

State of Oregon
Water Resources Department
725 Summer Street NE, Suite A
Salem, Oregon 97301-1266
(503) 986-0900

Application for Allocation and Use of Conserved Water

If your application is found to be incomplete, inaccurate or does not include the required fees, we will return it to you. If any requested information does not apply to your application, insert "n/a." If you need additional space to answer any of the questions, attach a separate sheet of writing paper and reference the section number and question. A summary of review criteria and procedures that are generally applicable to these applications is available at www.wrd.state.or.us/OWRD/PUBS/forms.shtml.

1. APPLICANT INFORMATION

APPLICANT/BUSINESS NAME North Unit Irrigation District, Mike Britton, District Manager			PHONE NO. (541) 475-3625	ADDITIONAL CONTACT NO.
ADDRESS	ADDRESS			FAX NO.
2024 NW Beech Street				(541) 475-3905
CITY	STATE	ZIP	E-MAIL**	
Madras	OR	97741	mbritton@northun	itid.com

2. AGENT INFORMATION

The agent is authorized to represent the applicant in all matters relating to this application.

AGENT/BUSINESS NAME			PHONE NO.	ADDITIONAL CONTACT NO.
Deschutes River Conservancy			(541) 382-4077	
ADDRESS				FAX NO.
700 NW Hill St				541-382-4078
CITY	STATE	ZIP	E-MAIL**	
Bend	OR	97701	zach@deschutesriver	.org

** BY PROVIDING AN E-MAIL ADDRESS, CONSENT IS GIVEN TO RECEIVE ALL CORRESPONDENCE FROM THE DEPARTMENT ELECTRONICALLY. COPIES OF THE FINAL ORDER DOCUMENTS WILL ALSO BE MAILED.

3. IRRIGATION & WATER CONTROL DISTRICTS Is the project within the boundaries of an irrigation district or water control district? ☐ Yes ☐ No If yes, include Exhibit E and list the name and mailing address of the district: North Unit Irrigation District, Mike Britton District Manager 2024 NW Beech Street, Madras, OR 97741 Did an irrigation district organized under ORS Chapter 545 or a water control district organized under ORS Chapter 553 file this allocation of conserved water? ☐ Yes ☐ No If yes, when was the District's OAR 690-018-0025 allocation of conserved water policy adopted? October 7, 2008

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- B) What is the maximum amount of water that can be diverted using the pre-project facilities? (If the water right is only limited by rate, do not list a duty, and conversely, if the water is only limited by duty, do not list a rate.)

 1. Rate (cfs):

 1.101 cfs from the Deschutes River and 200 cfs from the Crooked River

 2. Duty (acre feet):
- C) Describe the pre-project water delivery system. Include information on the diversion structure, pumps, and conveyance facilities (including canals, pipelines and sprinklers used to divert, convey and apply the water at the authorized place of use). Provide sufficient detail to confirm that the applicant is ready, willing, and able to exercise the right.

 NUID diverts up to 1,101 cfs of water from the Deschutes River into its Main Canal and then delivers it to 50,049.9 acres in Jefferson County under Certificates 72279 and 72280.

 The bottom of the Main Canal is lined from Canal Mile 0.5 to 11.8. The sides of the Main Canal are lined from Canal Mile 0.5 to 6.9. NUID's Main Canal crosses the Crooked River at approximately Canal Mile 26.1. At that point NUID pumps water from the Crooked River into the Main Canal using pumps located at approximately River Mile 27.5. NUID delivers up to 200 cfs from the Crooked River water to 8,817.7 acres in Jefferson County under Certificates 72283 and 72284. Deschutes and Crooked River waters intermingle in the Main Canal from approximately Canal Mile 26.1 through the remainder of NUID's delivery system.

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5. CONSERVATION MEASURES	
A) Describe the type of project, check all that apply:	
On-Farm efficiency project	
Distribution project, such as a ditch piping or lining project Other,	
Other,	
B) Describe the proposed changes to the physical system, operations and application result in the conservation of water. If these proposed changes will change the proposed of diversion requirement for Exhibit B. Provide sufficient detail for publication NUID proposes to line the sides of its Main Canal with shotcrete between Canal Mile 11.8. NUID expects to complete the canal lining between December 2012. This canal lining is anticipated to conserve approximately 7,880 acres.	oint of diversion, see c noticing the project. n Canal Mile 6.9 and nber 2011 and April
C) Place of Use*: entire right affected under Certificates 72279 and 72280	
Township Range Section Quarter/Quarter * Not required for a distribution project that does not propose to affect the on-farm rate If the entire water right is being affected, just state "entire right affected."	
if the entire water right is being affected, fust state entire right affected.	
6. CONSERVED WATER	
A) What amount of water will be needed for the existing, authorized use after impl	
measures? (If the water right is only limited by rate, do not list a duty, and conv	versely, if the water is
only limited by duty, do not list a rate.) 1. Rate* (cfs): see Attachment 1	
2. Duty* (acre feet): see Attachment 1	
* If there are multiple Priority Dates on the water right, list the rate and duty by pr	iority date.
B) What amount of water will be conserved as a result of the implementation of the	
measures? Subtract 6A from the smaller of 4A or 4B under "irrigation system" 1. Rate* (cfs): 18.56 cfs based on a 214 days of irrigation (Certification)	
72280)	cate 72277 and or
2. Duty* (acre feet): 7.880 AF	
* If there are multiple Priority Dates on the water right, list the rate and duty by pr	iority date.
	.0
C) What portions of the conserved water will be allocated to the state and applican1. Portion going to the state (list by percent, rate and duty):	t?
see Attachment 1 Percent see Attachment 1	Rate (cfs)
see Attachment 1 Duty (AF)	
2. Portion going to the applicant (list by percent, rate and duty):	
see Attachment 1 Percent see Attachment	Rate (cfs)
see Attachment 1 Duty (AF)	RECEIVED
D) The priority for the conserved water is requested to be:	APR 1 8 2012
The same as the original right, or	
One minute junior to the original right.	WATER RESOURCES DEPT SALEM, OREGON
E) If all or part of the applicants' portion of the conserved water is to be used for a an identified location:	
Name and address of the person using the water: not yet determined	
2. Description of the type of beneficial use of the water: <u>irrigation</u>	
3. Legal description of the place of use: not yet determined	

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- F) If all or part of the applicants' portion of the conserved water is to be leased*, dedicated or temporarily reserved instream, a statement identifying the quantity of water to be managed as an instream water right: See section 6(A) for detailed proposal. A total of 7,880 AF of Crooked River water with a priority date of September 18, 1968 will be permanently protected and managed as an instream water right for the benefit of fish and wildlife.
 - * Water can be temporarily protected instream without filing an OAR 690-077 Instream Lease application.

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7. LOCATION OF PROPOSED USE

A)	For new out-of-stream uses, describe the boundaries of the expected area within which structures and places of use of the applicants' conserved water right would be located. other than that to which this water right is appurtenant. See Exhibit B. See Attachment 1	
B)	For instream uses, to the extent possible, identify the stream reach(es) for which the stathe conserved water should be managed under an instream water right. Be as explicit a giving river miles, or other identifying information that might be included in the instream See Attachment 1	s possible, by
C)	Describe the proposed benefit to instream uses. If or instream use for conservation, maintenance and enhancement of aquatic a wildlife, fish and wildlife habitat and other ecological values. If other, please describe:	and fish life,
A)	B. MITIGATION Describe any expected effects on other water rights from the proposed allocation of consideratify what currently happens to the water that is proposed to be conserved. No effects to other appropriators are expected from the proposed allocation of consumption of the most junior user of irrigation water on both the Deschutes and Crook the most downstream user on the Crooked River. The water to be conserved is less system through seepage and is not available to other appropriators on the Deschutes. Crooked Rivers.	onserved water. oked Rivers and ost from the
B)	Describe any mitigation or other measures that are planned to avoid harm to other water No harm to other water rights will occur from this project.	r rights.
and	9. FUNDING nore than 25% of the conserved water is proposed to be allocated to the applicant then pridentify what portion of project funds (expressed as a percentage) come from federal or reces that are not subject to repayment. Not Applicable	
<u>0W</u>	es the Oregon Watershed Enhancement Board (OWEB) have a contractual interest in thi Yes No If yes, what is the OWEB project number? The DRC is EB for project funding through the Deschutes SIP. The DRC expects that OWE Stractual interest in the project in the future.	has applied to
If n	10. PROJECT SCHEDULE project is not yet complete:	
пр	Proposed date construction has/will begin: <u>December 5, 2011 and see Attachm</u> Proposed date construction will be completed and notice of project completion April 30, 2012	
	Proposed date the project will be finalized: April 1, 2013	RECEIVED
If p	Project is already complete: Date it was implemented: (Provide Exhibit K) The applicant requests: That the allocation be finalized, or	APR 1 8 2012 WATER RESOURCES DEPT SALEM, OREGON

Additional time be granted to prove that the project worked to the applicant's satisfaction before finalizing the allocation of conserved water. Indicate the amount of time desired see Attachment 1 (up to five years after completion of the project may be allocated).

