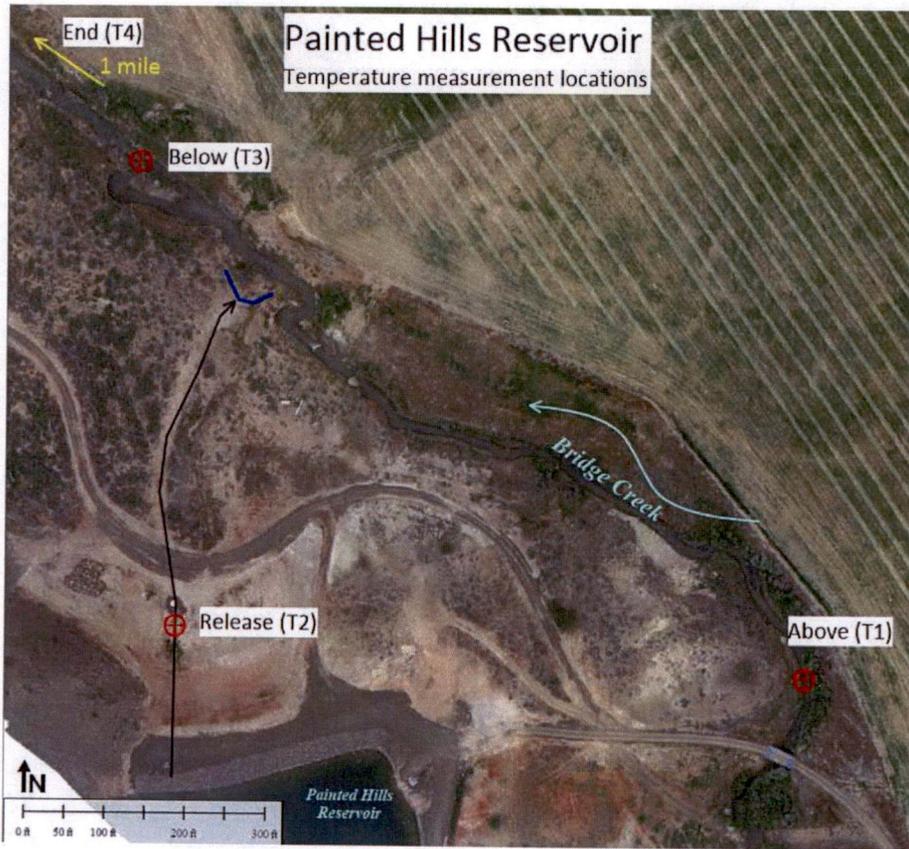


Figure 2 - Temperature monitoring locations

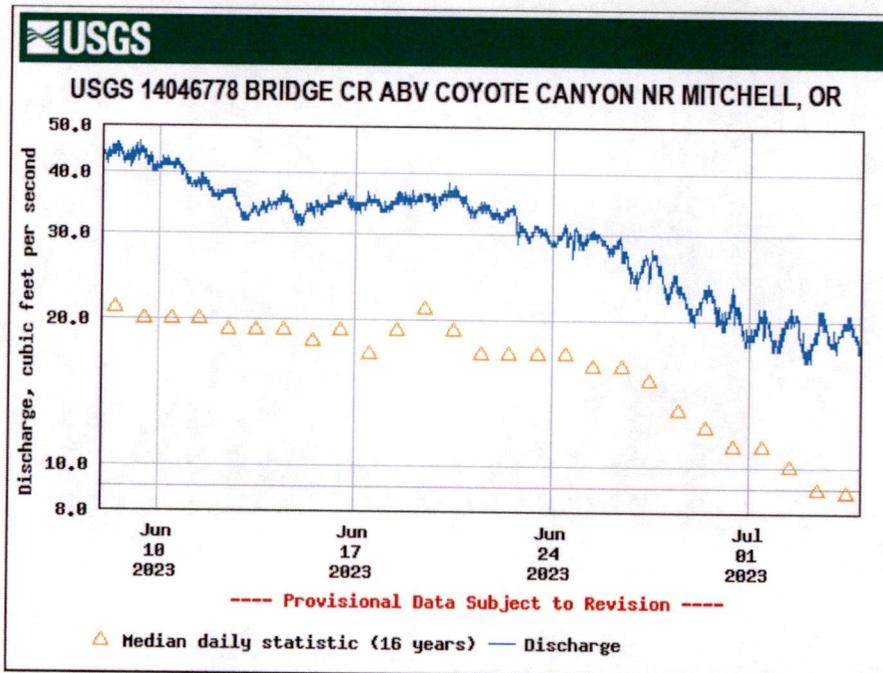


Figure 3 - Discharge in Bridge Creek during release period

Received
FEB 03 2026
OWRD

The recorded temperature measurements are plotted below in Figure 4. The data from T2 was clipped to the release period of 6/15/23 – 6/27/23 for clarity.

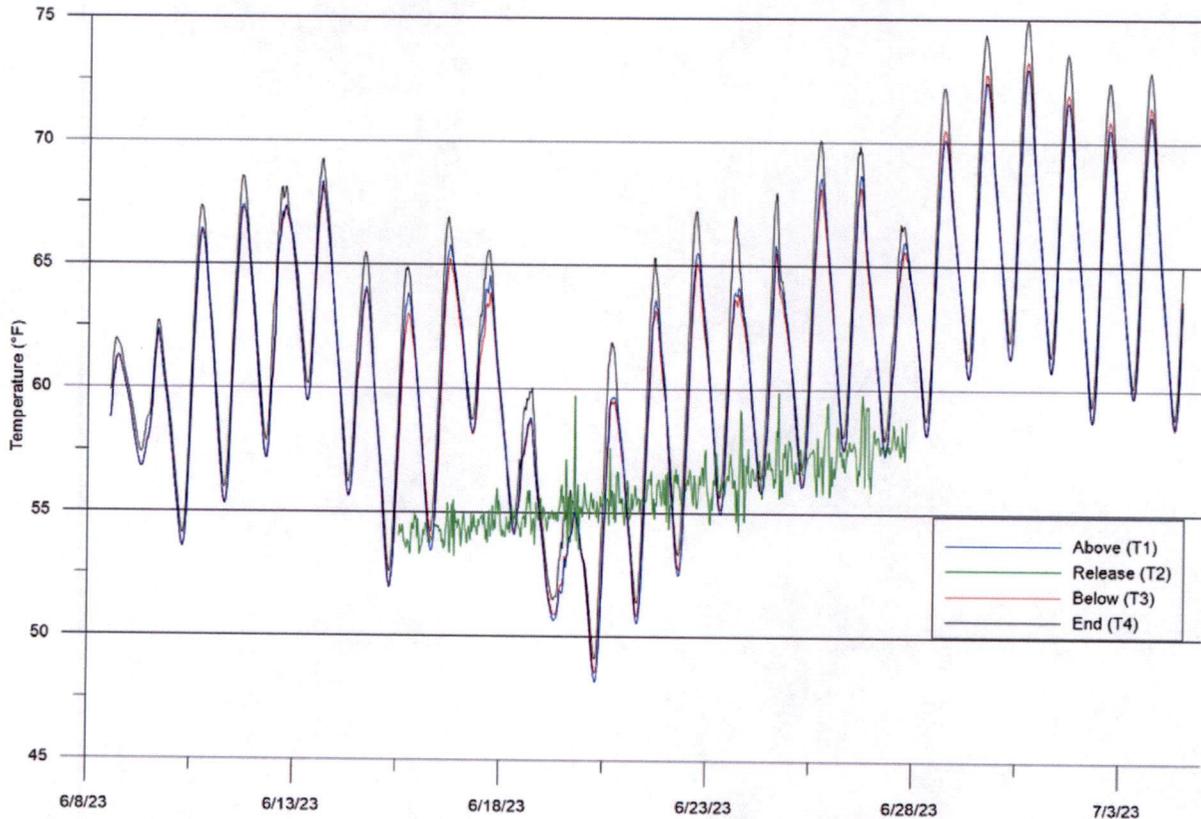
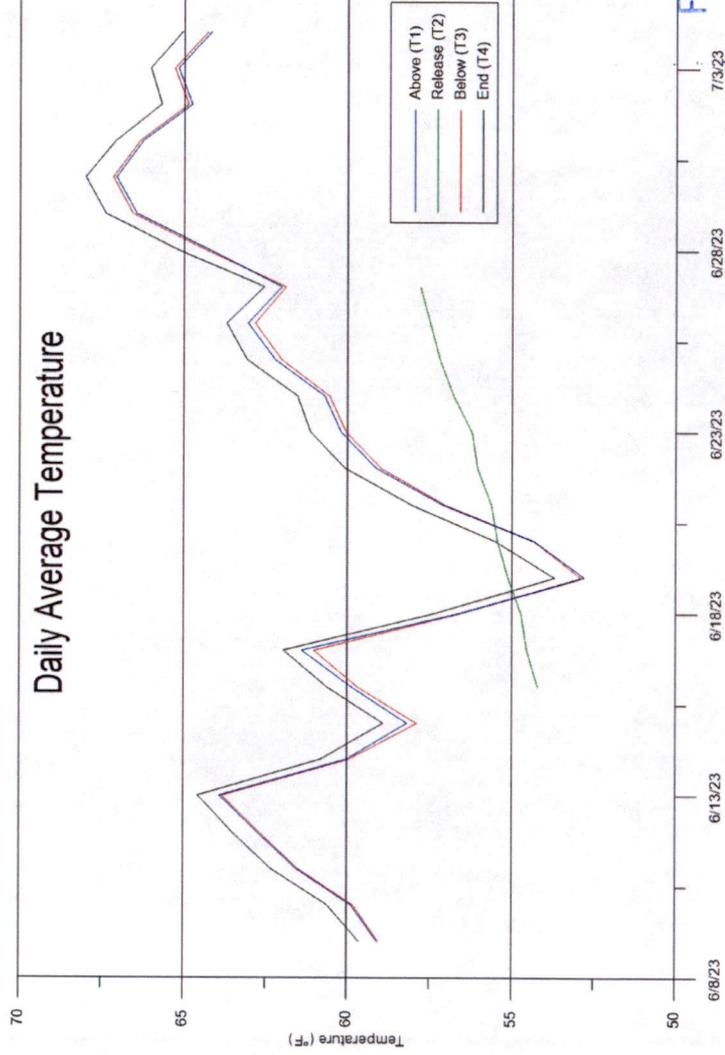


Figure 4 - Recorded temperatures in Bridge Creek and Painted Hills Reservoir release

Diel fluctuations of 7-10 degrees (F) are prominent on the Bridge Creek thermistors. The temperature of the release from the Reservoir begins at roughly 54 degrees and steadily increases to approximately 58 degrees at the end of the release. A cold front on 6/19 – 6/20 pushed stream temperatures down below the release temperature from the Reservoir, but other than those two days the temperature of the release from the Reservoir was significantly below the observed temperatures in Bridge Creek.

