

After determining any quantity of water needed to mitigate the effects on other water rights, 25-percent of the conserved water shall be allocated to the state and 75-percent to the applicant unless the applicant proposes a higher allocation to the state or more than 25-percent of the funds used to finance the conservation measures comes from federal or state sources not subject to repayment. ORS 537.470(3).

If an application for the allocation of conserved water is approved, the Department shall issue orders describing the changes in the original water rights. Once the conservation project is finalized, the Department shall issue new certificates preserving the previously established-priority date of the rights to reflect the unaffected portion of the water rights and new certificates reflecting the changes for the portions of the water rights involved in the conserved water application. ORS 537.470(6).

ORS 537.455 to 537.500 authorize and establish the process by which a water right holder may submit a request for an allocation of conserved water. OAR Chapter 690, Division 18, implements the statutes and provides the Department's procedures and criteria for evaluating allocation of conserved water applications. OAR Chapter 690, Division 077 provides additional criteria for evaluating proposed instream water rights.

Findings of Fact

1. On April 2, 2020, Tumalo Irrigation District (TID) filed an allocation of conserved water application under Certificates 95175, 95176, and 95177. The Department assigned the application number CW-116.
2. The conservation project involves piping the unlined Steele, Highline, 2 Rivers (Box S), Parkhurst, Gill, Lacy, and Allen laterals with HDPE pipe. Canal or lateral piping or lining is a proven technology for conserving water.

3. The applicant proposed a rate reduction of approximately 3.299 cubic feet per second (cfs) and proposed to reduce the annual volume by approximately 1204.0 acre-feet (AF) under Certificate 95175; a rate reduction of approximately 6.154 cfs and an annual volume reduction of 979.89 AF under Certificate 95176; and originally proposed an annual volume reduction of 1936.87 AF under Certificate 95177.

Conserved Water Description Certificate 95175							
		Before Project		After Project		Conserved Water	
		Maximum Rate	Maximum Volume	Maximum Rate	Maximum Volume	Maximum Rate	Maximum Volume*
Certificate	Priority	CFS	AF	CFS	AF	CFS	AF
95175	8/5/1900	4.778	733.68	4.486	733.68	0.292	106.57
	9/1900	33.506	7301.61	31.457	7301.61	2.049	747.80
	4/28/1905	3.536	542.88	3.320	542.88	0.216	78.83
	5/27/1907	0.495	77.76	0.465	77.76	0.030	10.95
	6/1/1907	11.636	1786.77	10.924	1786.77	0.712	259.85
Totals		53.951	10442.70	50.652	10442.70	3.299	1,204.00

* Conserved Water Volume is calculated: (rate x 184 days (season) x 1.983471 (conversion factor))

Conserved Water Description Certificate 95176*							
		Before Project		After Project		Conserved Water	
		Maximum Rate	Maximum Volume	Maximum Rate	Maximum Volume	Maximum Rate	Maximum Volume
Certificate		CFS	AF	CFS	AF	CFS	AF
95176	Season 1	82.383	9,967.60	80.106	9,794.76	2.277	172.84
	Season 2	109.843	6,536.13	107.709	6,455.13	2.134	81.00
	Season 3	136.000	48,809.12	129.846	48,083.07	6.154	726.05
Totals		136.000	65,312.85	129.846	64,332.96	6.154	979.89

* Certificate 95176 is limited to a total of 136.0 cfs. After project Certificate 95176 will be limited to 129.846 cfs.

Conserved Water Description Certificate 95177				
		Before Project	After Project	Conserved Water
		Maximum Volume	Maximum Volume	Maximum Volume
Certificate		AF	AF	AF
95177	Season 1	32,268.00	30,331.13	167.94
	Season 2			111.96
	Season 3			1656.97
Totals		32,268.00	30,331.13	1936.87

4. On October 24, 2022, a Final Order of Approval of Allocation of Conserved Water CW-116 (Approval Order) was issued. The order is recorded at Special Order Volume 125, Pages 950-976.