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11. ACKNOWLEDGMENT OF FORFEITURE

Complete this if the Certified Water Right Examiner's map shows less acreage has been irrigated over the past five years than allowed under the right.

I am aware that acre(s) have not been irrigated for abandoning that portion of the water right and make no fithis acre(s) portion of the right be permanently can acre(s) portion of the right and make no fit all acre(s) portion of the right and make no fit all acre(s) portion of the right and make no fit all acre(s) portion of the right and make no fit all acre(s) portion of the right be permanently can acre(s) portion of t	further claim for the water. I ask that neeled. All attachments are required unless otherwise
Exhibit (Form) A – Evidence of Use Affidavits	Exhibit H - Ownership & Lien
 ☑ Provide if 1) it is an on-farm efficiency project, or 2) specific acreage is being affected by the project. Consult with Department staff regarding the evidence needed for distribution projects. At least one Evidence of Use Affidavit documenting that the right has been used during the last five years or that the right is not subject to forfeiture under ORS 540.610 is attached. The affidavit provided must be the original, not a copy. The form is available at http://www.wrd.state.or.us/OWRD/PUBS/docs/forms/Evidence_of_Use_Form_3_01_10.pdf. Exhibit B - Map ☑ Provide if the entire water right is not part of the conservation project and/or new lands shall receive water. Consult with Department staff if there is any question regarding the need for submittal. See OAR 690-018-0040(17) and 690-018-0062(3)(a). Exhibit C - Project Funding Description ☐ Provide if more than 25% of water goes to applicant. See OAR 690-018-0040(18). Exhibit D - Identification and Resolution of Water Right Conflicts ☑ Provide if construction has begun or been completed and if more than 25% of the project costs have been expended prior to filing this application. See OAR 690-018-0040(19). Exhibit E - Letter of Approval from the Irrigation District ☐ Provide if project is located within boundaries of an irrigation district and the district is not the applicant. See OAR 690-018-0040(20). Exhibit F - District Conserved Water Policy ☑ Provide if applicant is an Irrigation District or Water Control District. See OAR 690-018-0040(21) & 690-018-0025. Exhibit G - Land Use Information Form ☑ See OAR 690-018-0040(22). The land use form is available at: http://www.wrd.state.or.us/OWRD/PUBS/do	Information □ Provide if application involves: • on-farm efficiency project, and/or • distribution project affecting specified lands. Provide a report of ownership and lien information or a current recorded deed to the subject lands. Exhibit I — Support Letters from ODFW, DEQ and OPRD □ Letters from ODFW, DEQ, and OPRD indicating that they have been consulted and indicating that at least one of the agencies attests that conserved water is needed to support instream uses. See OAR 690-018-0050(4)(f). Exhibit J — Water Right Clarification & Notification of Affected Persons □ Provide if the application involves water rights for • lands under multiple ownerships and not all of the water right holders are applicants, and the project is not being submitted by a District as a distribution project and/or • which the current final proof survey maps for lands involved in the application do not adequately describe the location of the place of use or the associated priority dates of the associated water rights Consult with Department staff if there is any question regarding the need for submittal. Exhibit K — Evidence that the Project was Implemented Within 5 Years. □ Provide if project was completed before application submittal. See OAR 690-018-0040(12)(a).
<u>Form 3_01_10.pdf</u>	Fees: Amount enclosed: \$ 1,175 See OAR 690-018-0040(25) and the Department's Fee Schedule at www.wrd.state.or.us/OWRD/PUBS/forms.sht

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ml#fees or call (503) 986-0900.

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Revised 2/1/2012

13. SIGNATURE

I understand that prior to Department approval of the allocation of conserved water, I may be required to submit payment to the Department for publication of a notice in a newspaper with general circulation in the area where the water right is located, once per week for two consecutive weeks. If more than one qualifying newspaper is available, I suggest publishing the notice in the following paper: _____

I (we) affirm that the information contained in this application is true and accurate.

(NUID) Name (print) April 17, 2012

Date

Applicant Signature

Agent Signature

(DRC)
Name (print)

April 16, 2012

Before submitting your application, be sure you have:

- Answered each question completely.
- Included the required attachments.
- · Provided original signatures for all water right holders or other parties with an interest in the right.
- Included a check payable to the Oregon Water Resources Department for the appropriate amount.

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Additional Information

The complete OAR Chapter 690, Division 018 Allocation of Conserved Water rules are available at: http://arcweb.sos.state.or.us/rules/OARS_600/OAR_690/690_018.html

690-018-0040

Application Requirements (Excerpt)

Applicants for allocation of conserved water shall provide to the Department the information described in this rule in substantially the same order as listed. The information shall include:

- (12) For a project that has already been completed:
- (a) Evidence that the measure was implemented within five years prior to the date of filing the application; and
- (b) The date on which the applicant intends to request that the allocation be finalized pursuant to OAR 690-018-0062(3).
- (17) A map with sufficient detail to locate and describe the facilities and areas affected by the conservation measures:
- (18) Identification of any federal or state public sources of project funds and, if federal or state public funds that are not subject to repayment will be used in the project, information showing the estimated project costs and anticipated sources of funds for the project including:
 - (a) The total cost for project engineering and construction;
- (b) The present value of any incremental changes in the costs of operations and maintenance that are directly attributable to the project that would not be incurred or realized in the absence of the project;
- (c) The amount of funding and the value of any in-kind contributions for project engineering and construction and for any incremental changes in the costs of operations and maintenance to be provided from federal or state public funds that are not subject to repayment; and
- (d) The amount of funding and the value of any in-kind contributions for project engineering and construction and for any incremental change since costs of operations and maintenance to be provided from other funds.
- (19) If construction of the project has begun or been completed and if more than 25 percent of the project costs have been expended before applying for allocation of conserved water, evidence that the applicant has attempted to identify and resolve the concerns of water right holders in the area, governmental entities, or other organizations who have asked to be consulted regarding the allocation of conserved water;
- (20) A letter showing irrigation district or water control district approval if the conservation project is within the boundaries of the district;
- (21) For applications submitted by irrigation districts or water controls districts, evidence of an adopted policy consistent with the requirements of OAR 690-018-0025.
 - (22) Land use information outlined in the Department's Land Use Planning Procedures Guide; and
- (23) Other information the Department or Commission deems necessary and appropriate to aid in the evaluation of the application.
 - (24) The appropriate fee as required under ORS 536.050.
- (25) The Director shall waive the application fee based on the percent of conserved water allocated to the state for instream use, not to exceed 50 percent of the application fee, if the instream allocation is:
 - (a) To establish an instream water right pursuant to ORS 537.348;
 - (b) Necessary to complete a project funded by the Oregon Watershed Enhancement Board under ORS 541.375; or
 - (c) Determined and endorsed in writing by Oregon Department of Fish and Wildlife as a change that will result in a net benefit to fish and wildlife habitat.

690-018-0050

Processing a Conservation Application (Excerpt)

- (4) The Department shall review the application and consider any comments received under section (3) of this rule to determine:
- (f) In consultation with the Departments of Fish and Wildlife, Environmental Quality and Parks and Recreation, if conserved water is needed to support instream uses;

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690-018-0062

Completion of Conservation Project (Excerpt)

- (3) Prior to the expiration of the time allowed under OAR 690-018-0050(4)(i), the applicant may request that an allocation of conserved water be finalized. The request shall include:
- (a) If all or part of the applicants' portion of the conserved water is to be used for an out-of-stream use at an identified location, the following information:
 - (A) The name and address of the person using the water;
 - (B) A description of the type of beneficial use of the water;
 - (C) A legal description of the place of use; and
 - (D) A map that meets the standards in OAR 690-310-0050 and
- (b) If all or part of the applicants' portion of the conserved water is to be leased, dedicated or temporarily reserved instream, a statement identifying the quantity of water to be managed as an instream water right.

Exhibit B - Application Map

The application map shall include:

- a. Township, range, section, 1/4 1/4, a north arrow, and a standard scale such as 1 inch = 400 feet or 1 inch = 1.320.
- b. Location of existing and new point of diversion, if applicable, with coordinates referenced to a recognized survey corner.
- c. For on-farm conservation involving only a portion of the place of use, the location of the lands to be affected by the project with acres described by ¼ ¼.
- d. Location of lands on which applicant's portion of conserved water is to be used if other than those currently authorized with acres described by 1/4.1/4.

If the applicant is requesting that the project be finalized upon approval of this application, then the applicant must complete a map consistent with OAR 690-310-0050 as identified in OAR 690-018-0062.

