# BEFORE THE WATER RESOURCES DEPARTMENT OF THE STATE OF OREGON

In the Matter of Instream Transfer	)	FINAL ORDER APPROVING A
Application T-10952, Deschutes County	)	CHANGE IN PLACE OF USE AND
	)	CHARACTER OF USE

# Authority

ORS 540.505 to 540.580 establishes the process in which a water right holder may submit a request to transfer the point of diversion, place of use, or character of use authorized under an existing water right. OAR Chapter 690, Division 380 implements the statutes and provides the Department's procedures and criteria for evaluating transfer applications. OAR Chapter 690, Division 077 provides additional criteria for evaluating transfers to instream water rights.

# Applicant

DESCHUTES RIVER CONSERVANCY 700 NW HILL STREET BEND OR 97701

# **Findings of Fact**

# Background

- 1. On September 11, 2009, the Deschutes River Conservancy (DRC) filed an application to change the place of use and character of use under a portion of Certificates 85384, 85385, and 85390 to instream use. The Department assigned the application number T-10952.
- 2. The portion of the first right to be transferred is as follows:

Certificate: 85384 in the name of City of Sisters and Lazy Z Meadows (confirmed by

Squaw Creek [Whychus Creek] Decree)

Use: IRRIGATION of 7.5 ACRES

Priority Date: 1880

Rate: 0.15 CUBIC FEET PER SECOND (CFS)

**Source:** WHYCHUS CREEK (formerly known as Squaw Creek), tributary to the

**DESCHUTES RIVER** 

#### **Authorized Point of Diversion:**

Twp	Rng	Mer	Sec	Q-Q	Measured Distances	
15 S	10 E	WM	21	SW SW	600 FEET NORTH AND 1100 FEET EAST FROM	
					THE SW CORNER OF SECTION 21	

This final order is subject to judicial review by the Court of Appeals under ORS 183.482. Any petition for judicial review must be filed within the 60-day time period specified by ORS 183.482(1). Pursuant to ORS 536.075 and OAR 137-003-0675, you may 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.

## Authorized Place of Use:

Irrigation – Lazy Z Meadows, LLC							
Twp Rng Mer Sec Q-Q Tax Lot Acre							
15 S	10 E	WM	10	NW SW	705	0.30	
15 S	10 E	WM	10	SW SW	705	7.20	

3. The portion of the second right to be transferred is as follows:

Certificate:

85385 in the name of City of Sisters and Lazy Z Meadows (confirmed by

Squaw Creek [Whychus Creek] Decree)

Use:

**IRRIGATION of 25.5 ACRES** 

**Priority Date: 1881** 

Rate:

0.51 CFS

Source:

WHYCHUS CREEK (formerly Squaw Creek), tributary to the

**DESCHUTES RIVER** 

**Authorized Point of Diversion:** 

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

## Authorized Place of Use:

	Irrigation – Lazy Z Meadows, LLC							
Twp	Twp Rng Mer Sec Q-Q Tax Lot Acres							
15 S	10 E	WM	10	NE SW	705	4.40		
15 S								

4. The portion of the third right to be transferred is as follows:

Certificate:

85390 in the name of City of Sisters and Lazy Z Meadows (confirmed by

Squaw Creek [Whychus Creek] Decree)

Use:

Domestic and IRRIGATION of 30.0 ACRES

**Priority Date: 1880** 

Rate:

0.95 CFS

Source:

WHYCHUS CREEK (formerly Squaw Creek), tributary to the

DESCHUTES RIVER

# **Authorized Point of Diversion:**

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

# **Authorized Place of Use:**

Domestic and Irrigation – Lazy Z Meadows, LLC								
Twp Rng Mer Sec Q-Q Tax Lot Acres								
15 S	10 E	WM	10	SW SW	705	28.40		
15 S 10 E WM 10 SE SW 705 1.60								

5. Certificates 85385, 85384, and 85390 do not specify an irrigation season. Nor is an irrigation season specified by Basin Program or Decree.