5. On January 23, 2023, TID submitted a Notice of Completion.
6. On March 1, 2023, the Department issued a Final Order on Completion of Allocation of Conserved Water CW-116 (Completion Order), recorded at Special Order Volume 127, Pages 931-943. The Completion Order confirmed the following quantities of conserved water:

Conserved Water Allocation Certificate 95175									
Priority	State's Portion			Applicant's Portion			Conserved Water		
	Percent	Max. Rate (CFS)	Max. Volume (AF)*	Percent	Max. Rate (CFS)	Volume (AF)	Percent	Max. Rate (CFS)	Max. Volume (AF)*
8/5/1900	100%	0.292	106.57	0%	0	0	100%	0.292	106.57
9/1900	100%	2.049	747.80	0%	0	0	100%	2.049	747.80
4/28/1905	100%	0.216	78.83	0%	0	0	100%	0.216	78.83
5/27/1907	100%	0.030	10.95	0%	0	0	100%	0.030	10.95
6/1/1907	100%	0.712	259.85	0%	0	0	100%	0.712	259.85
Totals		3.299	1,204.00					3.299	1,204.00

Conserved Water Allocation Certificate 95176*										
Certificate	Season	State's Portion			Applicant's Portion			Conserved Water		
		Percent	Max. Rate (CFS)	Max. Volume (AF)	Percent	Max. Rate (CFS)	Max. Volume (AF)	Percent	Max. Rate (CFS)	Max. Volume (AF)
95176	1	100%	2.277	172.84	0%	0	0	100%	2.277	172.84
	2	100%	2.134	81.00	0%	0	0	100%	2.134	81.00
	3	100%	6.154	726.05	0%	0	0	100%	6.154	726.05
Totals			6.154	979.89					6.154	979.89

* Certificate 95176 will be limited to a total of 129.846 cfs.

Conserved Water Allocation Certificate 95177							
Certificate	Season	State's Portion		Applicant's Portion		Conserved Water	
		Percent	Max. Volume (AF)	Percent	Max. Volume (AF)	Percent	Max. Volume (AF)
95177	1	100%	167.94	0%	0	100%	167.94
	2	100%	111.96	0%	0	100%	111.96
	3	100%	1,656.97	0%	0	100%	1,656.97
Total			1,936.87				1,936.87

7. The Completion Order established the reduced rates and duties for the existing uses as follows:

Certificate 95175			
		Rate	Volume
Certificate	Priority	CFS	AF
95175	8/5/1900	4.486	733.68
	9/1900	31.457	7301.61
	4/28/1905	3.320	542.88
	5/27/1907	0.465	77.76
	6/1/1907	10.924	1786.77
Totals		50.652	10442.70

Certificate 95176*			
		Rate	Volume
Certificate	Season	CFS	AF
95176	1	80.106	9,794.76
	2	107.709	6,455.13
	3	129.846	48,083.07
Totals		129.846	64,332.96

Certificate 95177	
Certificate	Volume
	AF
95177	30,331.13

8. The Completion Order established a deadline of June 1, 2023, for the Request for Finalization form to be submitted.
9. On June 8, 2023, the Department issued a Final Order on Extension of Time of Conserved Water CW-116 (Extension of Time Order), recorded at Special Order Volume 128, Pages 466-467, extending the deadline for submitting the Request for Finalization to September 1, 2023.
10. On September 1, 2023, the Applicant submitted a Request for Finalization indicating the amount of water proposed to be conserved has been modified under Certificate 95177, since the application was originally submitted. TID has indicated the following modification:

TID's application for Allocation of Conserved Water reflects estimated water savings of 11.29 cfs and 4,120.76 AF. After completion of the project, TID found that the project conserved less water than anticipated. Even when water supplies are sufficient, more water than estimated is needed to meet demands on piped laterals. The anticipated amount of water conserved through piping of the Highline, Two Rivers (Box S), and Allen laterals, in particular, has not been realized. The district estimates actual water savings realized from piping of all laterals to have been 9.89 cfs rather than the 11.29 cfs TID anticipated.