Exhibit J – Water Right Clarification and Evidence of Notification of Affected Persons If the application:

- 1) Involves rights for lands under more than one ownership and not all of the owners are applicants; and/or
- 2) The final proof survey maps on file with the Department for any quarter-quarter section in which lands involved in the application are located do not adequately describe the location of the place of use or the associated priority dates of the associated water rights, the Department may require the following additional information:
 - A list of the name and address of each landowner whose lands the Department concludes may be included
 in the portion of the water right proposed for allocation of conserved water and written proof of service of a
 copy of the application on those landowners and a map delineating the location, acreage, priority dates, and
 ownership of the subject water right; and
 - Other information sufficient to establish that no portion of the right to be conserved is held by persons other
 than those proposing the conservation project and, for rights with multiple priority dates, the priority dates
 for the right to be transferred are consistent with the decree or other document establishing the right.

(The applicant should consult with Department staff if there is any question regarding the need for submittal of Exhibit J.)

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ATTACHMENT 1

4. Current Water Rights Information

Water Rights Subject to Transfer

X Certificated Right 72279, 72280, 72281, 72282, 72283, and 72284
Certificate Number

6. A) What amount of water will be needed for existing authorized use after conservation measures?

1. **Deschutes River - Certificates 72279 and 72280.** Currently, Certificates 72279 and 72280 have a joint requirement that limits them to a combined total maximum rate of 1101 cfs of Deschutes River primary water for their authorized places of use (POU) of 49,916.0 acres and 133.9 acres respectively. After completion of the conservation project, the total duty will be reduced by approximately 7,880 acre-feet, which translates to a total rate reduction of 18.56 cfs (which is equivalent to 7,880 acre-feet across the 214-day irrigation season), which would be shared between the two certificates.

Reduction in Combined Total Maximum Rate for Certificates 72279 and 72280:

- Days in irrigation season from April 1 through October 31 = 214 days
- (7,880 af/214 days)/(1.98347 af/cfs/day) = 18.56 cfs conserved
- 1,101 cfs [pre-project total] 18.56 cfs [conserved post-project] = 1,082.44 cfs post-project combined total maximum rate

Therefore, after the project's completion, the combined total maximum rate for Certificates 72279 and 72280 would be reduced to 1,082.44 cfs (which is the current total of 1101 cfs less 18.56 cfs of conserved water) for the authorized uses.

The Applicant will make uniform duty and rate reductions under Certificates 72279 and 72280 as a result of the project. The box below and **Table 1** of **Attachment 2** provides more details about the reductions.

Total Acres Under Certificates 72279 and 72280: 49,916 ac (Certificate 72279) + 133.9 ac (Certificate 72280) = 50,049.9 ac

Post-Project Reduction in Rate on Certificate 72279:
(49,916 ac/50,049.9 ac) * 18.56 cfs = 18.50 cfs rate reduction
1101 cfs - 18.50 cfs = 1082.44 cfs post-project rate

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Post-Project Reduction in Duty on Certificate 72279: (49,916 ac /50,049.9 ac) * 7,880 af = 7,858.92 af duty reduction

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262,059 \text{ af} - 7858.92 \text{ af} = 254,200.08 \text{ af post-project duty}
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Post-Project Reduction in Rate on Certificate 72280: (133.9 ac / 50,049.9 ac) * 18.56 cfs = 0.06 cfs rate reduction 3.35 cfs - 0.06 cfs = 3.29 cfs post-project rate

Post-Project Reduction in Duty on Certificate 72280: $(133.9 \text{ ac}/50,049.9 \text{ ac}) \times 7880 \text{ af} = 21.08 \text{ af duty reduction}$ 702.98 af - 21.08 af = 681.89 post-project duty

NOTE: The reduction in the total maximum duty and total maximum rate in Certificates 72279 and 72280 will not result in an actual reduction in diversions at the point of diversion on the Deschutes River under Certificates 72279 and 72280. As described below in Section 6.A.2, the Deschutes River conserved water created through this project will be allocated for irrigation use on lands currently being watered with water pumped from the Crooked River water under Certificates 72283 and 72284. The corresponding Crooked River water rights will be allocated instream in the Crooked River. The Applicant will identify for OWRD what acreages will receive the conserved Deschutes River water and no longer receive Crooked River water prior to requesting issuance of any incremental Final Order.

2. Crooked River - Certificates 72283 and 72284. Applicant intends to allocate the 7,880 acre-feet of conserved Deschutes River water created by the conservation project (under Certificates 72279 and 72280) to water approximately 3,152 acres of land currently being watered under Certificates 72283 and 72284 at a maximum duty of 2.5 acre-feet per acre.

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Allocation of New Acreage of Deschutes River Water for Irrigation:
          7,880 \text{ af}/2.5 \text{ af per ac} = 3,152 \text{ ac}
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Currently, Certificates 72283 and 72284 have a joint requirement that limits them to a combined total maximum rate of 200 cfs of Crooked River primary water for their authorized POUs of 8,530.8 acres and 286.9 acres respectively. After completion of the conservation project, the POUs under Certificate 72283 and 72284 will be reduced by approximately 3,152 acres from their total of 8,817.7 acres for a new combined POU acreage of approximately 5,665.7 (8,817.7 less 3,152) acres, to reflect those same acres being added to the POUs for Certificates 72279 and 72280.

```
Total Pre-Project Acres Under Certificates 72283 and 72284:
          8,530 ac (Certificate 72283) + 286.9 ac (Certificate 72284) = 8,817.7 ac pre-project
Post-Project Reduction of Acres Under Certificates 72283 and 72284:
          7,880 \text{ af}/2.5 \text{ af per ac} = 3,152 \text{ ac}
Actual Post-Project Acres Watered Under Certificates 72283 and 72284:
         8,817.7 \text{ ac [original]} - 3,152 \text{ ac [reduction]} = 5,665.7 \text{ ac post-project}
```

Each acre watered under Certificate 72283 and 72284 is currently allowed to receive a maximum duty of 4 acre-feet per acre and the total duty under them is 35,270.8 acre-feet. After the project completion, Applicant requests a corresponding reduction in the maximum duty for

Attachment 1 - 2012 NUID Conserved Water Application (April 12, 2012)

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these two certificates of 12,608 acre-feet (3,152 acres multiplied by 4 acre-feet per acre), to a new maximum duty of 22,662.8 acre-feet (35,270.8 total acre-feet less 12,608).

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Pre-Project Maximum Duty Under Certificates 72283 and 72284:
8,817.7 ac * 4 af per ac = 35,270.8 af

Post-Project Maximum Duty Under Certificates 72283 and 72284:
5,665.7 ac * 4 af per ac = 22,662.8 af
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The combined total maximum rate for these certificates would also be reduced by 71.5 cfs, which is equivalent to a 35.7% rate reduction (3152/8817.7 acres) of the pre-project rate maximum of 200 cfs, to a post-project maximum total rate of 128.5 cfs.

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Total Pre-Project Acres Under Certificates 72283 and 72284:
8,530 ac (Certificate 72283) + 286.9 ac (Certificate 72284) = 8,817.7 ac pre-project

Post-Project Reduction in Acres Under Certificates 72283 and 72284:
7,880 af/2.5 af per ac = 3,152 ac

Reduction in Maximum Rate Under Certificates 72283 and 72284:
3,152 ac / 8,817.7 ac * 200 cfs = 71.5 cfs reduction

Post-Project Maximum Combined Rate Under Certificates 72284 and 72284:
200 cfs - 71.5 cfs = 128.5 cfs
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Table 2 of Attachment 2 summarizes all of the figures discussed above. The Applicant will elect to make the duty and rate reductions under either Certificate 72283 or both Certificates 72283 and 72284. The particular acreage reductions will depend on the results of a lottery amongst the Applicant's patrons. The Applicant will identify the acreage, duty, and rate reductions that will come from each of these two certificates prior to the Applicant requesting issuance of any incremental Final Order.

- 3. Crooked River Certificates 72281 and 72282. The maximum rates, duties, and POUs for Certificates 72281 and 72282 which provide <u>supplemental</u> Crooked River water to lands served by Certificates 72279 and 72280 will remain unchanged; however pumping under these rights will be limited as described in the Additional Conditions in Section 6.A.4 below. Table 3 of Attachment 2 summarizes these water rights.
- 4. Additional Conditions Applicable to Crooked River Certificates 72281, 72282, 72283, and 72284. The Applicant will ensure its future pumping under Certificates 72281, 72282, 72283, and 72284 is protective of both the (1) the 7880 af of conserved water added to the Crooked River, and (2) the historical stream flow that is expected to be present based on records of historical flows downstream of NUID's pump station.

To accomplish this, Applicant agrees to limit its pumping to protect these stream flows pursuant to certain established flow rate minimums. The actual pumping limitations put in place each year will reflect a declaration by OWRD of whether there are "Non-Dry Year" or "Dry Year" conditions present at the start of each irrigation season using the evaluation protocol described in **Attachment 3**.

In sum, Applicant is requesting that Certificates 72281, 72282, 72283, and 72284 be conditioned to reflect minimum stream flow rate requirements in the Crooked River that are established in **Attachment 3**, and which will be annually determined by whether OWRD declares that year is a Non-Dry Year or Dry year, in order to protect the minimum stream flow rates identified in **Attachment 3**.