- 6. Certificates 85385, 85384, and 85390 do not specify a duty limit per acre nor is one specified by Decree. Historically the applicant has diverted the full quantity allowed by the water right.
- 7. Application T-10952 proposes to change the character of use to instream use for conservation, maintenance and enhancement of aquatic and fish life, wildlife, fish and wildlife habitat and any other ecological values.
- 8. Application T-10952 proposes to change the place of use of the right to create an instream reach from the POD (as described in Findings of Fact #2, #3, and #4) to the mouth of Whychus Creek and into the Deschutes River to the mouth of the Deschutes River.
- 9. The applicant proposes that the quantities of water to be transferred instream be protected as follows:

Instream Reach #1: From the POD (as described in Findings of Fact #3 and #4) to the POD for Certificate 85384 (as described in Finding of Fact #2)

		Period Protected Instream April 15 through October 15				
Certificate	Priority Date					
		Instream Rate (cfs)	Instream Volume (AF)			
85385	1881	0.51	186.13			
85390	1880	0.95	241.11			
Total		1.46	427.24			

**Instream Reach #2:** From the POD for Certificate 85384 (as described in Finding of Fact #2) to River Mile 19.2

		Period Pro	tected Instream			
Certificate	Priority Date	April 15 through October 15				
		Instream Rate (cfs)	Instream Volume (AF)			
85385	1881	0.51	186.13			
85390	1880	0.95	241.11			
85384	1880	0.15	54.74			
Total		1.61	481.98			

**Instream Reach #3:** From River Mile 19.2 to the mouth of Whychus Creek and then into the Deschutes River to the Madras Gage

		Period Protected Instream  April 15 through October 15				
Certificate	Priority Date					
		Instream Rate (cfs)	Instream Volume (AF)			
85385	1881	0.383	140.25			
85390	1880	0.450	165.00			
85384	1880	0.113	41.25			
Total		0.946	346.50			

Instream Reach #4: From the Madras Gage to the mouth of the Deschutes River

		Period Pro	ected Instream			
Certificate	Priority Date	April 15 through October 15				
		Instream Rate (cfs)	Instream Volume (AF)			
85385	1881	0.128	45.00			
85390	1880	0.150	54.00			
85384	1880	0.038	13.50			
Total		0.316	112.50			

- 10. The quantities requested to be protected instream in Reach #3 and #4 have been adjusted to account for return flows at River Mile 19.2 on Whychus Creek and at the Madras Gage on the Deschutes River.
- 11. The applicant proposes that any instream water right established as a result of this instream transfer be additive to existing instream water rights for the same reach established pursuant to ORS 537.348 (instream transfer process) and ORS 537.470 (allocation of conserved water process). The applicant also proposes that any instream water right established as a result of this instream transfer replace a portion of any existing instream rights established pursuant to ORS 537.346 (minimum streamflow conversion) and ORS 537.341 (state agency instream application process), with an earlier priority date.
- 12. The applicant has provided notification of the proposed action to the Confederated Tribes of Warm Springs, Three Sisters Irrigation District, City of Sisters, City of Maupin, Jefferson County, and Deschutes County. Additionally, the Department provided notification of the proposed action to these local governments upon receipt of Transfer Application T-10952.
- 13. Notice of the application for transfer was published on September 29, 2009, pursuant to OAR 690-380-4000. No comments were filed in response to the notice. On March 17, 2010, the Department mailed a copy of the draft Preliminary Determination proposing to approve Transfer Application T-10952 to the applicants. The cover letter that accompanied the draft Preliminary Determination set forth a deadline of April 15, 2010, for the applicants to respond.
- 15. On April 29, 2010, the DRC submitted comments requesting additional information on the Department's findings with regard to return flows (see Finding of Fact #27). The DRC also identified that they may want to address how the Department calculates the amount of water that can be protected below the location of return flows, in this case the consumptive portion of the use. The DRC also identified that they may want to comment further on how the Department determines the reach in which an instream use may be protected. Specifically, identification of whether or not an instream use can be protected outside of the source stream and into a receiving stream.
- 16. The Department considered these comments and provided additional information to the applicant. No changes are being proposed as a result of review of these comments.