It is difficult to see in the plot; however, the general trend is that during the release period the peak temperatures observed at T3 were below what was seen upstream at T1. This is the opposite of what is observed after the release period and can be directly attributed to beneficial outcomes of the release. By computing the daily average and maximum values at each of the sensors we can get a sense of the magnitude of influence of the release.

Plotting the daily average temperature allows some of the trends to be more easily visualized. The magnitude of the influence is minor, however unmistakable (Figure 5). Daily average and maximum temperatures values are provided in Table 1.



Received

FEB 03 2026

OWRD

Figure 5 - Daily average temperature of Bridge Creek and release

Table 1 - Daily average and maximum temperatures

| Date | Daily Average Temperature (°F) | | | | Daily Maximum Temperature (°F) | | | | Delta T3-T1 |
|---------|--------------------------------|--------------|------------|----------|--------------------------------|------------|----------|-------------|-------------|
| | Above (T1) | Release (T2) | Below (T3) | End (T4) | Above (T1) | Below (T3) | End (T4) | Delta T3-T1 | |
| 6/8/23 | 59.608 | | 59.589 | 60.215 | -0.019 | 62.062 | 62.062 | 62.062 | 0.000 |
| 6/9/23 | 59.084 | | 59.051 | 59.635 | -0.033 | 62.362 | 62.276 | 62.704 | -0.086 |
| 6/10/23 | 59.873 | | 59.805 | 60.597 | -0.068 | 66.429 | 66.344 | 67.372 | -0.085 |
| 6/11/23 | 61.560 | | 61.494 | 62.342 | -0.066 | 67.413 | 67.285 | 68.571 | -0.128 |
| 6/12/23 | 62.756 | | 62.692 | 63.526 | -0.064 | 67.372 | 67.372 | 68.142 | 0.000 |
| 6/13/23 | 63.917 | | 63.843 | 64.569 | -0.073 | 68.356 | 68.185 | 69.256 | -0.171 |
| 6/14/23 | 60.024 | | 59.960 | 60.804 | -0.064 | 64.074 | 63.903 | 65.487 | -0.171 |
| 6/15/23 | 58.177 | 54.056 | 57.885 | 58.906 | -0.292 | 63.819 | 63.005 | 64.888 | -0.814 |
| 6/16/23 | 59.877 | 54.217 | 59.687 | 60.629 | -0.190 | 65.788 | 65.23 | 66.943 | -0.558 |
| 6/17/23 | 61.392 | 54.545 | 61.027 | 61.957 | -0.365 | 64.546 | 63.862 | 65.574 | -0.684 |
| 6/18/23 | 56.662 | 54.722 | 56.632 | 57.392 | -0.030 | 59.486 | 59.315 | 60.046 | -0.171 |
| 6/19/23 | 52.780 | 55.123 | 52.892 | 53.706 | 0.112 | 55.038 | 54.995 | 55.949 | -0.043 |
| 6/20/23 | 54.320 | 55.443 | 54.322 | 55.508 | 0.002 | 59.659 | 59.529 | 61.891 | -0.130 |
| 6/21/23 | 57.090 | 55.632 | 57.015 | 58.048 | -0.075 | 63.604 | 63.176 | 65.316 | -0.428 |
| 6/22/23 | 59.119 | 56.051 | 58.967 | 60.065 | -0.152 | 65.53 | 65.102 | 67.199 | -0.428 |
| 6/23/23 | 60.194 | 56.221 | 60.040 | 61.134 | -0.154 | 64.117 | 63.819 | 67.028 | -0.298 |
| 6/24/23 | 60.703 | 56.773 | 60.553 | 61.541 | -0.150 | 65.829 | 65.53 | 67.971 | -0.299 |
| 6/25/23 | 62.226 | 57.189 | 62.028 | 63.092 | -0.198 | 68.571 | 68.142 | 70.115 | -0.429 |
| 6/26/23 | 63.055 | 57.481 | 62.843 | 63.709 | -0.212 | 68.657 | 68.185 | 69.858 | -0.472 |
| 6/27/23 | 62.020 | 57.785 | 61.896 | 62.556 | -0.124 | 66 | 65.615 | 66.729 | -0.385 |
| 6/28/23 | 64.207 | | 64.325 | 65.184 | 0.118 | 70.115 | 70.502 | 72.221 | 0.387 |
| 6/29/23 | 66.449 | | 66.570 | 67.389 | 0.122 | 72.437 | 72.783 | 74.381 | 0.346 |
| 6/30/23 | 67.061 | | 67.169 | 68.000 | 0.108 | 72.997 | 73.299 | 74.943 | 0.302 |
| 7/1/23 | 66.246 | | 66.345 | 67.080 | 0.099 | 71.62 | 71.964 | 73.602 | 0.344 |
| 7/2/23 | 64.763 | | 64.879 | 65.689 | 0.116 | 70.543 | 70.887 | 72.437 | 0.344 |
| 7/3/23 | 65.181 | | 65.302 | 66.024 | 0.122 | 71.06 | 71.447 | 72.869 | 0.387 |
| 7/4/23 | 64.182 | | 64.291 | 65.055 | 0.109 | 69.942 | 70.329 | 71.92 | 0.387 |

The largest impact of the release is illustrated by the sharp demarcation in temperatures, and temperature differences occurring once the release from the Reservoir is stopped on 6/27. The magnitude of the change occurring is approximately 0.25 degree reduction for the daily average and 0.75 degree reduction for the peak temperatures.

This was the first year of conducting a summer release from Painted Hills Reservoir into Bridge Creek. The results seen from the temperature analysis are encouraging and show a positive impact from the release. Flows in Bridge Creek were approximately 200% of normal during the release period. Assuming the same release regime occurred during flows closer to normal, the thermal impacts of the release would be roughly double what was seen in 2023. During low water years, even though the release rate will be reduced, the impact should be much larger in magnitude than what was observed this year.

Received
FEB 03 2026
OWRD



20340 Empire Ave. Ste E8
 Bend, OR 97703
 (541) 771-6911

Memorandum

Date: September 3rd, 2024
 From: Benn Eilers, Resource Specialists Inc. (benn@rsiengr.com)
 Re: Temperature monitoring of Painted Hills Reservoir release into Bridge Creek - 2024

In accordance with Permit S-55289, Bridge Creek Ranch LLC is required to release 25% of additionally stored water in Painted Hills Reservoir. The timing and release rate into Bridge Creek varies depending on an Oregon Department of Fish and Wildlife (ODFW) determination of a “normal” or “dry” flow year and is stipulated in the permit as seen below:

VOLUME AND RATE OF RELEASE FOR – BRIDGE CREEK:

| Normal Year Release | | |
|--|--------------------------------------|--|
| Period of Release | June 15 — July 15 (up to 31 days) | July 16 — August 15 (up to 31 days) |
| Maximum Volume Released in Each Period | 93.75 ACRE-FEET | 21.25 ACRE-FEET |
| Rate of Release (CFS) (+/- 20%) | 1.52 CFS | 0.34 CFS |

| Dry Year Release | | |
|--|-------------------------------------|---------------------------------------|
| Period of Release | June 1 — July 15 (up to 45 days) | July 16 — August 5 (up to 21 days) |
| Maximum Volume Released in Each Period | 93.75 ACRE-FEET | 21.25 ACRE-FEET |
| Rate of Release (+/- 20%) | 1.05 CFS | 0.51 CFS |

VOLUME/RATE OF RELEASE – BEAR CREEK:

| ALL WATER YEAR TYPES | |
|--|-----------------------------------|
| Period of Release | June 1-September 15 (101 days) |
| Maximum Volume Released in Each Period | 10.0 ACRE-FEET |
| Rate of Release (+/- 20%) | 0.05 CFS |

Received
 FEB 03 2026
 OWRD

ODFW determined 2024 to be a “normal” year, and the release into Bridge Creek began on June 15th. The purpose of the release into Bear Creek was for vegetation establishment, however flows in Bear Creek were still high enough during the release period that additional water was not necessary to supplement the vegetation.

During the storage period of 2024, Bridge Creek Ranch was able to store an additional 154.5 acre-ft of water in Painted Hills Reservoir. The amount of water needing to be released to Bridge Creek was

calculated to be 38.625 acre-ft (25% of the additionally stored water). On June 15th at approximately 10 am, the outflow from the reservoir was opened and adjusted to a discharge rate of approximately 725 GPM (1.615 CFS). Flow was measured with an inline Seametrics flowmeter at the base of the dam.

The flow meter totalizer was not reset from the release in 2023 and the beginning reading was 39.25 acre-feet. The release proceeded until June 27th 7:00 pm at which point the total volume on the flowmeter read 80.00 ac-ft (Figure 1). The photo was taken just prior to turning off the outlet headgate.



Figure 1 - Flowmeter at completion of release

Water temperature was measured at three points on Bridge Creek and at the release point near the base of the dam. The monitoring locations are labeled T1 – T4 as seen in Figure 2. The lower most monitoring location (T4) is located very near the property boundary, approximately 1 mile downstream of T3. Temperature was recorded using Hobo Tidbit V2 temperature loggers at 30 minute intervals. Data were downloaded from the sensors for analysis and plotting.

Flow rates in Bridge Creek (USGS 14046778) were examined over the release period and show that the discharge was well above the long term average (Figure 3).