6. C) What portions of the conserved water will be allocated to the state and Applicant?

1. Applicant Portion: Applicant requests that the approximately 7,880 acre-feet of the conserved Deschutes River water generated by the project under Certificates 72279 and 72280 be allocated to irrigate approximately an additional 3,152 acres of the acreage that is currently being irrigated with Crooked River primary water under Certificates 72283 and 72284. The allocation of the conserved water would be at the maximum duty of 2.5 acre-feet per acre instead of the maximum duty of 4.0 acre feet per acre now authorized for these lands under Certificates 72283 and 72284. The maximum rate for these lands will be 1/80 of a cfs per acre with a total maximum rate of 39.40 cfs (3,152 acres * 1/80 cfs per acre). The combined maximum rate allowed for these lands and for lands served under Certificates 72279 and 72280 will remain 1101 cfs. Table 4 of Attachment 2 summarizes the proposed allocation of Applicant's conserved water.

The Applicant will identify the particular lands that will receive the conserved water prior to any request by Applicant for issuance of any incremental Final Order for this Application.

2. State Portion: Approximately 3,152 acres of Crooked River primary water rights from Certificates 72283 and 72284 will be allocated to the state for instream use in the Crooked River after the completion of the project.

The place of use of the instream water will be from the point of diversion identified in Certificates 77283 and 72284 to the mouth of the Crooked River. The new instream water right will have a maximum duty of approximately 12,608 acre-feet (4.0 acre-feet per acre for 3,152 acres), and a maximum rate of 29.7 cfs (based on a 214-day irrigation season) that will be protected instream from April 1 through October 31, and will retain the original priority date of Certificates 72283 and 72284. These details are also summarized in **Table 5** of **Attachment 2**.

State Portion - Maximum <u>Duty</u> Allocated Instream Crooked River: 3,152 acres x 4 acre-feet per acre = 12,608 af

State Portion - Maximum <u>Rate</u> Allocated Instream Crooked River:

Days in irrigation season from April 1 through October 31 = 214 days
1 cfs = 1.98347 af per day
12,608 acre-feet/214 days/1.98347 af per cfs per day = 29.7 cfs

3. Adjustment to Applicant's Crooked River Pumping Demand Accounting pursuant to OWRD's 1996 memorandum: Applicant requests that OWRD reduce the proportion of water that it requires the Applicant to pump from the Crooked River coincident with the reduction of acreage under Certificates 72283 and 72284 and the formula adopted in the July 10, 1996 memorandum from B. Main to M. Pagel (see Attachment 4).

As described in Attachment 4, OWRD currently requires the Applicant to pump sufficient water from the Crooked River to supply the demand created by acreages watered under Certificates 72283 and 72284. OWRD requires the Applicant in this memorandum to meet 16.775% of their total irrigation demand by pumping from the Crooked River based on the following calculations of the Applicant's overall irrigation demand from both the Crooked and Deschutes Rivers:

Pre-Project Crooked River Pumping Requirements

Ratio of Crooked River Lands to Total Lands Watered by NUID:

9,000 Crooked River acres / (50,000 Deschutes River acres + 9,000 Crooked River acres) = 0.1525

Average Loss from Crooked River Pumps to Delivery Point:

Calculation of Crooked River Irrigation Demand:

(0.1525 * Total Demand) + 0.1*(0.1525 * Total Demand) = 0.16775 * Total Demand, or16,775 % of Total Demand

- Demand Ratio Post-Project: Applicant requests that OWRD reduce the Crooked River to Deschutes River demand ratio to correspond to the changes set by the two incremental Final Orders issued for Application described in Section 10 - Schedule of this Application.
- i. Post-First Incremental Final Order: After the issuance of the first incremental Final Order, after appeals if any, Applicant requests that OWRD require the Applicant to meet 11.18% of its total demand by pumping from the Crooked River. This figure is based on the following calculations:

Post-First Incremental Final Order Crooked River Pumping Requirements

Crooked River Lands

Pre-Project Crooked River Lands: 8,817.70 ac

First Incremental Final Order's Reduction in Crooked River Lands: (7,880 af/2.5 af per ac) * 0.9 = 2,836.8 ac

Post-First Incremental Final Order Crooked River Lands: 8,817.70 - 2,836.8 ac = 5,980.9 ac

Deschutes River Lands

Pre-Project Deschutes River Lands: 50,049.90 ac

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Post First Incremental Final Order Increase in Deschutes River Lands: 2,836.8 ac

Post-First Incremental Final Order Deschutes River Lands:

50,049.90 ac + 2,836.8 ac = 52,886.7 ac

Post -First Incremental Final Order Pumping Requirements

Ratio of Crooked River Lands to Total Lands: 5,980.9 Crooked River acres / (52,886.7 Deschutes River acres + 5,980.9 Crooked River acres) = 0.1016

Average Loss from Crooked River Pumps to Delivery Point:

Post-First Incremental Final Order Crooked River Demand Ratio 0.1016 (ratio) * Total Demand + 0.10*(0.1016 * Total Demand) = 0.1118 * Total Demand, or 11.18% of Total Demand

ii. Post-Second Incremental Final Order: Applicant requests that OWRD reduce the pumping requirement again following the second incremental Final Order. The final ratio of Crooked River to Deschutes River lands following the second incremental Final Order will be dependent on the volume of water measured during the true-up period. Applicant estimates that OWRD require the Applicant to meet 10.587% of their total demand by pumping from the Crooked River based on the following calculations, which will need to be finalized to reflect the new acreage ratio after the second incremental final order is issued.

Approximate Post-Second Incremental Final Order Crooked River Pumping Requirements

Crooked River Lands

Pre-Second Incremental Final Order Crooked River Lands: 5,980.9 ac

Post-Second Incremental Final Order's Estimated Reduction in Crooked River Lands:

7,880 (af/2.5 af per ac)*0.1 = 315.2 ac

Post-Second Incremental Final Order Crooked River Lands: 5,980.9 ac - 315.2 ac = 5,665.7 ac

Deschutes River Lands

Pre-Second Incremental Final Order Deschutes River Lands: 52,886.7 ac

Post-Second Incremental Final Order's Approximate Increase in Deschutes River Lands:

315.2 ac

Attachment 1 - 2012 NUID Conserved Water Application (April 12, 2012)

Approximate Post-Second Incremental Final Order Deschutes River Lands: 52,886.7 ac + 315.2 ac = 53,201.9 ac

Approximate Post -Second Incremental Final Order Requirements

Approximate Ratio of Crooked River Lands to Total Lands:

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5,665.7 Crooked River acres / (53,201.9 Deschutes River acres + 5,665.7 Crooked River acres) = 0.0962

Average Loss from Crooked River Pumps to Delivery Point: 10%

Approximate Post-Second Final Order Crooked River Demand Ratio: 0.0962 * Total Demand + 0.1*(0.0962 * total demand) = 0.10587 * Total Demand, or 10.587% of Total Demand

b. Note: The Applicant's current Conserved Water Policy allows its Patrons to "opt-out" of the conservation project until January 2013 and pay for and receive their proportionate share of the conserved water from the Project. Although the Applicant does not anticipate that there will be any opt-outs, if there are, then much of the numeric information provided in this application will need to be adjusted accordingly. If there are any opt-outs, the Applicant will promptly notify OWRD and provide revised information that takes the opt-out Patrons and their lands into account.

7. A) Describe boundaries of proposed use of conserved water.

As described in **Section 6** above, the Applicant intends to allocate approximately 7,880 acre-feet of Deschutes River conserved water to approximately 3,152 acres of land that currently receive Crooked River primary water under Certificates 72283 and 72284, thereby replacing the use of the Crooked River water. The Applicant will divert this 7,880 acre-feet of Deschutes River water from the point of diversion identified under Certificates 72279 and 72280 and deliver it to the new POUs through its existing delivery system.

The Applicant will identify the particular lands to receive the Deschutes River conserved water instead of Crooked River water prior to requesting issuance of any incremental Final Order for this Application.

7. B) Describe location of instream use.

The new Crooked River instream water will be protected in the Crooked River from the NUID Crooked River pumps located at approximately RM 27.5 to the mouth where the Crooked River enters Lake Billy Chinook on the Deschutes River.

10. Schedule and Incremental Finalization

The conservation project is expected to be completed before the 2012 irrigation season. Applicant requests that OWRD finalize this conserved water application in <u>two incremental</u> final orders.