TID initially estimated water savings based on multiple measurements of loss carried out between 2016 and 2020. The revised estimated losses are well within the range of uncertainty of these measurements.

Over a 184-day period, the reduced rate of 9.89 cfs amounts to a conserved volume of 3,609.44 AF, which results in a reduction in the estimated volume of water to be allocated instream of 511.32 AF. TID’s initial application proposed a 53 percent to 47 percent split in the allocation of water to Tumalo Creek and Crescent Lake. In recognition of greater interest in increasing flow in Tumalo Creek, TID is proposing to reduce the volume of water allocated to instream use only from Crescent Lake. This reduces the total volume of water allocated instream under Certificate 95177 from 1,936.87 AF to 1,425.55 AF.

11. After modification, the following quantities of conserved water are realized under Certificate 95177:

Conserved Water Allocation Certificate 95177							
Certificate	Season	State’s Portion		Applicant’s Portion		Conserved Water	
		Percent	Max. Volume (AF)	Percent	Max. Volume (AF)	Percent	Max. Volume (AF)
95177	1	100%	123.60	0%	0	100%	123.60
	2	100%	82.40	0%	0	100%	82.40
	3	100%	1,219.55	0%	0	100%	1,219.55
Total			1,425.55				1,425.55

12. After modification, the reduced duty for the existing uses under Certificate 95177 are as follows:

Certificate 95177	
Certificate	Volume AF
95177	30,842.45

Conclusions of Law

The Findings of Fact and Conclusions of Law set forth in the Final Order Approving Allocation of Conserved Water CW-116, recorded at Special Order Volume 125, Pages 950 to 976, are incorporated as if set forth fully herein. The Findings of Fact and Conclusions of Law set forth in the Final Order on Completion of Allocation of Conserved Water CW-116, recorded at Special Order Volume 127, Pages 931 to 943, are incorporated as if set forth fully herein. The project as modified and described in Allocation of Conserved Water Application CW-116, is consistent with the criteria in ORS 537.455 to 537.500, and OAR Chapter 690, Divisions 018 and 077.

Now, therefore, it is ORDERED:

1. The project is complete, and no additional time is needed for finalization.

2. Water Right Certificate 95175 is modified by the rate only (the Department will cancel Certificate 95175 and issue a superseding certificate incorporating these modifications when it is determined to be necessary for record keeping):

Certificate: 95175 in the name of TUMALO IRRIGATION DISTRICT (confirmed by Tumalo Creek Decree)
Use: IRRIGATION OF 5772.98 ACRES; 3.46 ACRES INCHOATE IRRIGATION, 23.06 ACRES-EQUIVALENT FOR POND USE, 2.0 ACRES-EQUIVALENT FOR INDUSTRIAL USE, AND DOMESTIC USE INCLUDING LIVESTOCK
Priority Dates: AUGUST 5, 1900, SEPTEMBER 1900, APRIL 28, 1905, MAY 27, 1907, and JUNE 1, 1907
Rate: 50.652 CUBIC FEET PER SECOND (CFS), measured at the point of diversion from the source:

Priority Date	CFS	Acres Equivalent
8/5/1900	4.486	407.60
9/1900	31.457	4056.45
4/28/1905	3,320	301.60
5/27/1907	0.465	43.20
6/1/1907	10.924	992.65
Totals	50.652	5,801.50

Limit/Duty: The amount of water used for irrigation, together with the amount secured under any other right existing for the same lands, is limited to a diversion of ONE-SEVENTIETH of one cubic foot per second (or its equivalent) and 1.8 acre-feet, measured at or within one-half mile of the land to be irrigated, for each acre irrigated during the irrigation season of each year.