Received
FEB 03 2026
OWRD

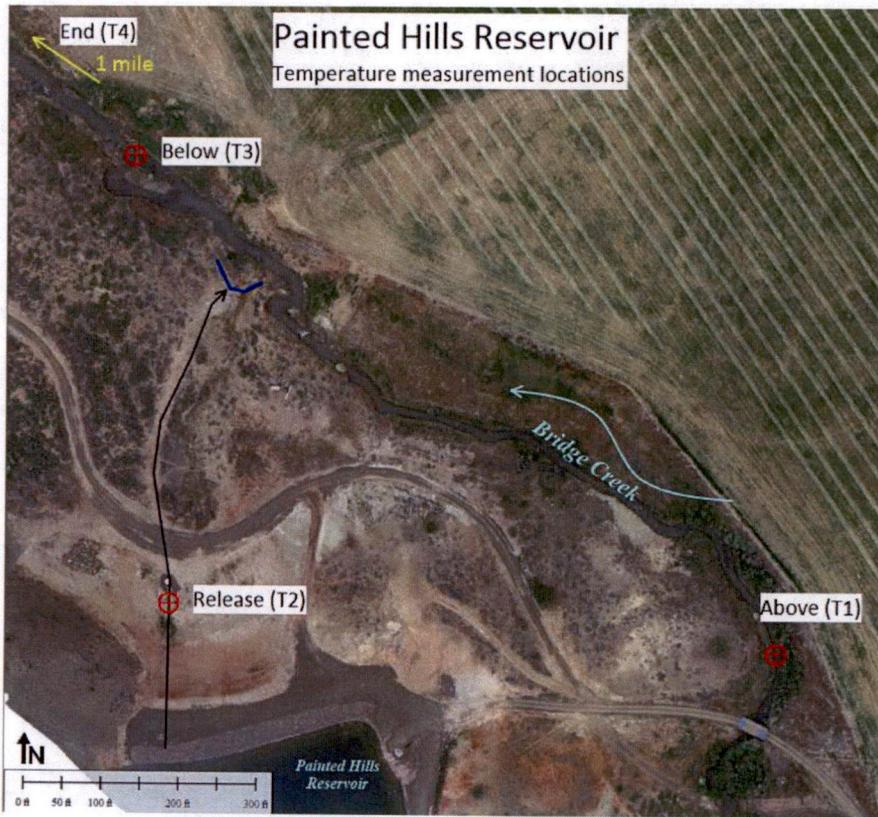


Figure 2 - Temperature monitoring locations

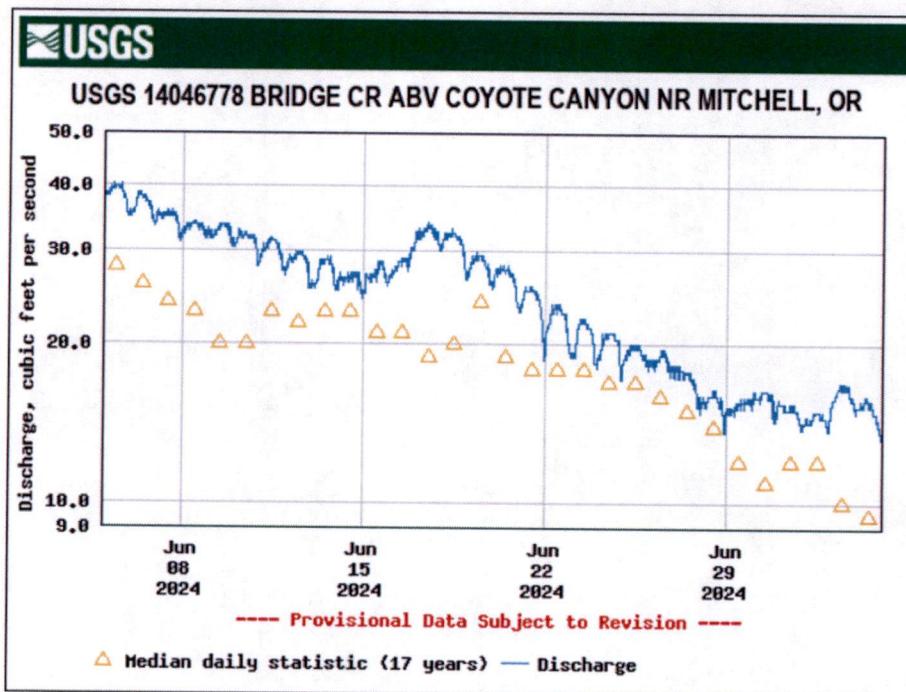


Figure 3 - Discharge in Bridge Creek during release period

Received
 FEB 03 2026
 OWRD

The recorded temperature measurements are plotted below in Figure 4. The data from T2 was clipped to the release period of 6/15/23 – 6/27/23 for clarity.

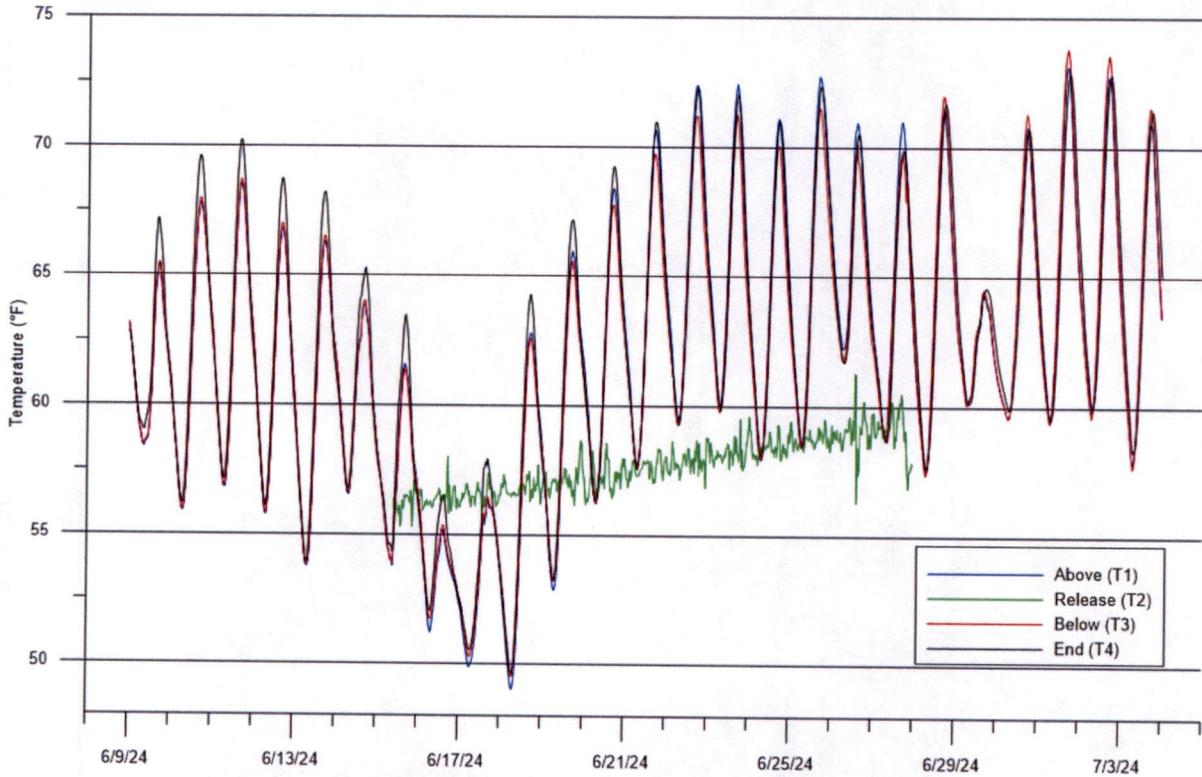


Figure 4 - Recorded temperatures in Bridge Creek and Painted Hills Reservoir release

Diel fluctuations of 5-12 °F are prominent on the Bridge Creek thermistors. The temperature of the release from the Reservoir begins at roughly 56 °F and steadily increases to approximately 59 °F at the end of the release. A cold front on 6/16 – 6/18 pushed stream temperatures down below the release temperature from the Reservoir, but other than those two days the temperature of the release from the Reservoir was significantly below the observed temperatures in Bridge Creek.

Prior to the start of the release the general trend was seeing consistent warming from upstream to downstream. Highest peak temperatures were observed at the lowest measured point (T4). This trend continued approximately halfway through the release period at which point the peak observed temperatures were occurring at the most upstream monitoring location (T1).

Immediately after the release was turned off on 6/27 the temperature monitoring just below the release exhibited the largest temperature swings including the highest peak temperatures.

By computing the daily average and maximum values at each of the sensors we can get a sense of the magnitude of influence of the release.

Received

FEB 03 2026

OWRD

Page 4 of 6

Plotting the daily average temperature allows some of the trends to be more easily visualized. The magnitude of the influence is minor, however unmistakable (Figure 5 and Figure 6). Daily average and maximum temperatures values are provided in Table 1.