A. <u>First Incremental Final Order</u>: The first incremental final order will be requested once the project is completed. It will reflect modification requests reflecting 90% of the changes requested to existing water rights, 90% of the 7,880 AF of conserved water for the Crooked River, and conditioning of the four Crooked River rights as follows:

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- (1) Certificates 72279 and 72280 (Deschutes River)
 - a. Reduce the rate of Certificate 72279 by 16.65 (90% of 18.50) cfs,
 - b. Reduce the rate of Certificate 72280 by 0.054 (90% of 0.06) cfs,
 - c. Reduce the duty of Certificate 72279 by 7,073.03 (90% of 7,858.92) acre-feet, and
 - d. Reduce the duty of Certificate 72280 by 18.97 (90% of 21.08) acre-feet.
- (2) New Deschutes River Certificates
 - a. Issue a new certificate for the Deschutes River conserved water that allocates it to 2,836.8 acres (90% of 3,152 acres) of designated POUs at a maximum rate of 35.46 cfs (90% of 39.4 cfs), duty of 2.5 acre-feet per acre, and maximum duty of 7,092 acre-feet (90% of 7,880 acre-feet).
- (3) Certificates 77283 and 77284 (Crooked River)
 - a. Remove 2,836.8 (90% of 3,152) acres of designated POUs,
 - b. Reduce the total rate by 64.35 (90% of 71.5) cfs,
 - c. Reduce the total duty by 11,347.2 (90% of 12,608) acre-feet, and
 - d. Allocate 11,347.2 (90% of 12,608) acre-feet for instream use.
- (4) Issue a New Instream Crooked River Right
 - a. With a duty of 11,347.2 (90% of 12,608) acre-feet,
 - b. With a rate of 26.73 (90% of 29.7) cfs, and
 - c. With same season, priority date, and diversion point of Certificates 77283 and 77284.
- (5) Certificates 77281, 77282, 77283, and 77284 (Crooked River)
 - a. Add all of the new conditions to each certificate as described in **Attachment 3** to reflect the protection of minimum flows equal to the historical stream flow plus 90% of 7,880 af allocated monthly; provided however that **Section 3** of **Attachment 3** will not be applicable as it only applies with respect to a second incremental final order after the true-up process.
- (6) Revise OWRD 1996 Crooked River Pumping Demand Memorandum a. Require the Applicant to meet <u>11.18%</u> of its total demand by pumping from the Crooked River.
- B. Second Incremental Final Order: The second and final incremental Final Order will be requested after the Applicant conducts a "true-up" of the post-project canal flows to determine the requests for the final changes to the rates, duties, and POUs for existing water rights, and the instream water right as a result of the conservation project, as well as final conditions for the four Crooked River rights. To accomplish this Applicant requests 12 months after the project's completion to conduct the true-up process. When the true-up is complete, the Applicant will timely request that the second incremental Final Order be issued to:



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- (1) Certificates 72279 and 72280 (Deschutes River)
 - a. Reduce the total rate as indicated by true-up, and
 - b. Reduce the total duty as indicated by true-up.
- (2) New Deschutes River Certificates
 - a. Issue a new certificate for the Deschutes River conserved water that allocates it to the additional new designated POUs at a maximum rate of 1/80 cfs per acre, duty of 2.5 acre-feet per acre, and maximum duty as indicated by the true-up.
- (2) Certificates 77283 and 77284 (Crooked River)
 - a. Remove acres of additional new designated POU as indicated by true-up,
 - b. Reduce the total rate as indicated by true-up,
 - c. Reduce the total duty as indicated by true-up, and
 - d. Allocate additional acre-feet for instream use as indicated by true-up.
- (3) New Instream Crooked River Right
 - a. Increase duty as indicated by true-up,
 - b. Increase rate as indicated by true-up, and
 - c. Issue changes with same season, priority date, and diversion point of Certificates 77283 and 72284.
- (4) Certificates 77281, 77282, 77283, and 77284 (Crooked River)
 - a. Add all of the conditions to each as described in **Attachment 3** to reflect protection of minimum flows after the true-up; provided however that **Section 2** of **Attachment 3** will not be applicable as it only applies with respect to a second incremental final order after the true-up process.
- (5) Revise OWRD 1996 Pumping Crooked River Demand Memorandum a. Require the Applicant to meet an estimated 10.57% of its total demand by pumping from the Crooked River, with the exact number to follow the formula outlined in **Section 6(c) 3.a.i.** above and to be finalized after the true-up.

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Tables

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Table 1. Deschutes River (primary) water rights from Certificates 72279 and 72280 conserved through the project

	and it bekindes their (primary) water rights from the trackets 72275 and 72200 conserved through the project										
	-				Before Project		Pro	oject		Post Project	
			Acre	Maximum Rate	Maximum Duty	Per Acre Duty	Rate Conserved	Duty Conserved	Maximum Rate	Maximum Duty	Per Acre Duty
Certificate	Priority Date	Source	Equivalents	(cfs)	(AF)	(AF/acre)	(cfs)	(AF)	(cfs)	(AF)	(AF/acre)
72279	2/28/1913	Deschutes River, Wickiup Reservoir	49,916.00	1101	262,059.00	5.25	18.50	7858.92	1082.44	254,200.08	5.09
72280	2/28/1913	Deschutes River, Wickiup Reservoir	133.9	3.35	702.98	5.25	0.06	21.08	3.29	681.89	5.09
Combined Tot	al		50,049.90	1101*	262,761.98	5.25	18.56	7880.00	1082.44	254,881.98	5.09

^{*}Combined total allowed under Certificates 72279 and 72280

Table 2. Crooked River (primary) water rights from Certificates 72283 and 72284 affected by the project

	- 1		Before	Project			Project			Post Pro	iect	
		Acre	Maximum Rate	Maximum Duty	Per Acre Duty	Acre Reduction	Rate Reduction	Duty Reduction		Maximum Rate	Maximum	Per Acre Duty
Certificate	Priority Date Source	Equivalents			(AF/acre)		(cfs)	(AF)			Duty	(AF/acre)
72283	9/18/1968 Crooked River	8,530.80	200	34,123.20	4.00	TBD	TBD	TBD	TBD	TBD	TBD	4.00
72284	9/18/1968 Crooked River	286.9	7.17	1,147.60	4.00	TBD	TBD	TBD	TBD	TBD	TBD	4.00
Combined Total		8,817.70	200*	35270.8	4.00	3,152.00	71.5*	12,608.00	5,665.70	128.5*	22,662.80	4.00

^{*}Combined total allowed under Certificates 72283 and 72284.

Table 3. Crooked River (secondary) water rights from Certificates 72281 and 72282 affected by the project

				Maximum Rate	Maximum Duty	Per Acre Duty
Certificate	Priority Date	Source	Acres	(cfs)	(AF)	(AF/acre)
72281	6/23/1955	Crooked River	49,866.00	200	199,464.00	4.00
72282	6/23/1955	Crooked River	133.9	3.35	535.60	4.00
Combined Tota	ı		49,999.90	200*	199,999.60	4.00

^{*}Combined total allowed under Certificates 72281 and 72282.

Table 4. Applicant's portion of the conserved water.

Originating			Maximum Rate	Maximum Duty	Per Acre Duty		
Certificate	Priority Date	Source	(cfs)	(AF)	(AF/acre)	Acres	Place of Use
72279	2/28/1913	Deschutes River, Wickiup Reservoir	39.29	7858.92	2.5	3,144	TBD
72280	2/28/1913	Deschutes River, Wickiup Reservoir	0.11	21.08	2.5	8	тво
Combined Tate	al			7880.00	2.5	3,152	Not Applicable

^{*}Combined total of 1101 cfs allowed under water rights originating from Certificates 72279 and 72280

Table 5. State's portion of the conserved water.

	Originating	-			Maximum Rate	Maximum Duty	
1	Certificate*	Priority Date	Source	Season	(cfs)	(AF)	Reach
	72283		Crooked River	4/1 through	29.70		Crooked River from the POD identified in Certificates 72283
	72284	72284 9/18/1968 Crook		10/31	29.70		and 72284 to the mouth

^{*}Conserved water will be allocated by the Applicant from either Certificate 72283 or Certificate 72283 and 72284

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Applicant requests that OWRD impose conditions to limit the Applicant's exercise of its Crooked River water rights under Certificates 72281, 72282, 72283, and 72284. These conditions will limit the Applicant's post-project exercise of these rights to ensure protection of the minimum stream flows in the Crooked River downstream of the Certificates' POD as particularly described in the sections below.

