

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

In the Matter of the Proposed Allocation of) FINAL ORDER APPROVING
Conserved Water by Tumalo Irrigation District,) ALLOCATION OF CONSERVED
for certificates 74146 and 74148, Deschutes) WATER
County, Oregon)

ORS 537.455 to 537.500 as amended by 2003 HB 2456, and OAR Chapter 690, Division 018, authorize and establish the process and criteria for allocations of conserved water.

Findings of Fact

1. On May 20, 2005, Tumalo Irrigation District (TID) filed an application for an allocation of conserved water. The Department assigned the application number C-37.
2. The application requests an allocation of conserved water under certificates 74146 and 74148 in the name of TID. However, TID indicated a willingness to have the allocation of conserved water apply to other TID rights.
3. The Oregon Water Resources Department consulted with the Oregon Department of Fish and Wildlife (ODFW), Department of Environmental Quality, Oregon State Parks and Recreation Department, and TID to determine how the conserved water could best meet instream needs. Based on this consultation, the State of Oregon determined that the allocation of conserved water would be most beneficial if applied to the water rights TID proposed, certificates 74146 and 74148.
4. The rights involved in the allocation of conserved water are generally described below, and reflect a previously approved allocation of conserved water, C-9, as evidenced by Special Order Volume 64, Page 157. However, these rights of record may be further modified by any cancellations, transfers, and other allocation of conserved water projects, completed pursuant to ORS 537 and ORS 540.

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

Certificate 74146

Source: Tumalo Creek

Priority Date	Acres (equivalent)	Maximum Rate (cfs)	Maximum Duty (AF)
August 5, 1900	407.60	5.823	733.68
September, 1900	3,265.85	40.835	5,878.63
April 28, 1905	301.60	4.309	542.88
May 27, 1907	43.20	0.603	77.76
June 1, 1907	992.65	14.181	1,786.77
Total	5,010.90	65.751	9,019.62

Total Duty: 1.8 AF/ac, being 9,019.62 AF measured at or within one-half mile of the place of use

On-Farm Rate: 1/70 cfs per acre

Type of Use: Irrigation, pond maintenance, industrial, domestic including livestock

Total Acres-Equivalent: 5,010.9

Points of Diversion:

Twp	Rng	Mer	Sec	Q-Q	Survey Coordinates
17 S	11 E	WM	23	SW NE	NORTH 70 DEGREES 21 MINUTES WEST, 1550 FEET FROM E1/4 CORNER, SECTION 23
18 S	10 E	WM	2	NW SW	NORTH 14 DEGREES 2 MINUTES EAST 1713 FEET FROM S1/4 CORNER, SECTION 2

Certificate 74148

Source: Crescent Lake Reservoir

Priority: April 7, 1911

Duty: 35,000 AF

Type of Use: Supplemental irrigation, pond maintenance, industrial use

Total Acres-Equivalent: 6,590.6

Point of Diversion:

Twp	Rng	Mer	Sec	Q-Q
24 S	6 E	WM	11	SE SW and SW SE

- The conservation project involves piping the un-piped portion of the Tumalo Feed Canal above the junction with the Bend Feed Canal, and piping the two joined canals from the junction to Upper Tumalo Reservoir, a distance of approximately 6 miles. The replacement of open, unlined ditches with pipelines is a proven technology for conserving water.
- The water conserved by this pipelining project is seepage losses from the ditches operated by TID. To the extent that the seepage losses eliminated by pipelines are in excess of the quantities of conserved water to be allocated, the project also will provide for more reliable delivery of water for the beneficial purposes under the water right.

7. Public notice was published as required under OAR 690-018-0050. No comments were received.
8. The application includes land use information forms completed and signed by Deschutes County demonstrating that the required land use approvals have been obtained by the applicant.
9. Pursuant to OAR 690-018-0012(1), the applicant's propose that 100 percent of the conserved water be allocated to the State for an instream water right.
10. Pursuant ORS 537.485, the applicant's request that the priority dates of the conserved water be the same as the originating rights.
11. The applicant has proposed to conserve 11.8 cubic feet per second (cfs) from Tumalo Creek under certificate 74146, with the rate proportionately distributed between all priority dates, and 2,732 acre-feet (AF) as measured at Crescent Creek Gauging Station No. 14060000, from Crescent Lake Reservoir under certificate 74148, with a priority date of April 7, 1911. After the allocation of conserved water, the water right held by the district and the State's instream water right will allow use of the following quantities of water:

Certificate	Priority Date	Before Project District Maximum Rate/Duty	After Project District Maximum Rate/Duty	Conserved Water Rate/Duty	Instream Water Right Rate/Duty
74146*	Aug. 5, 1900	5.823 cfs	4.778 cfs	1.045 cfs	1.045 cfs
	Sept. 1900	40.835 cfs	33.506 cfs	7.329 cfs	7.329 cfs
	April 28, 1905	4.309 cfs	3.536 cfs	0.773 cfs	0.773 cfs
	May 27, 1907	0.603 cfs	0.495 cfs	0.108 cfs	0.108 cfs
	June 1, 1907	14.181 cfs	11.636 cfs	2.545 cfs	2.545 cfs
	Subtotal		65.751 cfs	53.951 cfs	11.8 cfs
74148	April 7, 1911	35,000 AF	32,268 AF	2,732 AF	2,732 AF

* Certificate 74146 has a maximum rate at the point of diversion, but no duty associated with the point of diversion. The duty of 1.8 AF/ac is measured at or within one-half mile of the lands to be irrigated. Since this piping project is not affecting the amount of water to be delivered within ½ mile of the place of use, only the rate at the point of diversion is involved in this allocation of conserved water.

12. Project construction is proposed to begin in October 2006, and is scheduled for completion between April 2007 and April 2010.
13. The applicant has proposed to create two instream reaches. One from the point of diversion on Tumalo Creek to Lake Billy Chinook and the other from Crescent Lake Reservoir to Lake Billy Chinook.
14. TID is located in an area that is underlain by highly permeable, fractured basalts. The canal seepage that is conserved by the project likely would have entered the regional ground water system that discharges near or into Lake Billy Chinook. The ground water flows in the area are generally parallel to Tumalo Creek. As a result, the canal seepage did not return to Tumalo Creek and did not become available to other water users in Tumalo Creek.

Channel loss is known to occur in the Little Deschutes River and in some segments of the Deschutes River. From Crescent Creek Gauging Station No. 14060000 to Benham Falls Gauging Station No. 14064500 on the Deschutes River there is an 18 percent channel loss. From Benham Falls to the City of Bend on the Deschutes River there is a 7 percent channel loss.

15. Instream water rights have been established in Tumalo Creek, Crescent Creek, the Little Deschutes River and the Deschutes River. However, these rights are frequently not met.
16. For many years an informal agreement has allowed for the release of approximately 5.0 cfs from Crescent Lake Reservoir, as measured at Crescent Creek Gauging Station Number 14060000. As part of this conserved water application, TID has requested that this gentleman's agreement be formalized.
17. The ODFW, Department of Environmental Quality, and Oregon Parks and Recreation Department were consulted and indicated that additional streamflows are needed in Tumalo Creek, Crescent Creek, the Little Deschutes River and the Deschutes River to provide for the conservation, maintenance and enhancement of aquatic and fish life and fish habitat.
18. Pursuant to OAR 690-018-0025, the applicant has an adopted allocation of conserved water policy, which was approved on March 8, 2005.

Ultimate Findings of Fact

Pursuant to OAR 690-018-0050, in reviewing the application for allocation of conserved water the Department has determined the following:

- A. The proposed allocation of conserved water will result in a reduced diversion for the uses allowed under the original rights of 11.8 cfs for certificate 74146 and 2,732 AF for certificate 74148 as established in Finding of Fact 11. Additionally, a flow of 5.0 cfs shall be required at Crescent Creek Gauging Station Number 14060000. Any flow restoration activities, including, but not limited to, instream transfers, allocations of conserved water, and instream leases, shall be additive to the 5.0 cfs flow release.
- B. The proposed allocation will not harm other water rights as long as the channel loss factors are applied as described in Finding of Fact 14.
- C. The application is compatible with the local comprehensive land use plan as established in Finding of Fact 8.
- D. Since no harm will occur to other water rights, no reduction in the quantity of conserved water to be allocated is required to mitigate for effects on other water rights.
- E. Consistent with Finding of Fact 4 and 11, the maximum on-farm rate and duty associated with certificate 74146 remains unchanged at 1/70 cfs/ac and 1.8 AF/ac. The maximum rate at the point of diversion shall be:

Certificate	Priority Date	After Project District Maximum Rate (cfs)
74146	August 5, 1900	4.778
	September, 1900	33.506
	April 28, 1905	3.536
	May 27, 1907	0.495
	June 1, 1907	11.636
	Total	53.951

For certificate 74148 the maximum total diversion shall not exceed 32,268 AF for water used for supplemental irrigation, pond maintenance, and industrial use.