- a) On May 19, 2010, the Department provided the DRC with some background information on how the Department evaluates whether an instream use may be protected instream from a source stream and into a receiving stream. Under OAR 690-077-0015, an instream use is generally maintained from the point of diversion to the mouth of the source stream but may be protected further downstream if the amount of the instream use is measurable into the receiving stream. The applicant originally requested that the instream use be protected from the point of diversion on Whychus Creek and into the Deschutes River to the mouth of the Deschutes River. As identified in Finding of Fact #27, the Department identified that the proposed instream use is not measurable into the Deschutes River.
- b) On May 27, 2010, the Department provided the DRC with additional information and documentation on the Department's return flow finding (see Finding of Fact #27).
- 17. On June 30, 2010, the applicant submitted additional comments to the Department. These comments addressed how the Department calculated the amount of water that may be protected below the point of return flows. As identified in Finding of Fact #27, the amount of water that may be protected instream below the location of return flows is the consumptive portion of the right proposed for transfer. The comments offered explanation for why the consumptive portion of the use proposed for transfer should be higher than that estimated by the Department. The Department generally uses an average consumptive factor of 1.8 acre-feet per acre for irrigation uses in the Deschutes Basin above Lake Billy Chinook.
- 18. The Department considered the comments and responded to the applicant on November 15, 2010. The response to the applicant also identified that the Department would not be proposing to modify how the consumptive portion of the use proposed for transfer was calculated.
- 19. On November 15, 2010, the DRC submitted comments seeking additional background information on the use of 1.8 acre-feet per acre to estimate consumptive use for irrigation use in the Deschutes Basin, whether this standard is applied to other types of transfers, and how consumptive use is applied to transfers throughout the State.
- 20. The Department considered the comments submitted by the DRC and on November 23, 2010, responded to the applicant's request for additional information. No changes to the findings made by the Department in the Draft Preliminary Determination are being proposed as a result of evaluation of the comments submitted by the DRC.
- 21. On December 9, 2010, the applicant concurred with the draft Preliminary Determination and requested that the Department proceed with issuance of a Preliminary Determination.
- 22. On December 22, 2010, the Department issued a Preliminary Determination proposing to approve Transfer T-10952 and mailed a copy to the applicant. Additionally, notice of the Preliminary Determination for the transfer application was published on the Department's weekly notice on December 28, 2010, and in the Bend Bulletin newspaper on December 26,

2010, January 2 and January 9, 2011 pursuant to ORS 540.520 and OAR 690-380-4020. No protests were filed in response to the notice.

# Instream Transfer Review Criteria (OAR 690-77-0075 and 690-380-4010)

- 23. The portion of the right proposed for transfer was leased instream under IL-992 during the 2009 water year and there is no information in the record that would demonstrate that the right is subject to forfeiture under ORS 540.610.
- 24. A diversion structure and ditch sufficient to use the full amount of water allowed under the existing right were present within the five-year period prior to submittal of Application T-10952.
- 25. At the full rate and volume requested to be protected instream from Certificate 85390 (as described in Finding of Fact #9), the Department cannot protect water over the entire period requested, April 15 through October 15 (184 day period). At the rate and volume requested, water could be protected instream over a 127 day period.
- 26. On February 19, 2010, the DRC clarified that the instream use to be established through Certificate 85390 should be 0.95 CFS from April 15 through May 15 and 0.6 CFS from May 16 through October 31. Water may be protected instream over the entire period requested at the full requested volume and clarified rates.
- 27. The quantity of water requested to be protected instream in Reach #3 requires additional modification to account for both surface and subsurface return flows to prevent injury to downstream water users and enlargement.

The hydro geologic evaluation of where subsurface return flows occur is generally based on the following information: 1) the local shallow and regional ground water elevations, 2) the shallow and regional head gradient (i.e. ground water flow direction), 3) elevation of nearby streams, 4) elevation of closest gaining stream reaches, 5) distance from nearby streams and gaining stream reaches, and 6) local geologic information. When evaluating for return flows, the Department generally considers the place of use as a whole and where the majority of return flows occur based upon the presence of surface return flows (overland flow) and the factors described above for any subsurface return flows.