1. Non-Dry Year and Dry Year Declarations by OWRD

Applicant requests that the underlying foundation for setting the minimum post-project Crooked River flows be based on whether OWRD declares in writing that "dry year" or "non-dry year" conditions exist in the Crooked River basin. The Dry Year/Non-Dry Year Declaration metric ("Metric") was developed with the intention that a Dry Year will have an expected recurrence interval of three out of ten years over a thirty year period. Applicant requests that OWRD's declaration be made during March of every year according to the following metrics:

- i. <u>Dry Year Declaration</u> Established only if the following conditions apply:
 - a. OWRD's or Bureau of Reclamation's predicted March month-end contents of Prineville Reservoir are less than or equal to the 50% exceedance level of the contents at March 31 based on all data from the prior 30 years, <u>and</u>
 - b. Either:
 - The Prineville Reservoir outflow has not exceeded 75 cfs within 30 days of the actual date of OWRD's Non-Dry Year/Dry Year declaration, or
 - The Prineville Reservoir outflow has exceeded 75 cfs within 30 days of the actual date of OWRD's Non-Dry Year/Dry Year declaration only to supply irrigation demands for downstream users.
- ii. Non-Dry Year Declaration Established if any of the following conditions apply:
 - a. The conditions necessary for a Dry Year Declaration do not apply, or
 - b. When OWRD fails to make any written Dry Year Declaration by April 1 of that year.
- iii. The OWRD shall maintain discretion to apply and interpret the Dry Year Declaration metric in **Section 1.i** if there is an extenuating circumstance(s) with respect to predicted March month-end contents of Prineville Reservoir or its outflows 30 days prior to a Dry or Non-Dry Year Declaration so as to target a Dry Year recurrence interval of three out of ten years over a thirty year period.
- iv. The Applicant and DRC may jointly make a written petition to OWRD to administratively revise the Metric if they expect that the recurrence interval of a Dry Year Declaration over a thirty-year period will change from three out of ten years, and OWRD shall be allowed to amend the Metric in response to their petition. The anticipated conditions that could change the recurrence interval of a Dry Year include the allocation of uncontracted storage from Prineville Reservoir, the reallocation of

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contracted storage from Prineville Reservoir, significant changes to reservoir operations, and changes in long-term precipitation patterns.

2. Minimum Crooked River Flows: After Issuance of the First Incremental Final Order

Applicant requests that OWRD condition its Certificates 72281, 72282, 72283, and 72284 to limit the Applicant's use of water after issuance of the first incremental Final Order for this Application to ensure that Applicant may only exercise these water rights if and when existing Crooked River stream flows meet or exceed the stream flows levels set during Non-Dry Years as set out below in Column F of Table 1, or meet or exceed the stream flow levels set during Dry Years as set out in Column F of Table 2.

The historical stream flows downstream of the District's pumps on the Crooked River (pre-Project) include but are not limited to (1) irrigation return flows, (2) spring and tributary inputs, (3) undiverted irrigation deliveries, (4) instream water rights, and (5) any non-irrigation releases (uncontracted or contracted water) from Prineville Reservoir available above the District's pumps, after being reduced for channel and transportation losses, ground water pumping effects, and the District's pumping under Certificates 72281, 72282, 72283, and 72284 at the historical per acre rates. The resulting historical flows in cfs are represented by the figures in Column E in Tables 1 and 2 below. ("Columns E"). The Columns E flows represent the historical stream flows immediately above the District's pumps less the District's historical pumping.

Table 1. This table shows the development of the minimum monthly Crooked River stream flows required in <u>Non-Dry Years</u> after issuance of the <u>first incremental Final Order</u>, pursuant to the Non-Dry Year Declaration metric set forth in Section 1 above. Column F establishes the minimum stream flows.

A	В	C	D	E	F
Month	Proportion of Pumping During Month	7,092 af Allocated Monthly (af)	7,092 af Allocated Monthly (cfs)	Pre-Project 70% Exceedance Stream Flow (cfs)	Minimum Stream Flow (cfs) Post-First Increment of Conserved Water *
Apr	0.0435	308.795	5.189	174.7	179.889
May	0.1400	992.699	16.145	74.7	90.845
Jun	0.1969	1,396.602	23.471	55.7	79.171
Jul	0.2174	1,541.501	25.070	29	54.07
Aug	0.2414	1,712.279	27.848	32.1	59.948
Sep	0.1348	956.108	16.068	93.42	109.49
Oct	0.0259	184.016	2.993	147.7	150.69

Description of Table 1

Column	Calculation
Α	None
В	Monthly Total Crooked River Pumping from 2001-2010 / Total Annual Crooked River Pumping from 2001-2010
С	7,092 af * Column B

Description

Month

The proportion of NUID's annual pumping that occurred during each month based on data from 2001 through 2010.

The first increment of conserved water will reduce NUID's demand by 7,092 af. NUID will protect this 7,092 af instream in the Crooked River. This column shows the portion of 7,092 af allocated to each month based on the proportion of NUID's total pumping that occurred during that month.

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D	Column C / Number of Days in Month / 1.98347 af per cfs per day	Column C converted to a daily rate during each month.
E	None	This column represents the stream flow that was present 70% of the time during each month prior to this project from 2001 through 2010.
F	Column D + Column E	Minimum stream flow is equal to 7,092 af, allocated monthly, and the stream flow that would have been present prior to the project. *As described in Section 4 , the described rates may increase under specified conditions

Table 2. This table shows the development of the minimum monthly Crooked River stream flows required in <u>Dry Years</u> after issuance of the first incremental Final Order, pursuant to the Dry Year Declaration metric set forth in Section 1 above. Column F establishes the minimum stream flows.

Α	В	c	D	E	F
Month	Proportion of Pumping During Month	7,092 af Allocated Monthly (af)	7,092 af Allocated Monthly (cfs)	Pre-Project 90% Exceedance Stream Flow (cfs)	Minimum Stream Flow (cfs) Post-First Increment of Conserved Water *
Apr	0.0435	308.795	5.189	113.9	119.089
May	0.1400	992.699	16.145	22.9	39.045
Jun	0.1969	1,396.602	23.471	24	47.471
Jul	0.2174	1,541.501	25.070	19	44.07
Aug	0.2414	1,712.279	27.848	20.8	48.648
Sep	0.1348	956.108	16.068	36.8	52.868
Oct	0.0259	184.016	2.993	118	120.99

Description	of Table 2	
Column	Calculation	Description
Α	None	Month
В	Monthly Total Crooked River Pumping from 2001-2010 / Total Annual Crooked River Pumping from 2001-2010	The proportion of NUID's annual pumping that occurred during each month based on data from 2001 through 2010.
С	7,092 af * Column B	The first increment of conserved water will reduce NUID's demand by 7,092 af. NUID will protect this 7,092 af instream in the Crooked River. This column shows the portion of 7,092 af allocated to each month based on the proportion of NUID's total pumping that occurred during that month.
D	Column C / Number of Days in Month / 1.98347 af per cfs per day	Column C converted to a daily rate during each month.
E	None	This column represents the stream flow that was present 90% of the time during each month prior to this project from 2001 through 2010.
F	Column D + Column E	Minimum stream flow is equal to 7,092 af, allocated monthly, and the stream flow that would have been present prior to the project. *As described in Section 4, the specified rates may increase under certain conditions.

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3. Minimum Crooked River Flows: After Issuance of the Second Incremental Final Order

Applicant currently estimates that the additional conserved water finalized after the true-up process in the second incremental Final Order will be 788 AF (which is 10% of the total conserved water requested in this Application). The actual amount of acre-feet requested in Applicant's second finalization request will be set by the trued-up amount that is in excess of the 7,092 AF finalized by the first incremental Final Order. This actual amount will then be used instead of the 788 AF estimate used as a place holder estimate in Columns C and D in Tables 3 and 4 below and the values in these tables will be adjusted accordingly, consistent with the descriptions below of the calculations for each column.

Applicant requests that OWRD condition its Certificates 72281, 72282, 72283, and 72284 to limit the Applicant's use of water after issuance of the <u>second</u> (and final) incremental Final Order for this Application to ensure that Applicant may only exercise these water rights when Crooked River stream flows meet or exceed the final stream flow levels set during <u>Non-Dry Years</u> as calculated below in **Table 3** in Column F, or meet or exceed the final stream flow levels set during <u>Dry Years</u> as calculated in **Table 4** in Column F below.

Table 3. This table shows the development of the minimum monthly Crooked River stream flows required in **Non-Dry Years** after issuance of the **second incremental Final Order**, pursuant to the Non-Dry Year Declaration metric set forth in Section 1 above. Column F establishes the minimum stream flows. The minimum stream flow will be the sum of the second increment of conserved water and the non-dry year minimum flow following the Final Order of the first increment of conserved water.

A	В	c	D	E	F
	Proportion of Pumping During	Estimated 788 af Allocated	Estimated 788 af Allocated	Non-Dry Year Minimum Stream Flow (cfs) Post- First Increment of	Estimated Minimum Stream Flow (cfs) Post-Second Increment of Conserved
Month	Month	Monthly (af)	Monthly (cfs)	Conserved Water	Water *
Apr	0.0435	34.311	0.577	179.889	180.466
May	0.1400	110.300	1.794	90.845	92.639
Jun	0.1969	155.178	2.608	79.171	81.779
Jul	0.2174	171.278	2.786	54.07	56.856
Aug	0.2414	190.253	3.094	59.948	63.042
Sep	0.1348	106.234	1.785	109.49	111.275
Oct	0.0259	20.446	0.333	150.69	151.023

Description of Table 3

Column	Calculation	Description
Α	None	Month
В	Monthly Total Crooked River Pumping from 2001- 2010 / Total Annual Crooked River Pumping from 2001-2010	The proportion of NUID's annual pumping that occurred during each month based on data from 2001 through 2010.
С	788 af * Column B	The second increment of conserved water will reduce NUID's demand by an estimated 788 af. NUID will protect this estimated 788 af instream in the Crooked River. This column shows the portion of the estimated 788 af allocated to each month based on the proportion of NUID's total pumping that occurred during that month.
D	Column C / Number of Days in Month / 1.98347 af per cfs per day	Column C converted to a daily rate during each month.