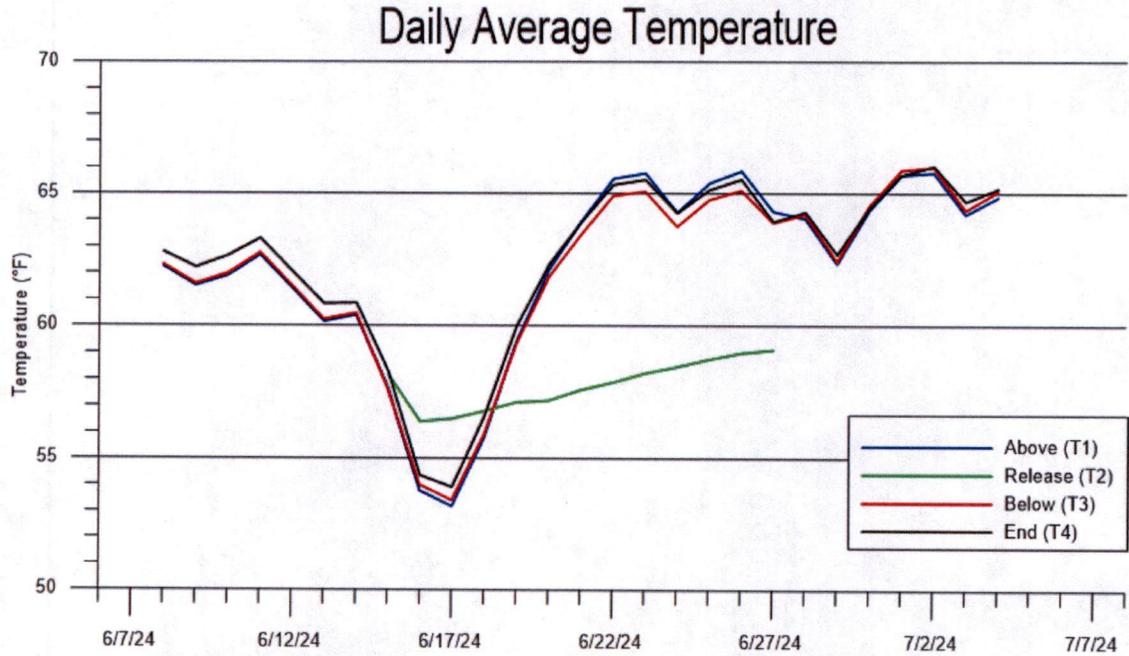
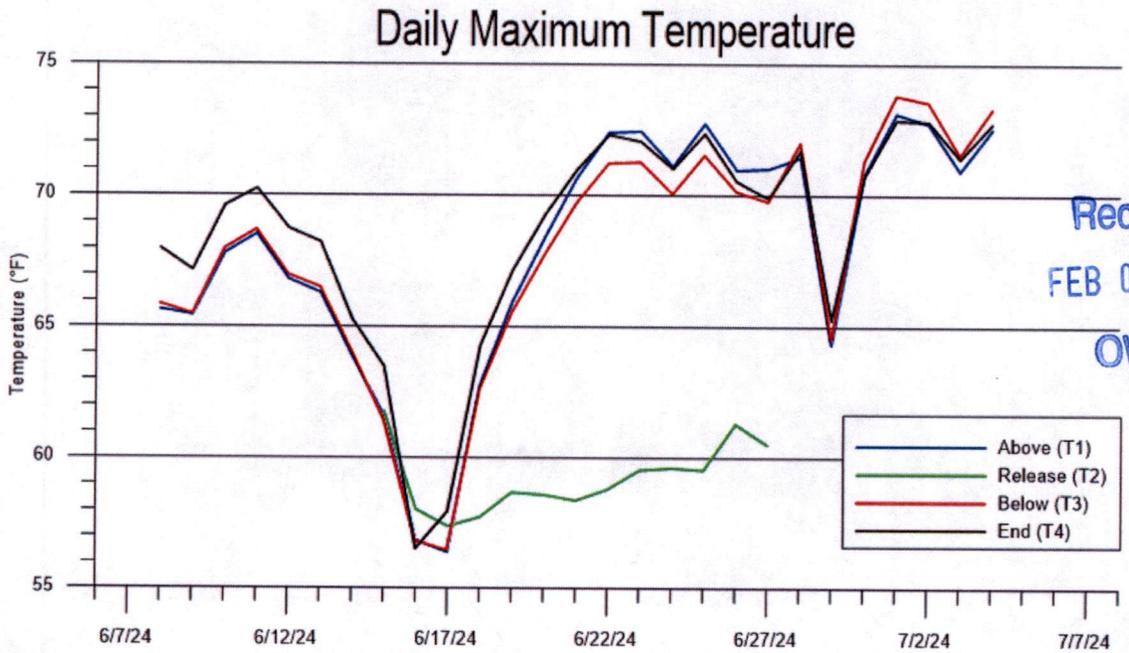


Figure 5 - Daily average temperature of Bridge Creek and release



Received
FEB 03 2026
OWRD

Figure 6 - Daily maximum temperature of Bridge Creek and release

2024 Painted Hills Release Temperature Monitoring.pdf

Table 1 - Daily average and maximum temperatures

| Date | Daily Average Temperature (°F) | | | | | Daily Maximum Temperature (°F) | | | | |
|---------|--------------------------------|--------------|------------|----------|-------------|--------------------------------|--------------|------------|----------|-------------|
| | Above (T1) | Release (T2) | Below (T3) | End (T4) | Delta T3-T1 | Above (T1) | Release (T2) | Below (T3) | End (T4) | Delta T3-T1 |
| 6/8/24 | 62.235 | | 62.306 | 62.783 | 0.071 | 65.658 | | 65.872 | 67.971 | 0.214 |
| 6/9/24 | 61.511 | | 61.581 | 62.201 | 0.070 | 65.444 | | 65.487 | 67.158 | 0.043 |
| 6/10/24 | 61.886 | | 61.974 | 62.645 | 0.088 | 67.798 | | 67.971 | 69.6 | 0.173 |
| 6/11/24 | 62.668 | | 62.757 | 63.301 | 0.089 | 68.527 | | 68.698 | 70.243 | 0.171 |
| 6/12/24 | 61.407 | | 61.497 | 62.039 | 0.090 | 66.814 | | 66.985 | 68.742 | 0.171 |
| 6/13/24 | 60.153 | | 60.240 | 60.831 | 0.087 | 66.301 | | 66.515 | 68.227 | 0.214 |
| 6/14/24 | 60.399 | | 60.469 | 60.859 | 0.070 | 63.862 | | 64.033 | 65.273 | 0.171 |
| 6/15/24 | 57.673 | 58.169 | 57.609 | 58.296 | -0.064 | 61.59 | 61.761 | 61.419 | 63.475 | -0.171 |
| 6/16/24 | 53.763 | 56.393 | 53.995 | 54.358 | 0.232 | 56.858 | 58.023 | 56.815 | 56.512 | -0.043 |
| 6/17/24 | 53.171 | 56.498 | 53.405 | 53.904 | 0.233 | 56.383 | 57.376 | 56.469 | 57.936 | 0.086 |
| 6/18/24 | 55.804 | 56.792 | 55.921 | 56.592 | 0.117 | 62.791 | 57.722 | 62.62 | 64.288 | -0.171 |
| 6/19/24 | 59.397 | 57.119 | 59.318 | 59.977 | -0.079 | 65.959 | 58.669 | 65.574 | 67.158 | -0.385 |
| 6/20/24 | 62.118 | 57.186 | 61.847 | 62.320 | -0.270 | 68.4 | 58.582 | 67.757 | 69.256 | -0.643 |
| 6/21/24 | 63.921 | 57.586 | 63.444 | 63.911 | -0.477 | 70.673 | 58.368 | 69.728 | 70.974 | -0.945 |
| 6/22/24 | 65.564 | 57.871 | 64.923 | 65.337 | -0.642 | 72.394 | 58.798 | 71.231 | 72.307 | -1.163 |
| 6/23/24 | 65.773 | 58.213 | 65.086 | 65.526 | -0.687 | 72.437 | 59.529 | 71.274 | 72.05 | -1.163 |
| 6/24/24 | 64.279 | 58.458 | 63.758 | 64.267 | -0.521 | 71.103 | 59.616 | 70.072 | 71.017 | -1.031 |
| 6/25/24 | 65.397 | 58.742 | 64.770 | 65.145 | -0.627 | 72.739 | 59.529 | 71.533 | 72.351 | -1.206 |
| 6/26/24 | 65.854 | 58.978 | 65.126 | 65.537 | -0.729 | 70.974 | 61.29 | 70.158 | 70.543 | -0.816 |
| 6/27/24 | 64.324 | 59.090 | 63.911 | 63.936 | -0.414 | 71.017 | 60.517 | 69.771 | 69.901 | -1.246 |
| 6/28/24 | 64.058 | | 64.219 | 64.300 | 0.162 | 71.447 | | 72.007 | 71.704 | 0.560 |
| 6/29/24 | 62.352 | | 62.428 | 62.698 | 0.077 | 64.332 | | 64.503 | 65.273 | 0.171 |
| 6/30/24 | 64.387 | | 64.543 | 64.472 | 0.156 | 70.803 | | 71.317 | 70.716 | 0.514 |
| 7/1/24 | 65.703 | | 65.889 | 65.703 | 0.186 | 73.126 | | 73.818 | 72.869 | 0.692 |
| 7/2/24 | 65.791 | | 66.005 | 66.036 | 0.214 | 72.739 | | 73.558 | 72.826 | 0.819 |
| 7/3/24 | 64.209 | | 64.371 | 64.692 | 0.162 | 70.93 | | 71.533 | 71.404 | 0.603 |
| 7/4/24 | 64.863 | | 65.085 | 65.187 | 0.222 | 72.523 | | 73.299 | 72.739 | 0.776 |

The largest impact of the release is illustrated by the sharp demarcation in temperatures, and temperature differences occurring once the release from the Reservoir was stopped on 6/27. The magnitude of the change is approximately 0.6 °F reduction for the daily average and 1.1 °F reduction for the peak temperatures as measured from T1 to T3.

This was the second year of conducting a summer release from Painted Hills Reservoir into Bridge Creek. The flow rate in Bridge Creek during the 2023 release was approximately 200% of normal, minimizing the thermal impact of the release. The flow rate in Bridge Creek during the 2024 release was less than what was seen in 2023, however it was still above normal. The positive thermal impacts of the release into Bridge Creek increase with decreasing flows. Seeing the positive thermal change (i.e. temperature reduction) during the release, even when Bridge Creek is flowing higher than normal conditions, is encouraging for the impacts that could be seen during a low water year.

During low water years, even though the release rate will be reduced, the impact should be significantly greater in magnitude than what was observed during 2023 and 2024.