- F. The State's portion of the conserved water is needed to improve aquatic resources and their habitat in Tumalo Creek, Crescent Creek, the Little Deschutes River and the Deschutes River.
- G. The applicant is requesting that 100 percent of the conserved water be allocated to an instream water right to be held in trust by the Water Resources Department for the people of Oregon and that the priority dates of the conserved water rights are the same as the originating rights.
- H. The State's portion of the conserved water shall be allocated to instream water rights for conservation, maintenance and enhancement of aquatic and fish life, wildlife, fish and wildlife habitat and other ecological values. The instream water rights that are being created shall provide for the protection of flows:

- From the authorized point of diversion for TID in Tumalo Creek at

Twp	Rng	Mer	Sec	Q-Q	Survey Coordinates
17 S	11 E	WM	23	SW NE	NORTH 70 DEGREES 21 MINUTES WEST, 1550 FEET FROM E1/4 CORNER, SECTION 23

to the mouth of Tumalo Creek and then into the Deschutes River from the mouth of Tumalo Creek to Lake Billy Chinook, and

- From the authorized point of diversion for TID in Crescent Lake Reservoir at

Twp	Rng	Mer	Sec	Q-Q
24 S	6 E	WM	11	SE SW & SW SE

to the mouth of Crescent Creek and then into the Little Deschutes River from the mouth of Crescent Creek to the mouth of the Little Deschutes River and then into the Deschutes River to Lake Billy Chinook.

The right originating in Tumalo Creek shall be for a total of 11.8 cfs, with the following priority dates and rates:

Priority Date	Rate (cfs)
August 5, 1900	1.045
September, 1900	7.329
April 28, 1905	0.773
May 27, 1907	0.108
June 1, 1907	2.545

and shall allow the use and protection of flows from April 15 through October 15.

The right originating in Crescent Creek shall be limited to a maximum of 2,732 AF, with an April 7, 1911 priority date, as measured at the Crescent Creek at Gauging Station No. 14060000. To account for channel losses, an 18 percent loss factor shall be used between the Crescent Creek Gauging Station and the Benham Falls Gauging Station No. 14064500 on the Deschutes River. A 7 percent loss factor shall be used on the Deschutes River between Benham Falls and the City of Bend. The right shall allow the use and protection of flows from January 1 through December 31, and shall be in addition to the 5.0 cfs flow required year-around at Crescent Creek Gauging Station.

- I. The applicant has not requested additional time to finalize the project after the project has been completed.
- J. No other conditions or limitations are needed to prevent or mitigate for harm to existing water rights.

Conclusion of Law

The project described in the application C-37 for allocation of conserved water is consistent with the criteria in ORS 537.455 to 537.500, as amended by 2003 HB 2456, and OAR Chapter 690, Division 018. Water will be conserved that can be allocated without harming other water rights.

Now, therefore, it is ORDERED:

- 1. The applicant has until October 31, 2015, to file a notice of completion of the conservation measures, unless the Director grants an extension of time.
- 2. When the applicant files the notice of completion, the project will be finalized, unless the applicant requests additional time to finalize the project and the Director grants an extension of time for the purposes of finalization.

On submittal of notice of completion of the conservation project described in the application for allocation of conserved water, the Department shall:

- 3. Cancel certificate 74146. A new superseding certificate shall be issued to TID for irrigating approximately 5,010.90 acres, pond maintenance, industrial use, and domestic use including livestock. The acreage, rate, duty, and priority dates are subject to modification by any previously approved transfers, cancellations, corrections, allocation of conserved water, or

other prior modification to Certificate 74146. The associated priority date and rate shall be approximately:

Priority Date	Acres (equivalent)	Maximum Rate (cfs)
August 5, 1900	407.60	4.778
September, 1900	3,265.85	33.506
April 28, 1905	301.60	3.536
May 27, 1907	43.20	0.495
June 1, 1907	992.65	11.636
Total	5,010.90	53.951

The maximum per acre rate associated with these rights is 1/70 cfs/ac. The duty remains at 1.8 AF/ac, measured at within one-half mile of the land to be irrigated. The place of use shall be those lands described under certificate 74146, as modified by any transfers completed pursuant to ORS 540.580 or other prior modifications. All other conditions and limitations of the existing water right shall be included in the superseding certificate.