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E None Non-Dry Year minimum stream flow from Table 1, Column F (Attachment 3)

Column D + Column E Estimated minimum stream flow is equal to the estimated

788 af, allocated monthly, and the sum of the non-dry year minimum stream flow finalized following the second incremental Final Order. *As described in Section 4, the described rates may increase under specified conditions.

Table 4. This table shows the development of the minimum monthly Crooked River stream flows required in <u>Dry Years</u> after issuance of the **second incremental Final Order**, pursuant to the Dry Year Declaration metric set forth in Section 1 above. Column F establishes the minimum stream flows. The minimum stream flow will be the sum of the second increment of conserved water and the non-dry year minimum flow following the Final Order of the first increment of conserved water.

Α	В	C	D	E	F
Month	Proportion of Pumping During Month	Estimated 788 af Allocated Monthly (af)	Estimated 788 af Allocated Monthly (cfs)	Dry Year Minimum Stream Flow (cfs) Post- First Increment of Conserved Water	Estimated Minimum Stream Flow (cfs) Post-Second Increment of Conserved Water *
Apr	0.0435	34.311	0.577	119.089	119.666
May	0.1400	110.300	1.794	39.045	40.839
Jun	0.1969	155.178	2.608	47.471	50.079
Jul	0.2174	171.278	2.786	44.07	46.856
Aug	0.2414	190.253	3.094	48.648	51.742
Sep	0.1348	106.234	1.785	52.868	54.653
Oct	0.0259	20.446	0.333	120.99	121.323

Description of Table 4

Column	Calculation	Description
Α	None	Month
В	Monthly Total Crooked River Pumping from 2001- 2010 / Total Annual Crooked River Pumping from 2001-2010	The proportion of NUID's annual pumping that occurred during each month based on data from 2001 through 2010.
С	788 af * Column B	The second increment of conserved water will reduce NUID's demand by an estimated 788 af. NUID will protect this estimated 788 af instream in the Crooked River. This column shows the portion of the estimated 788 af allocated to each month based on the proportion of NUID's total pumping that occurred during that month.
D	Column C / Number of Days in Month / 1.98347 af per cfs per day	Column C converted to a daily rate during each month.
E	None	Dry Year minimum stream flow from Table 2, Column F (Attachment 3).
F	Column D + Column E	Estimated minimum stream flow is equal to the estimated 788 af, allocated monthly, and the sum of the Dry Year minimum stream flow finalized following the second incremental Final Order. *As described in Section 4 , the described rates may increase under specified conditions.

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4. Revisions of Columns E and F after Petition by Parties to OWRD

After any Final Orders are issued by OWRD in response to this Application, and in response to a joint petition by the Applicant and the DRC to modify the flow rates set in Column E of Tables 1 and 2 due to changed conditions, OWRD may revise the flow rates set in Column E of Tables 1 and 2, and then correspondingly update Column F, in Tables 1 and 2, and Columns E and F in Tables 3 and 4.

5. Daily Stream Flow Records

Applicant agrees it shall observe and record daily stream flow levels in the Crooked River at gauge 14087300 and time recorded at least once between 5 AM and 6 PM for each day that it considers operating its pumps on the Crooked River. (And in case of a future event that makes data from gauge 14087300 unavailable, then Applicant will observe stream flow levels at an alternate gauge location established by OWRD that adequately describes stream flow in the reach downstream from the POD for Certificates 72281, 72282, 72283, and 72284.)

6. Applicant Diversions and Minimum Crooked River Stream Flows

Applicant agrees it shall not divert any water under Certificates 72281, 72282, 72283, and 72284 if that diversion would reduce the daily observed Crooked River stream flow level below the levels identified in Column F in Tables 1, 2, 3, and 4.

7. Submission of Daily Stream Flow Observations and Pumping Rates

Applicant agrees it shall record its daily near-real time stream flow observations and daily pumping rates and submit this information digitally to OWRD following the completion of each irrigation season and prior to the subsequent irrigation season, and/or anytime OWRD requests the information.



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ATTACHMENT 4

Interoffice Memo, South Central Region, Oregon Water Resources Department, From Bob Main to Martha Pagel, dated July 12, 1996

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Interoffice Memo

South Central Region

1340 NW Wall Street, Suite 100, Bend, Ocogon, 97701-1939, (503) 388-6669, Fax (503) 388-5101

DATE:

July 12, 1996

TO:

MARTHA PAGEL

FROM:

BOB MAIN

SUB:

NORTH UNIT LD. WATER ACCOUNTING

During the review of North Unit Irrigation District's (NUID) HB-3111 petition, WaterWatch (WW) raised questions concerning how the Water Resources Department (WRD) and the public could be sare that NUID drew weter from the correct sources for the leads NUID intigates. A meeting was held in Bend, OR. on July 10, 1996 to resolve these questions. Attending were Chuck Schonnecker (NUID), Erio Glover (USBR), Reed Besson (WW), and Bob Maia (WRD).

Background:

NUID irrigates approximately 50,000 acros (priority 1913) from the Deschutes River and 9,000 acres (priority 1968) from the Crooked River. The lands irrigated from the Deschutes River also have a supplemental water right from the Crooked River (pribrity 1955). The water from these two sources is mixed together in the main cenal, then distributed to the lands of the district. The amount diverted from each source is measured and recorded;

Since 1981, WRD has required that NUID pump sufficient water from Crooked River to supply the demand created by the 9,000 scree of Crooked River leads. The remainder of this memo will detail the process agreed to by the parties to ensure that this happens.

THE PROCESS

Assumptions:

Total infigured Crooked River irrigated average loss from Crooked River pumps to delivery point TD = "total acre foot delivered on the Project to date" CRD = "Crooked River Demand"

59,000 acres 9,000 acres 10%

Crooked River lands are irrigated at the same rate as Deschites lands

ratio of Crooked River lands to total intigated is 9000/59000- .1525 Crooked River Demand = $(.1525 \times TD) + .10 \times (.1525 \times TD) = .16775 \times TD$

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The watermaster produces the "storage report" approximately monthly during the irrigation season. The first storage report of the season is not calculated until demand exceeds the natural flow of the river. As part of the storage report the watermaster will add a section that will calculate the Crooked River Demand and will record the total pumped from Crooked River to date. After each storage report is produced, NUID will make a best effort to eliminate any deficit in the total pumped from Crooked River at a constant rate over the remainder of the irrigation season. In no case shall any deficit remain at the end of the irrigation season. NUID will supply to the watermaster, prior to each storage report, the total acre feet delivered and total pumped from Crooked River. The storage reports will remain on file in the watermaster's office and open to public inspection.

This process may require NUID to pump more water from Crooked River than is actually required by Oregon water law, for it assumes that the percentage of Crooked River scres in actual production in any given year is the same percentage as Deschutes River lands in actual production. In fact, a higher percentage of Deschutes lands are irrigated in any given year than Crooked River lands. If NUID were to establish an internal water ordering system that would allow accurate measurement of Crooked River deliveries, apparate from all other deliveries, then the process for calculating Crooked River Demand will be renegotized.

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Exhibit A – Evidence of Use Affidavits

NUID will submit affidavits of use by the owners of Crooked River primary lands at issue in this Application (where the appurtenant Crooked River water rights are being transferred to instream use), and/or other documentation as may be required by the Department. As of the date of submission of this Application, NUID is still working to determine exactly which Crooked River primary lands will be receiving the Deschutes River conserved water.

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EXHIBIT A - EVIDENCE OF USE AFFIDAVIT

State of Oregon)	
	·)	SS
County of Jefferson)	

I, Michael E. Britton, in my capacity as Secretary-Manager of the North Unit Irrigation District, mailing address 2024 NW Beech Street, Madras, OR 97741, telephone number (541) 475-3625, being first duly sworn depose and say:

The North Unit Irrigation District (NUID) Main Canal diverts water from the Deschutes River at a point of diversion located on the Deschutes River, with the exact location as follows:

NUID Main Canal POD Deschutes River - SE 1/4 NE 1/4, SECTION 29, TOWNSHIP 17 SOUTH, RANGE 12 EAST, W.M.; 1700 FEET SOUTH & 730 FEET WEST FROM NE CORNER, SECTION 29.

Water is diverted into the NUID Main Canal at this point of diversion at a maximum rate of 1,101 cubic feet per second as authorized under State of Oregon Water Right Certificate Nos. 72279 and 72280. The point of diversion currently diverts water for delivery to 50,049.9 acres of land. Water under Certificate Nos. 72279 and 72289 was beneficially delivered through the NUID Main Canal or temporarily leased through the Oregon Water Resources Department Instream Lease Program during the last five years.