Source: TUMALO CREEK, tributary to the DESCHUTES RIVER

Authorized Points of Diversion:

Twp	Rng	Mer	Sec	Q-Q	Measured Distances
17 S	11 E	WM	23	SW NE	TUMALO FEED CANAL POD 1: NORTH 70 DEGREES 21 MINUTES WEST, 1550 FEET FROM THE EAST 1/4 CORNER OF SECTION 23
18 S	10 E	WM	2	NW SW	TUMALO CREEK POD 2: NORTH 14 DEGREES 2 MINUTES EAST, 1713 FEET FROM THE SOUTH 1/4 CORNER OF SECTION 2

3. Water Right Certificate 95176 is modified by the rate and duty only (the Department will cancel Certificate 95176 and issue a superseding certificate incorporating these modifications when it is determined to be necessary for record keeping):

Certificate: 95176 in the name of TUMALO IRRIGATION DISTRICT (perfected under Permit S-19628)

Use: IRRIGATION OF 1,556.25 ACRES, INCHOATE IRRIGATION OF 17.68 ACRES, 2.00 ACRES EQUIVALENT FOR INDUSTRIAL USE, 3.77 ACRES-EQUIVALENT FOR POND MAINTENANCE, SUPPLEMENTAL IRRIGATION OF 4997.38 ACRES, 3.46 ACRES FOR INCHOATE SUPPLEMENTAL IRRIGATION, 2.00 ACRES-EQUIVALENT FOR SUPPLEMENTAL INDUSTRIAL USE, 8.06 ACRES-EQUIVALENT FOR SUPPLEMENTAL POND MAINTENANCE, and STOCK AND DOMESTIC USE

Priority Date: OCTOBER 29, 1913

Rate: 129.846 CUBIC FEET PER SECOND

Limit/Duty: The use is limited to 129.846 CUBIC FEET PER SECOND (CFS) from TUMALO CREEK with any deficiency from Tumalo Creek to be made up by diverting no more than 40.0 CFS from CRATER CREEK; 34.0 CFS from LITTLE CRATER CREEK, and 1.0 CFS from THE THREE SPRING BRANCHES, or its equivalent in case of rotation, measured at the point of diversion from the source.

The amount of water used for irrigation, together with the amount secured under any other right for existing for the same lands, is limited as shown in the table below, and shall conform to such reasonable rotation system as may be ordered by the proper state officer, provided that the quantity of water to be diverted during the non-irrigation season for stock use shall not exceed 60.0 CFS at any time nor shall it exceed the equivalent of a continuous flow of 20.0 CFS during the non-irrigation season.

CUBIC FEET PER SECOND PER ACRE AT DIVERSION			ACRE-FEET (AC-FT) PER ACRE AT DIVERSION DURING THE SEASON
SEASON	PERIOD OF USE	RATE/ACRE	DUTY
1	April 1 through April 30 and October 1 through October 31	1/80	9.76 AC-FT/ACRE
2	May 1 through May 14 and September 15 through September 30	1/60	
3	May 15 through September 14	1/32.4	

Source: TUMALO CREEK, CRATER CREEK, LITTLE CRATER CREEK, and THREE SPRING BRANCHES, tributaries of the DESCHUTES RIVER

Authorized Points of Diversion:

Twp	Rng	Mer	Sec	Q-Q	Measured Distances
17 S	11 E	WM	23	SW NE	TUMALO FEED CANAL POD 1: NORTH 70 DEGREES 21 MINUTES WEST, 1550 FEET FROM THE EAST 1/4 CORNER OF SECTION 23

Twp	Rng	Mer	Sec	Q-Q	Measured Distances
18 S	10 E	WM	2	NW SW	TUMALO CREEK POD 2: NORTH 14 DEGREES 2 MINUTES EAST, 1713 FEET FROM THE SOUTH 1/4 CORNER OF SECTION 2
17 S	9 E	WM	31	SE SE	CRATER CREEK
17 S	9 E	WM	31	NW SE	LITTLE CRATER CREEK
17 S	9 E	WM	31	NW SE	SPRING BRANCH #1
17 S	9 E	WM	31	NE SW	SPRING BRANCH #2
18 S	9 E	WM	5	SE NW	SPRING BRANCH #3

4. Water Right Certificate 95177 is modified by the duty only (the Department will cancel Certificate 95177 and issue a superseding certificate incorporating these modifications when it is determined to be necessary for record keeping):

Certificate: 95177 in the name of TUMALO IRRIGATION DISTRICT (perfected under Permit S-624)

Use: SUPPLEMENTAL USE ON 7,329.23 ACRES OF IRRIGATION, 21.14 ACRES OF INCHOATE IRRIGATION, 4.0 ACRES-EQUIVALENT OF INDUSTRIAL USE, AND 26.83 ACRES-EQUIVALENT OF POND MAINTENANCE.