The place of use is located in close proximity to Whychus Creek. A portion of the water diverted to the place of use returns to the creek system around River Mile 19.2 as a result of overland flow. Remaining return flows take the form of subsurface return flows. The place of use lies on soils overlying glacial outwash of relatively high permeability, which is juxtaposed against older Deschutes formations strata just east of the southeast—northwest trending Sisters fault zone (in the vicinity of, and trending in the same direction as McKinney Butte). The contrast in permeability is what forms the shallow aquifer (Lite and Gannett, 2002) in the area and results in the shallow groundwater elevation being very close to the elevation of the creek just southeast of McKinney Butte. From seepage run data, the creek has been shown to gain groundwater inflows in the vicinity of McKinney Butte. In addition, the place of use lies in a paleo—drainage that leads to the creek. Given this

information, subsurface return flows from the existing use would follow local sub–surface flow paths and not infiltrate into the regional ground water aquifer. Subsurface returns would also return to the creek system in the area of River Mile 19.2.

The instream flows at River Mile 19.2 have been reduced to the consumptive portion of the rights to account for both surface and subsurface return flows.

- 28. The instream reach requested by the applicant requires modification. The applicant proposed to protect water instream from Whychus Creek into the Deschutes River. An instream reach is generally from the point of diversion to the mouth of the source stream (Whychus Creek) but may be protected further if measurable in the receiving stream (the Deschutes River) (OAR 690-077-0015 (8)). The quantity that may be protected instream from Whychus Creek is not measurable into the Deschutes River and may not be protected instream in the Deschutes River.
- 29. Based on Findings of Fact #25 through #28, the instream use has been modified from the original request and the quantities to be transferred and protected instream are as follows:

Instream Reach #1: From the POD (as described in Findings of Fact #3 and #4) to the POD for Certificate 85384 (as described in Finding of Fact #2)

		Period Protected Instream						
Certificate	Priority Date	April 15 thro	ough May 15	May 16 through October 15				
	Friority Date	Instream Rate	Instream	Instream Rate	Instream			
		(cfs)	Volume (AF)	(cfs)	Volume (AF)			
85385	1881	0.51	31.36	0.51	154.77			
85390	1880	0.95	58.41	0.60	182.08			
Total		1.46	89.77	1.11	336.85			

Instream Reach #2: From the POD for Certificate 85384 (as described in Finding of Fact #2) to River Mile 19.2

Certificate	Priority Date	Period Protected Instream			
		April 15 through May 15		May 16 through October 15	
		Instream Rate (cfs)	Instream Volume (AF)	Instream Rate (cfs)	Instream Volume (AF)
85385	1881	0.51	31.36	0.51	154.77
85390	1880	0.95	58.41	0.60	182.08
85384	1880	0.15	9.22	0.15	45.52
Total		1.61	98.99	1.26	382.37

**Instream Reach #3:** From River Mile 19.2 to mouth of Whychus Creek

		Period Protected Instream  April 15 through October 15			
Certificate	Priority Date				
		Instream Rate (cfs)	Instream Volume (AF)		
85385	1881	0.126	45.90		
85390	1880	0.148	54.00		
85384	1880	0.037	13.50		
Total		0.311	113.40		

- 30. The proposed changes, as modified, would not result in enlargement of the right.
- 31. The proposed changes, as modified, would not result in injury to other water rights.
- 32. The amount and timing of the proposed instream flow is allowable within the limits and use of the original water right.
- 33. The protection of flows within the proposed reach is appropriate, considering:
  - a) The instream water right begins at the recorded points of diversion;
  - b) The location of confluences with other streams downstream of the point of diversion;
  - c) There are no known areas of natural loss of streamflow to the river bed downstream from the point of diversion; and
  - d) Return flows resulting from the exercise of the existing water right would re-enter Whychus Creek within the proposed reach and have been accounted for at River Mile 19.2, beginning point for Reach #3.
- 34. There are several existing instream water rights located within the same reach as that proposed for the new instream water right. The existing instream rights were established pursuant to ORS 537.341 (state agency instream water right application process), ORS 537.348 (instream transfer process), and ORS 537.470 (allocation of conserved water process). These instream rights protect water instream for the purpose of fish and wildlife habitat. The instream rights established pursuant to the state agency application process have priority dates (October 11, 1990) junior to the proposed instream use.
- 35. The existing instream water rights established pursuant to the state agency application process within the proposed reach are sufficient to protect the monthly quantities of water necessary for fish and wildlife habitat but are not always met during the period requested for instream protection. The right proposed for transfer will allow replacement of a portion of the existing instream water rights with an earlier priority date.
- 36. By adding to other instream water rights, established pursuant to ORS 537.348 (instream transfer process) and ORS 537.470 (allocation of conserved water process), for the same location, and which also replace a portion of the instream rights established pursuant to the state agency application process, the instream right will provide protection for additional streamflows necessary for fish and wildlife habitat.
- 37. During the period April 15 through October 15, any instream water right established by this transfer application may 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 by an order approving a new instream water right under these statutes.