Received
 FEB 03 2026
 OWRD



20340 Empire Ave. Ste E8
 Bend, OR 97703
 (541) 771-6911

Memorandum

Date: September 19th, 2025
 From: Benn Eilers, Resource Specialists Inc. (benn@rsiengr.com)
 Re: Temperature monitoring of Painted Hills Reservoir release into Bridge Creek - 2025

In accordance with Permit S-55289, Bridge Creek Ranch LLC is required to release 25% of additionally stored water in Painted Hills Reservoir. The timing and release rate into Bridge Creek varies depending on an Oregon Department of Fish and Wildlife (ODFW) determination of a “normal” or “dry” flow year and is stipulated in the permit as seen below:

VOLUME AND RATE OF RELEASE FOR – BRIDGE CREEK:

| Normal Year Release | | |
|--|--------------------------------------|--|
| Period of Release | June 15 — July 15 (up to 31 days) | July 16 — August 15 (up to 31 days) |
| Maximum Volume Released in Each Period | 93.75 ACRE-FEET | 21.25 ACRE-FEET |
| Rate of Release (CFS) (+/- 20%) | 1.52 CFS | 0.34 CFS |

| Dry Year Release | | |
|--|-------------------------------------|---------------------------------------|
| Period of Release | June 1 — July 15 (up to 45 days) | July 16 — August 5 (up to 21 days) |
| Maximum Volume Released in Each Period | 93.75 ACRE-FEET | 21.25 ACRE-FEET |
| Rate of Release (+/- 20%) | 1.05 CFS | 0.51 CFS |

VOLUME/RATE OF RELEASE – BEAR CREEK:

| ALL WATER YEAR TYPES | |
|--|-----------------------------------|
| Period of Release | June 1-September 15 (101 days) |
| Maximum Volume Released in Each Period | 10.0 ACRE-FEET |
| Rate of Release (+/- 20%) | 0.05 CFS |

Received
 FEB 03 2026
 OWRD

ODFW determined 2025 to be a “normal” year, and the release into Bridge Creek began on June 17th. The purpose of the release into Bear Creek was for vegetation establishment, however flows in Bear Creek were still high enough, and the vegetation has become establish in the infiltration area such that additional water was not necessary to supplement the vegetation.

During the storage period of 2025, Bridge Creek Ranch was able to store an additional 268.5 acre-ft of water in Painted Hills Reservoir. The amount of water needing to be released to Bridge Creek was

calculated to be 67.1255 acre-ft (25% of the additionally stored water). On June 17th at approximately 5 pm, the outflow from the reservoir was opened and adjusted to a discharge rate of approximately 550 GPM (1.23 CFS). Flow was measured with an inline 12" Seametrics AG3000 flowmeter at the base of the dam.

The flow meter totalizer was not reset from the release in 2024 and the beginning reading was 100.21 acre-feet. The release proceeded until July 15th 7:30 pm at which point the total volume on the flowmeter read 168.42 ac-ft (Figure 1) for a total released volume of 68.21 acre-ft.

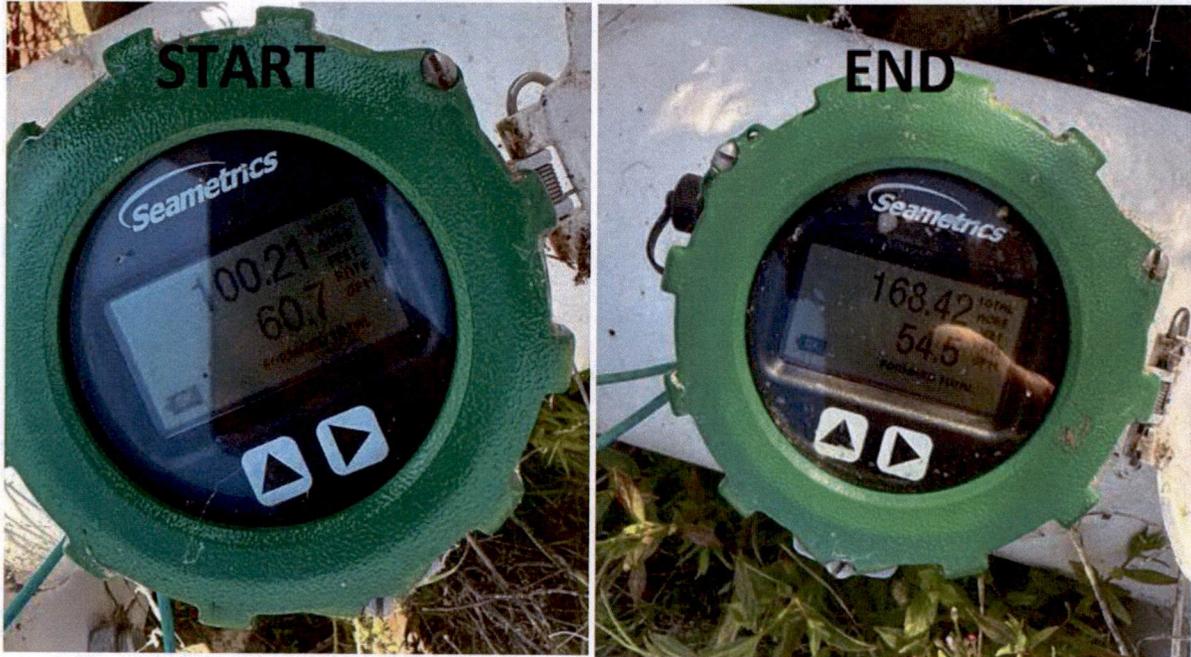


Figure 1 - Flowmeter at beginning and completion of release

Water temperature was measured at three points on Bridge Creek and at the release point near the base of the dam. The monitoring locations are labeled T1 – T4 as seen in Figure 2. The lower most monitoring location (T4) is located very near the property boundary, approximately 1 mile downstream of T3. Temperature was recorded using Hobo Tidbit V2 temperature loggers at 30 minute intervals. Data were downloaded from the sensors for analysis and plotting.

Flow rates in Bridge Creek (USGS 14046778) were examined over the release period and show that the discharge was above the long term average (Figure 3).

Received
FEB 03 2026
OWRD

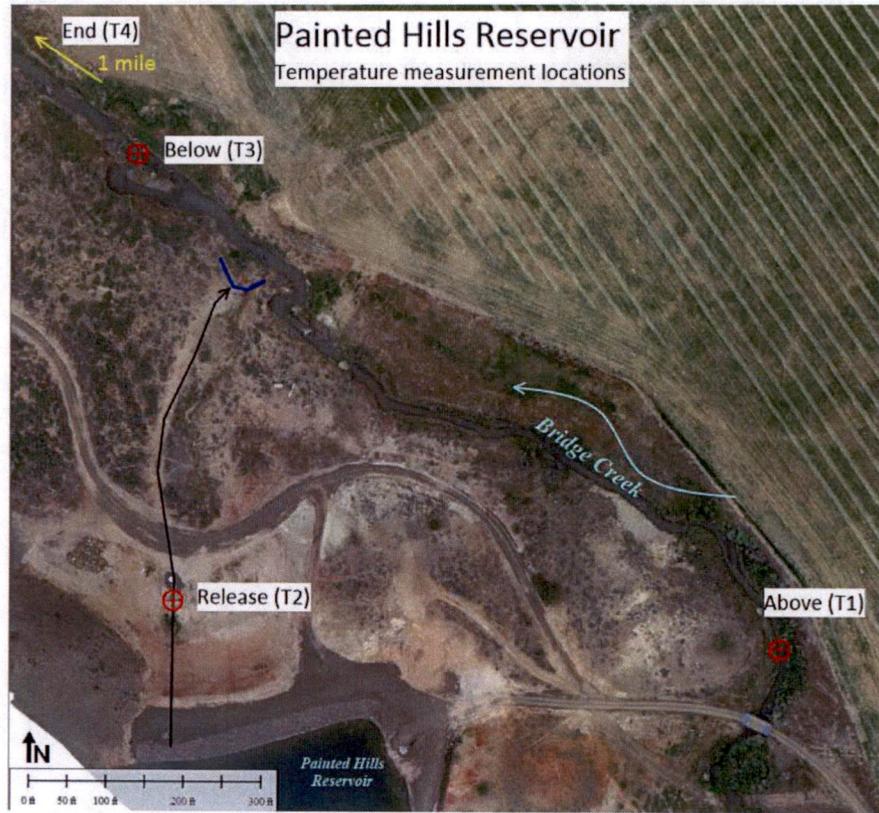


Figure 2 - Temperature monitoring locations

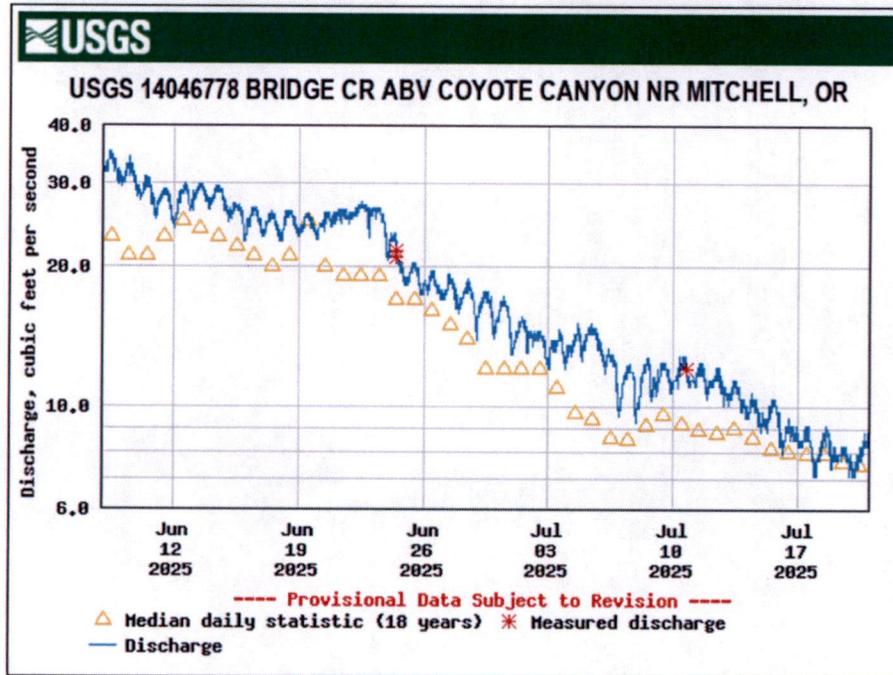


Figure 3 - Discharge in Bridge Creek during release period

Received
FEB 03 2026
OWRD

The recorded temperature measurements are plotted below in Figure 4. The data from T2 was clipped to the release period of 6/17/25 – 7/15/25 for clarity.