Priority Date: APRIL 7, 1911

Rate: 30,842.45 ACRE-FEET

Limit/Duty: The use is limited to 30,842.45 ACRE-FEET STORED WATER ONLY or its equivalent in case of rotation measured at the point of diversion from the source. The amount of water used for irrigation, together with the amount secured under any other right existing for the same lands, is limited to a diversion of the following amounts measured at the point of diversion from the Deschutes River for each acre irrigated during the periods indicated during the irrigation season of each year.

SEASON	PERIOD OF USE	ACRE-FEET PER ACRE	TOTAL DIVERSION PER SEASON
1	April 1 through April 30 and October 1 through October 31	0.75	30,842.45 ACRE-FEET
2	May 1 through May 14 and September 15 through September 30	0.50	
3	May 15 through September 14	7.40	

Source: CRESCENT LAKE RESERVOIR, a tributary of CRESCENT CREEK (Constructed under Permit R-102)

Authorized Points of Diversion:

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

5. Water use measurement conditions:
 - a. Before the use of the Applicant's portion of conserved water, the water user shall install a totalizing flow meter, or, with prior approval of the Director, another suitable measuring device, at each point of diversion.
 - b. The water user shall maintain the meters or measuring devices in good working order.
 - c. The water user shall allow the Watermaster access to the meters or measuring devices; provided however, where the meters or measuring devices are located within a private structure, the Watermaster shall request access upon reasonable notice.

6. The Department shall issue a new instream water right certificate for the conservation, maintenance and enhancement of aquatic and fish life, wildlife, fish and wildlife habitat, other ecological values, as follows:

From Certificate 95175:

Source: Tumalo Creek, tributary to Deschutes River

Priority	Max. Rate (CFS)	Max. Volume (AF)	Season of Use
8/5/1900	0.292	106.57	April 15 through October 15
9/1900	2.049	747.80	
4/28/1905	0.216	78.83	
5/27/1907	0.030	10.95	
6/1/1907	0.712	259.85	
Totals	3.299	1,204.00	

From the authorized point of diversion:

Twp	Rng	Mer	Sec	Q-Q	Measured Distances
17 S	11 E	WM	23	SW NE	TUMALO FEED CANAL: NORTH 70 DEGREES 21 MINUTES WEST, 1550 FEET FROM THE EAST 1/4 CORNER OF SECTION 23

To: the mouth at RM 0.0, at the confluence with the Deschutes River (approximately RM 160.5), then into the Deschutes River to Lake Billy Chinook at approximately RM 120.0.

Within the specified stream reach, the amount of water to which this right is entitled shall not exceed the quantity of water legally available at the original points of diversion. Stream channel losses and gains calculated based on available data and the use of water by senior appropriators will determine the amount of water to which this right is entitled downstream from the original point of diversion within the specified stream reach.

The instream right established by this allocation shall replace a portion of instream water rights established pursuant to ORS 537.341 or 537.346 and be in addition to instream water rights established pursuant to ORS 537.348 or 537.470 unless otherwise specified in an order approving a new instream water right under these statutes.