38. The total monthly quantities of water to be protected under the existing and proposed instream rights in the reach/at the point will provide for a beneficial purpose and do not exceed the estimated average natural flow.

### Conclusions of Law

The changes in character of use and place of use to instream use proposed in application T-10952 are consistent with the requirements of ORS 540.505 to 540.580, ORS 537.348, OAR 690-380-5000, and OAR 690-077-0075.

# Now, therefore, it is ORDERED:

- 1. The changes in character of use and place of use to instream use proposed in application T-10952 are approved.
- 2. Water right certificates 85384, 85385, and 85390 are cancelled. New certificates confirming the instream water rights shall be issued. New certificates will also be issued describing that portion of each right not affected by this transfer.
- 3. The instream water right shall provide for the protection of streamflows from the authorized point of diversions to the mouth of Whychus Creek. The quantities of water to be protected under the instream water right are:

Instream Reach #1: From the POD (as described in Findings of Fact #3 and #4) to the POD for Certificate 85384 (as described in Finding of Fact #2)

Certificate	Priority Date	Period Protected Instream			
		April 15 through May 15		May 16 through October 15	
		Instream Rate (cfs)	Instream Volume (AF)	Instream Rate (cfs)	Instream Volume (AF)
85385	1881	0.51	31.36	0.51	154.77
85390	1880	0.95	58.41	0.60	182.08
Total		1.46	89.77	1.11	336.85

Instream Reach #2: From the POD for Certificate 85384 (as described in Finding of Fact #2) to River Mile 19.2

	Priority Date	Period Protected Instream			
Certificate		April 15 through May 15		May 16 through October 15	
		Instream Rate (cfs)	Instream Volume (AF)	Instream Rate (cfs)	Instream Volume (AF)
85385	1881	0.51	31.36	0.51	154.77
85390	1880	0.95	58.41	0.60	182.08
85384	1880	0.15	9.22	0.15	45.52
Total		1.61	98.99	1.26	382.37

Instream Reach #3: From River Mile 19.2 to the mouth of Whychus Creek

		Period Protected Instream  April 15 through October 15			
Certificate	Priority Date				
		Instream Rate (cfs)	Instream Volume (AF)		
85385	1881	0.126	45.90		
85390	1880	0.148	54.00		
85384	1880	0.037	13.50		
Total		0.311	113.40		

- 4. Water rights upstream of the original point of diversion shall not be subject to regulation for flows in excess of the quantities to which this instream water right is entitled at the original point of diversion.
- 5. Stream channel losses and gains calculated based on available data and the use of senior appropriators will determine the amount of water to which this right is entitled downstream from the original points of diversion within the specified stream reach.
- 6. The instream right established by this transfer 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 identified in a subsequent order establishing a new instream water right under these statutes.
- 7. The right to the use of the water is restricted to beneficial use at the place of use described, and is subject to all other conditions and limitations contained in Certificates 85384, 85385, and 85390 and any related decree.
- 8. The former place of use of the transferred water shall no longer receive water as part of these rights.

Dated at Salem, Oregon this \_\_\_\_\_\_ day of February, 2011.

Dwight French for
PHILLIP C. WARD, DIRECTOR

FEB 1 7 2011

Mailing date: \_\_\_\_\_