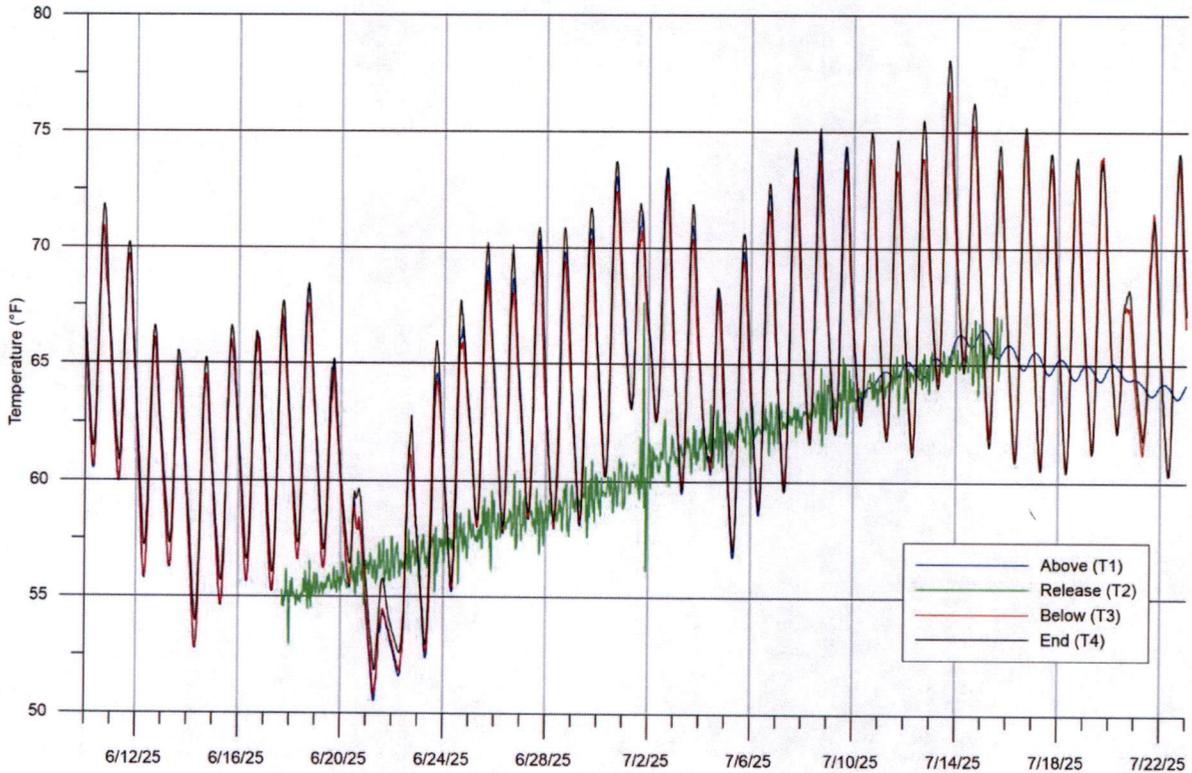


Figure 4 - Recorded temperatures in Bridge Creek and Painted Hills Reservoir release

Diel fluctuations of 5-12 °F are prominent on the Bridge Creek thermistors. The temperature of the release from the Reservoir begins at roughly 55 °F and steadily increases to approximately 65 °F at the end of the release. A cold front on 6/20 – 6/22 pushed average stream temperatures below the release temperature from the Reservoir, but other than those three days the temperature of the release from the Reservoir was significantly below the observed average temperatures in Bridge Creek.

Data from T1 ceased to demonstrate the standard diel fluctuations starting on 7/10 and exhibits a highly muted or insulated response. When the thermistor was recovered for download the sensor was buried in the stream sediment. As there were no peak flow events during this time frame the most likely culprit is that a large animal (cow, elk, etc) stepped on the sensor and embedded it in the sediment.

Prior to the start of the release the general trend was seeing consistent warming from upstream to downstream. Highest peak temperatures were observed at the lowest measured point (T4). In 2024, peak temperatures were a maximum during the release at T1, however in 2025 this did not occur and throughout the release period the highest peak temperatures were observed to be occurring at the most downstream monitoring point T4.

By computing the daily average and maximum values at each of the sensors we can get a sense of the magnitude of influence of the release.

Received
FEB 03 2026
OWRD

Plotting the daily average temperature allows some of the trends to be more easily visualized. The magnitude of the influence is minor, however unmistakable (Figure 5 and Figure 6). Daily average and maximum temperatures values are provided in Table 1.

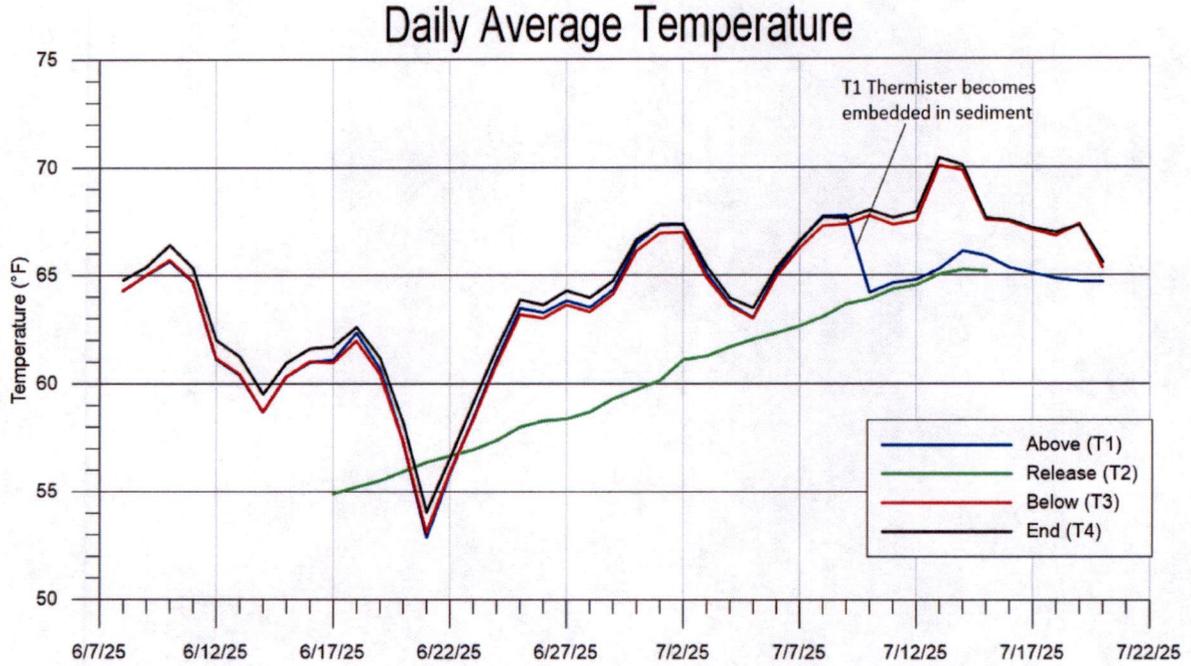


Figure 5 - Daily average temperature of Bridge Creek and release

Received
FEB 03 2026

OWRD

Page 5 of 8

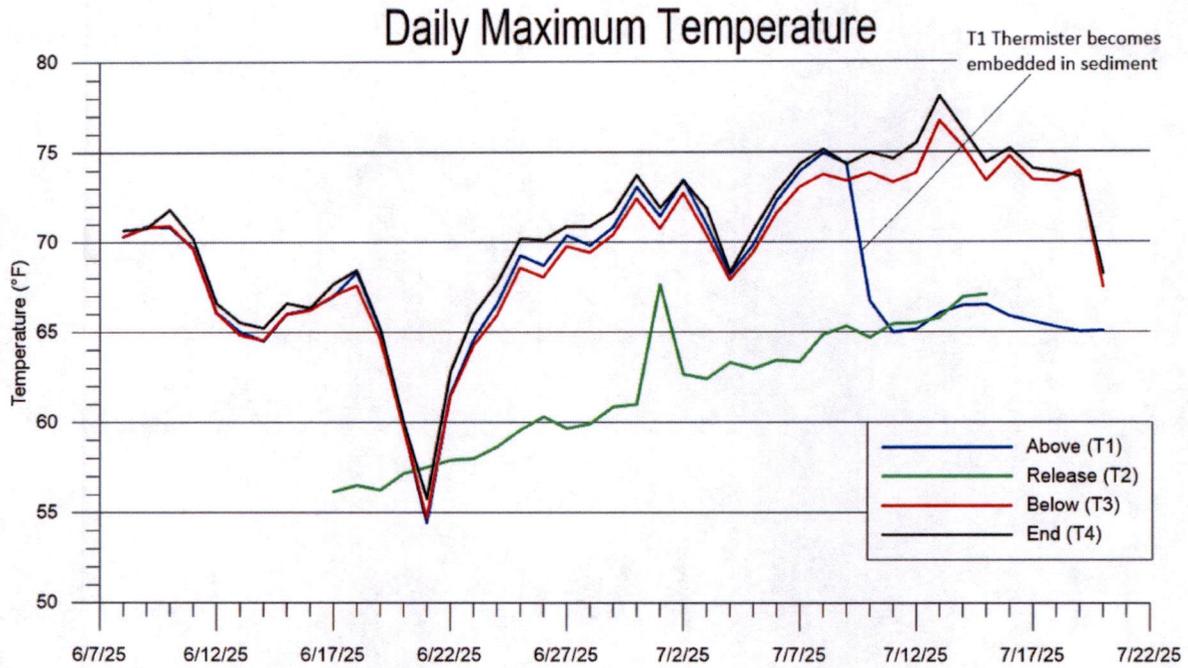


Figure 6 - Daily maximum temperature of Bridge Creek and release

The embedment of T1 is very apparent on both the average and maximum temperature plots. There's a spike on the maximum temperature for the release on 7/1. This spike can also be seen on Figure 4. The fluctuations of temperature during this time are rapid and do little to affect the overall average of the release temperature. It is not apparent what caused this rapid fluctuation at this time.

A table showing the average and maximum temperature of all thermistors is provided below in Table 1. The temperature difference between the upstream and downstream thermistors is also provided as a metric of cooling performance.