- Cancel certificate 74148. A new superseding certificate shall be issued to TID for the use of up to 32,268 AF of stored water. The use of the water shall be limited to total diversion of not to exceed 32,268 AF during any one irrigation season. Additionally, the water along with that described in #4 below shall be shared as follows: 3.175 % of Crescent Lake Reservoir's contents as of April 1 to the State for instream flow purposes, and 96.825 % to TID. Each party will share the storable inflow, from April 1 until maximum storage is reached, in this same proportion. Each party's usage of stored water during the year between April 1 and March 31 will be deducted from their respective accounts. On April 1 the contents of the reservoir shall again be divided between the parties as described above.

The acreage, rate, duty, and priority dates are subject to modification by any transfers, cancellations, corrections, allocation of conserved water, or other prior modification to Certificate 74148. The place of use shall be those lands described under certificate 74148, as modified by any transfers completed pursuant to ORS 540.580 or other prior modifications. All other conditions and limitations of the existing water right shall be included in the superseding certificate.

- Issue a new instream certificate for conservation, maintenance and enhancement of aquatic and fish life, wildlife, fish and wildlife habitat and other ecological values in Tumalo Creek from the authorized point of diversion for TID at the Tumalo Feed Canal:

Twp	Rng	Mer	Sec	Q-Q	Survey Coordinates
17 S	11 E	WM	23	SW NE	NORTH 70 DEGREES 21 MINUTES WEST, 1550 FEET FROM E1/4 CORNER, SECTION 23

to the mouth of Tumalo Creek and then into the Deschutes River from the mouth of Tumalo Creek to Lake Billy Chinook at River Mile 120. The instream water right shall allow the use of the water to provide fish screen bypass and cleaning flows at the Tumalo Feed Canal diversion provided such use does not interfere with use of instream flow to operate fish passage facilities at the same site.

The instream water right shall be for a total of 11.8 cfs, with the following priority dates and rates

Priority Date	Rate (cfs)
August 5, 1900	1.045
September, 1900	7.329
April 28, 1905	0.773
May 27, 1907	0.108
June 1, 1907	2.545

and shall replace a portion of instream water rights established pursuant to ORS 537.341 or 537.346 and shall be in addition to any instream water rights established pursuant to ORS 537.348 or 537.470, unless otherwise specified by a subsequent order establishing a new instream water right. The rights shall allow for the use and protection of flows from April 15 to October 15.

6. Issue a new instream certificate for conservation, maintenance and enhancement of aquatic and fish life, wildlife, fish and wildlife habitat and other ecological values in Crescent Creek from the authorized point of diversion for TID at the Crescent Lake Reservoir:

Twp	Rng	Mer	Sec	Q-Q
24 S	6 E	WM	11	SE SW & SW SE

to the mouth of Crescent Creek and then into the Little Deschutes River from the mouth of Crescent Creek to the mouth of the Little Deschutes River and then into the Deschutes River to Lake Billy Chinook at River Mile 120.

The instream water right shall be for a maximum of 2,732 AF, to be drawn from the State's share of Crescent Lake Reservoir, with an April 7, 1911 priority date, and shall replace a portion of instream water rights established pursuant to ORS 537.341 or 537.346 and shall be in addition to any instream water rights established pursuant to ORS 537.348 or 537.470, unless otherwise specified by a subsequent order establishing a new instream water right. The right shall be limited to an annual maximum of 2,732 AF. No fee, annual or otherwise, will be assessed by TID or other parties to the State of Oregon for the 2,732 AF of stored water.

To account for channel losses, an 18 percent loss factor shall be applied between the mouth of Crescent Creek on the Little Deschutes River to Benham Falls on the Deschutes River. A 7 percent loss factor shall be applied on the Deschutes River between Benham Falls and the City of Bend. For example, if 9.18 cfs was protectable under this right at Crescent Creek Gauging Station No. 14060000, then the 7.53 cfs would be protectable at Benham Falls and 7.00 cfs would be protectable at Bend.

The State of Oregon may call for water to be released from storage during any month of the year, but the State is limited to a maximum of two changes in the amount of water being released in any month, unless the Water Resource Director and TID concur that additional changes may be made.

7. An operational flow release of not less than 5.0 cfs shall be required year-around at Crescent Creek Gauging Station Number 14060000. The instream water right described in #4 above shall be additive to the 5.0 cfs flow. However, the 5.0 cfs flow shall not be additive to TID irrigation releases. Any additional flow restoration activities, including but not limited to, instream transfers, allocations of conserved water, and instream leases, shall also be additive to the 5.0 cfs flow requirement, unless otherwise specified by a subsequent order. Water users above Crescent Lake Reservoir shall not be regulated to satisfy the 5.0 cfs requirement.

Dated at Salem, Oregon this 9th day of December 2005.



For Phillip C. Ward
Director

Date of Mailing: DEC 14 2005