7. The Department shall issue a new instream water right certificate for the conservation, maintenance and enhancement of aquatic and fish life, wildlife, fish and wildlife habitat and other ecological values as follows:

From Certificate 95176:

Source: Tumalo Creek, tributary to Deschutes River

Priority	Season	Period of Use	Max. Rate	Max. Volume
			CFS	AF
10/29/1913	1	April 1 through April 30 and October 1 through October 31	2.277	172.84
	2	May 1 through May 14 and September 15 through September 30	2.134	81.00
	3	May 15 through September 14	6.154	726.05
Totals			6.154	979.89

From the authorized point of diversion:

Twp	Rng	Mer	Sec	Q-Q	Measured Distances
17 S	11 E	WM	23	SW NE	TUMALO FEED CANAL: NORTH 70 DEGREES 21 MINUTES WEST, 1550 FEET FROM THE EAST 1/4 CORNER OF SECTION 23

To: the mouth at RM 0.0, at the confluence with the Deschutes River (approximately RM 160.5), then into the Deschutes River to Lake Billy Chinook at approximately RM 120.0.

The rate and volume to be protected will be determined by the local Watermaster so the volume for each season is maximized but is not exceeded. The Watermaster's annual documentation of protected flows under Certificate 95176 shall be available for review upon request.

Within the specified stream reach, the amount of water to which this right is entitled shall not exceed the quantity of water legally available at the original points of diversion. Stream channel losses and gains calculated based on available data and the use of water by senior appropriators will determine the amount of water to which this right is entitled downstream from the original point of diversion within the specified stream reach.

The instream right established by this allocation shall replace a portion of instream water rights established pursuant to ORS 537.341 or 537.346 and be in addition to instream water rights established pursuant to ORS 537.348 or 537.470 unless otherwise specified in an order approving a new instream water right under these statutes.

8. The Department shall issue a new instream water right certificate for the conservation, maintenance and enhancement of aquatic and fish life, wildlife, fish and wildlife habitat and other ecological values as follows:

From Certificate 95177:

Source: CRESCENT LAKE RESERVOIR, a tributary of CRESCENT CREEK (Constructed under Permit R-102)

From the authorized points of diversion for TID at the Crescent Lake Reservoir on Crescent Creek from January 1 through December 31:

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

To the mouth of Crescent Creek at the confluence with the Little Deschutes River (approximately RM 55.0), then into the Little Deschutes River to the mouth at the confluence with the Deschutes River (approximately RM 192.5), and then into the Deschutes River to Lake Billy Chinook at approximately RM 120.0.

Maximum Annual and Seasonal Volume Limitations:

Priority Date	Season	Period of Use	Volume (AF)
April 7, 1911	1	April 1 through April 30 and October 1 through October 31	123.60
	2	May 1 through May 14 and September 15 through September 30	82.40
	3	May 15 through September 14	1,219.55
Total Annual Volume			1,425.55

The volume to be protected throughout the year will be determined by the local Watermaster to ensure the seasonal and annual volumes are not exceeded.

To account for channel losses, an 18 percent loss factor shall be used between the Crescent Creek Gauging Station No. 14060000 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. For example, if 9.18 cfs was protected under this right at Crescent Creek Gauging Station No. 14064500, then the 7.53 cfs would be protected at Benham Falls and 7.00 cfs would be protected at Bend.

Within the specified stream reach, the amount of water to which this right is entitled shall not exceed the quantity of water legally available at the original points of diversion. Stream channel losses and gains calculated based on available data and the use of water by senior appropriators will determine the amount of water to which this right is entitled downstream from the original point of diversion within the specified stream reach.

The instream right established by this allocation shall replace a portion of instream water rights established pursuant to ORS 537.341 or 537.346 and be in addition to instream water rights established pursuant to ORS 537.348 or 537.470 unless otherwise specified in an order approving a new instream water right under these statutes.

This instream flow shall be additive to the 5.0 cfs flow release required at Crescent Creek Gauging Station Number 1406000, as specified in the Memorandum of Agreement between Tumalo Irrigation District and the Oregon Department of Water Resources, recorded at Special Order Volume 120, Pages 773 and 774.

Dated at Salem, Oregon: OCT 19 2023



Lisa J. Jaramillo, Transfer and Conservation Section Manager, for
DOUGLAS E. WOODCOCK, ACTING DIRECTOR
OREGON WATER RESOURCES DEPARTMENT

Mailing date: OCT 20 2023