Received
 FEB 03 2026
 OWRD

2025 Painted Hills Release Temperature Monitoring.pdf

Table 1 - Daily average and maximum temperatures

| Date | Daily Average Temperature (°F) | | | | | Daily Maximum Temperature (°F) | | | | |
|---------|--------------------------------|--------------|------------|----------|-------------|--------------------------------|--------------|------------|----------|-------------|
| | Above (T1) | Release (T2) | Below (T3) | End (T4) | Delta T3-T1 | Above (T1) | Release (T2) | Below (T3) | End (T4) | Delta T3-T1 |
| 6/8/25 | 64.291 | | 64.289 | 64.776 | -0.002 | 70.329 | | 70.329 | 70.673 | 0.000 |
| 6/9/25 | 64.999 | | 65.008 | 65.382 | 0.009 | 70.887 | | 70.846 | 70.803 | -0.041 |
| 6/10/25 | 65.654 | | 65.699 | 66.392 | 0.045 | 70.846 | | 70.93 | 71.834 | 0.084 |
| 6/11/25 | 64.678 | | 64.709 | 65.308 | 0.031 | 69.685 | | 69.643 | 70.201 | -0.042 |
| 6/12/25 | 61.128 | | 61.169 | 62.002 | 0.040 | 66.087 | | 66.087 | 66.6 | 0.000 |
| 6/13/25 | 60.405 | | 60.446 | 61.249 | 0.040 | 65.017 | | 64.845 | 65.53 | -0.172 |
| 6/14/25 | 58.694 | | 58.698 | 59.514 | 0.004 | 64.503 | | 64.546 | 65.23 | 0.043 |
| 6/15/25 | 60.319 | | 60.320 | 60.952 | 0.000 | 66 | | 66 | 66.6 | 0.000 |
| 6/16/25 | 60.990 | | 61.023 | 61.615 | 0.033 | 66.258 | | 66.214 | 66.344 | -0.044 |
| 6/17/25 | 61.097 | 54.910 | 60.963 | 61.709 | -0.134 | 66.985 | 56.16 | 67.028 | 67.671 | 0.043 |
| 6/18/25 | 62.343 | 55.219 | 61.972 | 62.599 | -0.370 | 68.313 | 56.512 | 67.586 | 68.443 | -0.727 |
| 6/19/25 | 60.691 | 55.517 | 60.455 | 61.176 | -0.236 | 65.102 | 56.251 | 64.632 | 65.188 | -0.470 |
| 6/20/25 | 57.356 | 55.936 | 57.365 | 58.205 | 0.008 | 59.83 | 57.16 | 59.745 | 60.003 | -0.085 |
| 6/21/25 | 52.901 | 56.361 | 53.119 | 54.058 | 0.218 | 54.43 | 57.506 | 54.691 | 55.776 | 0.261 |
| 6/22/25 | 55.851 | 56.663 | 55.902 | 56.539 | 0.051 | 61.506 | 57.893 | 61.419 | 62.791 | -0.087 |
| 6/23/25 | 58.381 | 56.951 | 58.317 | 59.116 | -0.065 | 64.589 | 57.979 | 64.247 | 65.959 | -0.342 |
| 6/24/25 | 61.078 | 57.381 | 60.900 | 61.609 | -0.179 | 66.558 | 58.626 | 65.916 | 67.714 | -0.642 |
| 6/25/25 | 63.465 | 58.003 | 63.176 | 63.862 | -0.289 | 69.256 | 59.572 | 68.571 | 70.201 | -0.685 |
| 6/26/25 | 63.269 | 58.286 | 63.014 | 63.617 | -0.254 | 68.698 | 60.303 | 68.056 | 70.115 | -0.642 |
| 6/27/25 | 63.812 | 58.378 | 63.618 | 64.276 | -0.194 | 70.372 | 59.659 | 69.771 | 70.887 | -0.601 |
| 6/28/25 | 63.507 | 58.696 | 63.308 | 63.953 | -0.199 | 69.814 | 59.916 | 69.427 | 70.887 | -0.387 |
| 6/29/25 | 64.323 | 59.305 | 64.113 | 64.743 | -0.211 | 70.846 | 60.861 | 70.416 | 71.704 | -0.430 |
| 6/30/25 | 66.443 | 59.723 | 66.108 | 66.648 | -0.335 | 73.083 | 60.991 | 72.437 | 73.731 | -0.646 |
| 7/1/25 | 67.318 | 60.143 | 66.940 | 67.331 | -0.378 | 71.447 | 67.627 | 70.759 | 71.92 | -0.688 |
| 7/2/25 | 67.338 | 61.100 | 66.982 | 67.355 | -0.356 | 73.472 | 62.661 | 72.739 | 73.429 | -0.733 |
| 7/3/25 | 65.070 | 61.269 | 64.876 | 65.387 | -0.194 | 70.974 | 62.406 | 70.416 | 71.877 | -0.558 |
| 7/4/25 | 63.661 | 61.689 | 63.587 | 63.938 | -0.074 | 68.185 | 63.304 | 67.885 | 68.313 | -0.300 |
| 7/5/25 | 63.018 | 62.035 | 63.006 | 63.478 | -0.013 | 69.858 | 62.962 | 69.427 | 70.63 | -0.431 |
| 7/6/25 | 65.109 | 62.335 | 64.933 | 65.339 | -0.176 | 72.307 | 63.433 | 71.62 | 72.783 | -0.687 |
| 7/7/25 | 66.533 | 62.649 | 66.238 | 66.591 | -0.295 | 73.947 | 63.347 | 73.083 | 74.338 | -0.864 |
| 7/8/25 | 67.719 | 63.075 | 67.270 | 67.671 | -0.449 | 74.943 | 64.845 | 73.774 | 75.16 | -1.169 |
| 7/9/25 | 67.760 | 63.657 | 67.349 | 67.638 | -0.410 | 74.381 | 65.316 | 73.429 | 74.338 | -0.952 |
| 7/10/25 | 64.188 | 63.883 | 67.741 | 68.005 | 3.553 | 66.729 | 64.674 | 73.861 | 74.986 | 7.132 |
| 7/11/25 | 64.631 | 64.339 | 67.329 | 67.644 | 2.698 | 64.974 | 65.444 | 73.342 | 74.64 | 8.368 |
| 7/12/25 | 64.781 | 64.531 | 67.510 | 67.918 | 2.728 | 65.145 | 65.487 | 73.861 | 75.508 | 8.716 |
| 7/13/25 | 65.279 | 65.029 | 70.085 | 70.438 | 4.806 | 66.043 | 65.788 | 76.725 | 78.076 | 10.682 |
| 7/14/25 | 66.105 | 65.241 | 69.857 | 70.101 | 3.753 | 66.472 | 66.943 | 75.29 | 76.246 | 8.818 |
| 7/15/25 | 65.878 | 65.180 | 67.560 | 67.635 | 1.682 | 66.515 | 67.071 | 73.429 | 74.424 | 6.914 |
| 7/16/25 | 65.333 | | 67.474 | 67.527 | 2.141 | 65.872 | | 74.77 | 75.204 | 8.898 |
| 7/17/25 | 65.078 | | 67.081 | 67.162 | 2.003 | 65.574 | | 73.472 | 74.077 | 7.898 |
| 7/18/25 | 64.833 | | 66.807 | 66.971 | 1.974 | 65.273 | | 73.386 | 73.904 | 8.113 |
| 7/19/25 | 64.702 | | 67.360 | 67.303 | 2.658 | 65.017 | | 73.947 | 73.645 | 8.930 |
| 7/20/25 | 64.677 | | 65.344 | 65.580 | 0.667 | 65.059 | | 67.5 | 68.227 | 2.441 |

Data after the embedment of T1 on 7/10 (yellow highlighted data) can be disregarded as it renders any comparison data non-useful. The impacts of note occur during the release from 6/17 to 7/9 and are exhibited by a decrease in temperature from T1 to T3. The magnitude of this difference in daily average temperature varies from an increase of 0.22 °F during the cold snap, to a temperature reduction of 0.45 °F. The difference in peak temperatures is more dramatic ranging from an increase in temperature during the cold snap of 0.26 °F, to a peak temperature reduction of 1.17 °F. Data from before the

release demonstrates nearly identical temperatures at T1 and T3, demonstrating that the observed temperature reduction can be directly attributed to the released water from Painted Hills Reservoir.

This was the third year of conducting a summer release from Painted Hills Reservoir into Bridge Creek. All three years have demonstrated a cooling effect to Bridge Creek. For the third year in a row, flows in Bridge Creek during the release period were above average. This leads to a muted thermal response from the release for two reasons; 1) temperatures in Bridge Creek are likely cooler than normal due to the higher flow rates and 2) the higher flow rates temper the thermal response due to the lower ratio of released water vs. stream discharge.

Seeing the positive thermal change (i.e. temperature reduction) during the release, even when Bridge Creek is flowing higher than normal conditions, is encouraging for the impacts that could be seen during a low water year.

Received
FEB 03 2026
OWRD



Benn Eilers <benn80@gmail.com>

Bridge Creek Ranch - Painted Hills Reservoir, Water year determination

Benn Eilers <benn@rsiengr.com>

Thu, Jun 8, 2023 at 10:54 AM

To: THIEMANN Kenneth C * WRD <kenneth.c.thiemann@water.oregon.gov>, "Langford, Shonee D." <SLangford@schwabe.com>, "Howard, Elizabeth E." <EHoward@schwabe.com>, Gabe Williams <gabe@rsiengr.com>, Gordon Tolton <gtolton@pape.com>, Jake Tolton <jtolton@pape.com>, Mike Pati <mpati@pape.com>, "Thane, Lindsay M." <LThane@schwabe.com>

Ken -

The ODFW water year determination for Bridge Creek this year is a "normal" water year. All monitoring equipment is in place for water release beginning June 15th.

Thank you

Benn Eilers, PE



20340 Empire Ave. Ste E8
Bend, OR 97703
cell 541.678.3969
www.RSIengr.com

Received
FEB 03 2026
OWRD

Received
FEB 03 2026
OWRD



Benn Eilers <benn80@gmail.com>

Bridge Creek Ranch - Painted Hills Reservoir Release

Benn Eilers <benn@rsiengr.com>

Fri, Jun 16, 2023 at 8:23 AM

To: THIEMANN Kenneth C * WRD <kenneth.c.thiemann@water.oregon.gov>, "Langford, Shonee D." <SLangford@schwabe.com>, "Howard, Elizabeth E." <EHoward@schwabe.com>, Gabe Williams <gabe@rsiengr.com>, Gordon Tolton <gtolton@pape.com>, Jake Tolton <jtolton@pape.com>, Mike Pati <mpati@pape.com>, "Thane, Lindsay M." <LThane@schwabe.com>

Received
FEB 03 2026
OWRD

I just wanted to update everyone on the release.

I was at the reservoir yesterday and opened the outlet pipe at approximately 11 am. After a bit of tuning I was able to get the flowrate steady at ~725 gpm (1.62 cfs). The outflow into the creek is performing as expected.

Bear Creek was still flowing and the small discharge to Bear was not turned on.

At this rate we are discharging 3.2 acre-ft per day. With a stored additional volume of 157 ac-ft the 25% release requirement is 39.25 ac-ft

Assuming minimal change in the discharge rate the 39.25 ac-ft of discharge will be completed in 12.25 days. Which to be more exact would be at 5pm on the 27th. The flow gauge is working well at the base of the dam with it reading instantaneously in GPM and a totalizer in ac-ft.

Jake - if you could keep an eye on it and let me know if you see any changes to the flow rate that would be great. Also if you could lift the flap on the flow gauge and report total Ac-Ft with a date and time we can verify that our timeline is correct.

Thanks

Benn Eilers, PE



20340 Empire Ave. Ste E8
Bend, OR 97703
cell 541.678.3969
www.RSIengr.com

On Thu, Jun 8, 2023 at 10:54 AM Benn Eilers <benn@rsiengr.com> wrote:

Ken -

The ODFW water year determination for Bridge Creek this year is a "normal" water year. All monitoring equipment is in place for water release beginning June 15th.

Thank you

Benn Eilers, PE



20340 Empire Ave. Ste E8
Bend, OR 97703
cell 541.678.3969
www.RSIengr.com

Received
FEB 03 2026
OWRD



Benn Eilers <benn80@gmail.com>

Painted Hills Reservoir - 2025 Release Schedule

2 messages

Benn Eilers <benn@rsiengr.com> Mon, Jun 2, 2025 at 11:35 AM
 To: THIEMANN Kenneth C * WRD <Kenneth.C.THIEMANN@water.oregon.gov>, KOWITZ Chris C * WRD <Chris.C.KOWITZ@water.oregon.gov>, Gabe Williams <gabe@rsiengr.com>, Mike Pati <mpati@pape.com>, "Howard, Elizabeth E." <EHoward@schwabe.com>, "Langford, Shonee D." <SLangford@schwabe.com>, "Thane, Lindsay M." <LThane@schwabe.com>, Jake Tolton <jtolton@pape.com>, Gordon Tolton <gtolton@pape.com>

Hi All -

We were able to store 268.5 ac-ft of water in Painted Hills Reservoir during the April 1-14 fill window this year (2025) - see email from me on April 15th (subject: "Painted Hills Reservoir - April 2025 Fill") for further details and calculations.

A minimum of twenty five percent (25%) of this newly stored water (67.1255 ac-ft) will be released into Bridge Creek during the release window.

Spencer Sawaske (ODFW) ran the numbers and determined that 2025 is a "NORMAL" year for flow on Bridge Creek, so we will be using the following release schedule from Permit S-55289:

VOLUME AND RATE OF RELEASE FOR – BRIDGE CREEK:

| Normal Year Release | | |
|--|--------------------------------------|--|
| Period of Release | June 15 — July 15 (up to 31 days) | July 16 — August 15 (up to 31 days) |
| Maximum Volume Released in Each Period | 93.75 ACRE-FEET | 21.25 ACRE-FEET |
| Rate of Release (CFS) (+/- 20%) | 1.52 CFS | 0.34 CFS |

We are planning to release the full amount into Bridge Creek instead of splitting flow in Bear Creek.

Given the +/- 20% variance, the flow rate starting on June 15 will be between 1.216 - 1.824 cfs (545.74 - 818.6 gpm). The release will take between 19 and 28 days to release the required amount of 67.1255 ac-ft depending on the actual flow rate of the release.

The flow rate and temperature of the released water will be monitored at the base of the dam, and temperature will be monitored in Bridge Creek above and below the point of release with an additional temperature monitoring site near where Bridge Creek leaves the Ranch property on the north end. I visited all thermistor locations last week and double checked installation and operation.

Please let me know if you have any questions.

Thank you
Benn Eilers, PE

Resource Specialists Inc.
 20340 Empire Ave. Ste E8
 Bend, OR 97703
 cell 541.678.3969
www.RSlengr.com

Received
FEB 03 2026
OWRD

On Fri, May 24, 2024 at 10:41 AM Benn Eilers <benn@rsiengr.com> wrote:
 Hi All -

We were able to store 154.5 ac-ft of water in Painted Hills Reservoir during the April 1-14 fill window this year.

Twenty five percent (25%) of this newly stored water (38.625 ac-ft) will be released into Bridge Creek during the release window.

Spencer Sawaske (ODFW) ran the numbers and determined that 2024 is a "NORMAL" year for flow on Bridge Creek, so we will be using the following release schedule from Permit S-55289:

VOLUME AND RATE OF RELEASE FOR – BRIDGE CREEK:

| Normal Year Release | | |
|---|--|--|
| Period of Release | June 15 — July 15 (up to 31 days) | July 16 — August 15 (up to 31 days) |
| Maximum Volume Released in Each Period | 93.75 ACRE-FEET | 21.25 ACRE-FEET |
| Rate of Release (CFS) (+/- 20%) | 1.52 CFS | 0.34 CFS |

Flows are still up in Bear Creek so we are planning to release the full amount into Bridge Creek instead of splitting flow.

Given the +/- 20% variance, the flow rate starting on June 15 will be between 1.216 - 1.824 cfs (545.74 - 818.6 gpm). The release will take between 11 and 16 days to release the required amount of 38.625 ac-ft depending on the actual flow rate of the release.

The flow rate and temperature of the released water will be monitored at the base of the dam, and temperature will be monitored in Bridge Creek above and below the point of release with an additional temperature monitoring site near where Bridge Creek leaves the Ranch property on the north end.

Please let me know if you have any questions.

Thank you

Benn Eilers, PE

Resource Specialists Inc.

20340 Empire Ave. Ste E8
 Bend, OR 97703
 cell 541.678.3969
www.RSIengr.com

THIEMANN Kenneth C * WRD <Kenneth.C.THIEMANN@water.oregon.gov>
 To: Benn Eilers <benn@rsiengr.com>

Mon, Jun 2, 2025 at 3:58 PM

Thank you Benn,

I will take a look. Have a great rest of your day.

Ken Thiemann (He/His/Him)

District 21 Watermaster

Oregon Water Resources Department

Email: Kenneth.C.Thiemann@water.oregon.gov

Mobile: 541-969-8799

[Interactive Mapper Link](#)

Integrity | Service | Technical Excellence | Teamwork | Forward-Looking

Received
 FEB 03 2026
 OWRD

From: Benn Eilers <benn@rsiengr.com>

Sent: Monday, June 2, 2025 11:36 AM

To: THIEMANN Kenneth C * WRD <Kenneth.C.THIEMANN@water.oregon.gov>; KOWITZ Chris C * WRD <Chris.C.KOWITZ@water.oregon.gov>; Gabe Williams <gabe@rsiengr.com>; Mike Pati <mpati@pape.com>; Howard, Elizabeth E. <EHoward@schwabe.com>; Langford, Shonee D. <SLangford@schwabe.com>; Thane, Lindsay M. <LThane@schwabe.com>; Jake Tolton <jtolton@pape.com>; Gordon Tolton <gtolton@pape.com>

Subject: Painted Hills Reservoir - 2025 Release Schedule

Hi All -

We were able to store 268.5 ac-ft of water in Painted Hills Reservoir during the April 1-14 fill window this year (2025) - see email from me on April 15th (subject: "Painted Hills Reservoir - April 2025 Fill") for further details and calculations.

A minimum of twenty five percent (25%) of this newly stored water (67.1255 ac-ft) will be released into Bridge Creek during the release window.

Spencer Sawaske (ODFW) ran the numbers and determined that 2025 is a "NORMAL" year for flow on Bridge Creek, so we will be using the following release schedule from Permit S-55289:

VOLUME AND RATE OF RELEASE FOR – BRIDGE CREEK:

| Normal Year Release | | |
|--|--------------------------------------|--|
| Period of Release | June 15 — July 15 (up to 31 days) | July 16 — August 15 (up to 31 days) |
| Maximum Volume Released in Each Period | 93.75 ACRE-FEET | 21.25 ACRE-FEET |
| Rate of Release (CFS) (+/- 20%) | 1.52 CFS | 0.34 CFS |

We are planning to release the full amount into Bridge Creek instead of splitting flow in Bear Creek.

Given the +/- 20% variance, the flow rate starting on June 15 will be between 1.216 - 1.824 cfs (545.74 - 818.6 gpm). The release will take between 19 and 28 days to release the required amount of 67.1255 ac-ft depending on the actual flow rate of the release.

The flow rate and temperature of the released water will be monitored at the base of the dam, and temperature will be monitored in Bridge Creek above and below the point of release with an additional temperature monitoring site near where Bridge Creek leaves the Ranch property on the north end. I visited all thermistor locations last week and double checked installation and operation.

Please let me know if you have any questions.

Thank you

Benn Eilers, PE

Received

FEB 03 2026

OWRD

Resource Specialists Inc.

20340 Empire Ave. Ste E8

Bend, OR 97703

cell 541.678.3969

www.RSIengr.com

On Fri, May 24, 2024 at 10:41 AM Benn Eilers <benn@rsiengr.com> wrote:

Hi All -

We were able to store 154.5 ac-ft of water in Painted Hills Reservoir during the April 1-14 fill window this year.

Twenty five percent (25%) of this newly stored water (38.625 ac-ft) will be released into Bridge Creek during the release window.

Spencer Sawaske (ODFW) ran the numbers and determined that 2024 is a "NORMAL" year for flow on Bridge Creek, so we will be using the following release schedule from Permit S-55289:

VOLUME AND RATE OF RELEASE FOR – BRIDGE CREEK:

| Normal Year Release | | |
|---|--|--|
| Period of Release | June 15 — July 15 (up to 31 days) | July 16 — August 15 (up to 31 days) |
| Maximum Volume Released in Each Period | 93.75 ACRE-FEET | 21.25 ACRE-FEET |
| Rate of Release (CFS) (+/- 20%) | 1.52 CFS | 0.34 CFS |

[Quoted text hidden]

Received
FEB 03 2026
OWRD