DATED: April 1(a, 2012

Michael E. Britton, District Secretary-Manager

SUBSCRIBED AND AFFIRMED before me this \ day of April, 2012.



NOTARY PUBLIC FOR OREGON

My Commission Expires: \\-5-20\3

APR 1 8 2012 **WATER RESOURCES DEPT**

SALEM OREGON

Exhibit B – Map

As of the date of submission of this Application, and as described in Section 7(A) of the Conserved Water Application, NUID is still working to determine exactly which Crooked River primary lands currently served by Certificates 72283 and/or 72284 will be receiving the Deschutes River conserved water. Once determined, NUID will submit the requisite maps.

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EXHIBIT B

North Unit Irrigation District - Main Canal Lining, Mile 6.9-11.8 T16S R13E

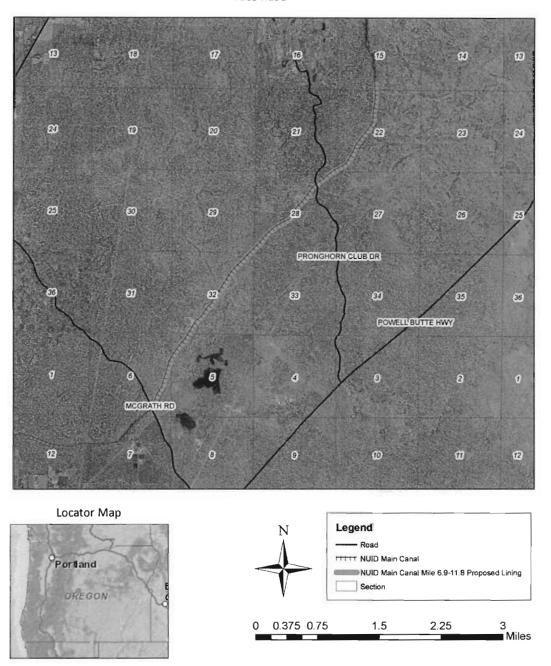




Exhibit D – Identification and Resolution of Water Right Conflicts

As of the date this application is being submitted to OWRD, construction of the project has begun and more than 25 percent of project costs have been expended. Thus, the Applicant provides the following evidence that the Applicant has attempted to identify and resolve the concerns of water right holders in the area, governmental entities, and other organizations that have asked to be consulted regarding the allocation of conserved water.

The Applicant (NUID), and/or its authorized agent, the Deschutes River Conservancy (DRC), have met with or communicated with the following:

- 1) Water users: NUID sent a letter (copy attached) to all of its patrons outlining the project on November 18, 2011, and further held a patron meeting on December 8, 2011, at the Jefferson County Fairgrounds in Madras to discuss the project. NUID also sent a letter (copy attached) by registered mail to all 182 NUID landowners with appurtenant primary Crooked River water rights, which described the process by which primary Crooked River water rights would be replaced with Deschutes River conserved water. To date, NUID has received the support of its patrons, as evidenced by the fact that no patron has stepped forward to "opt-out" of the project as otherwise allowed by NUID's Conserved Water Policy, and based on the positive response to NUID's lottery for determining the order in which landowners with appurtenant Crooked River primary water rights will have these rights replaced with new Deschutes River primary water rights made available as a result of the project.
- 2) Governmental entities: The District and the DRC have had multiple meetings with the Oregon Water Resources Department, the Oregon Department of Fish and Wildlife (ODFW), the Oregon Department of Environmental Quality (ODEQ), and the U.S. Bureau of Reclamation to discuss the project. Letters in support of the project from ODFW, ODEQ, and the Oregon Parks and Recreation Department are attached to this Application at Exhibit I. Also, the U.S. Bureau of Reclamation awarded NUID a WaterSmart grant for the project in the amount of \$1 million.
- 3) Other organizations: The District and/or the DRC have had various meetings with the Confederated Tribes of the Warm Springs (CTWS), Portland General Electric, WaterWatch of Oregon, and others. The CTWS actively participated in studies to determine the water savings potential of lining the NUID main canal in support of the project, while PGE supported use of the Pelton Fund to help fund the project. A letter from WaterWatch of Oregon regarding the project is attached.

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2024 N.W. Beech Street Madras, Oregon 97741

(541) 475-3625 (541) 475-3652 Fax (541) 475-3905 nuid@northunitid.com

November 18, 2011

Dear North Unit Irrigation District Landowner/Water User:

In 1968 North Unit Irrigation District (NUID) installed a pumping facility on the Crooked River near Terrebonne, Oregon to provide a supplemental water supply for NUID's Deschutes River lands and a primary water supply for NUID's Crooked River lands. Since 1968 the Crooked River pumping facility has remained fully operational and continues to be used today to meet district needs.

Beginning in 1981, the Oregon Water Resources Department (OWRD) required that NUID pump a sufficient amount of water (consistent with NUID's water rights) from the Crooked River to supply the demand created by the nearly 9,000 acres of Crooked River lands. In 1996, WaterWatch of Oregon, an environmental advocacy group, raised concerns about how OWRD and the public could be sure that NUID was diverting the appropriate amount of water from both the Crooked River and Deschutes River, consistent with NUID's water rights. In response to WaterWatch's concerns, OWRD, NUID, and WaterWatch in July 1996 developed a Crooked River Pumping Formula to ensure that NUID would divert the appropriate amount of water from both the Crooked River and Deschutes River, given the total number of primary acres to be irrigated from each source. Since that time NUID has been required to pump a set percentage of Crooked River water (16.775%) consistent with NUID's overall deliveries for the full irrigation season. For example if NUID delivered 100,000 acre-feet in an irrigation season, then 16,775 acre-feet would have to be pumped from the Crooked River even if the 16,775 acre-feet was otherwise available from the Deschutes River.

Since 1968 many things have changed. The price of power has steadily increased, the cost of maintaining the pumping facilities has increased, and perhaps most importantly, new environmental laws such as the Endangered Species Act have been enacted by Congress and the state legislature. Today, NUID budgets in excess of \$300,000 to cover the power costs associated with the "pumping requirement" imposed by OWRD in 1996. In 2010 power rates for the Crooked River pumping facility jumped nearly 9%, and NUID anticipated another increase of similar magnitude for 2011. Thankfully, the 2011 increase did not materialize, but NUID believes further increases in power costs for Crooked River pumping are highly likely over time. Another change has been the costs associated with maintaining the pumps and associated facilities. Although the current pumps (9 pumps at 450 hp each) and controls are 60 to 70 years old, they continue to perform well. However, given their current age, NUID believes their useful life could be nearing an end. Replacement costs for the pump motors alone are estimated to be in excess of \$1 million.

In 2005, anticipating the reintroduction of steelhead in the Crooked River, NUID began the process of seeking assistance to replace fish screens at the Crooked River pumping facility that did not

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comply with current fish screening standards. In 2007, NUID was able to replace the non-compliant screens at a cost of \$1.5 million, most of which was funded by other parties. Although the new screens now comply with applicable standards, NUID continues to have concerns about potential liability under the Endangered Species Act associated with the current operation of the Crooked River pumping facility.

Given the known costs and circumstances as well as potential unknown issues that may be on the horizon, NUID has undertaken the task of finding ways to relieve the district from its reliance on the Crooked River as a primary source of irrigation water. As such, this is the reason for writing to you today.

For several years now, NUID has been working with interested parties to develop a plan to reduce the district's reliance on the Crooked River. As a first step, a plan has been developed to line a 5-mile portion of the district's main canal. The lining would take place where the previous lining installed in the late 1990's ends. Based on recent studies and estimates, NUID anticipates the new lining project will conserve approximately 8,000 acre-feet of Deschutes River water per year, which would have otherwise been lost during transmission. The 8,000 acre-feet is considered to be the first phase (Phase I) of a multi-phase project, in which a total of 22,250 acre-feet will be conserved through various means, including additional canal lining. When completed, the full project will provide 2.5 acre-feet of water for each acre of land that is currently irrigated with NUID's primary Crooked River water right.

To date, approximately \$4.6 million dollars has been secured for the Phase I project. Contributors include the U.S. Bureau of Reclamation (\$1 million), the Oregon Watershed Enhancement Board (\$1 million), and the Pelton Fund, which was established as part of the relicensing of the Pelton-Round Butte hydroelectric project (\$2.6 million). NUID's out-of-pocket contribution to Phase I is approximately \$25,000, with the district intending to make in-kind contributions as well.

The Phase I project includes the following: Line approximately 5 miles of the NUID main canal, yielding approximately 8,000 acre-feet of conserved Deschutes River water. Apply the 8,000 acre-feet to approximately 3,200 acres of the Crooked River lands (i.e., lands currently irrigated with primary Crooked River water rights), at a duty of 2.5 acre-feet per acre. In turn, OWRD will adjust the mandatory amount NUID must pump from the Crooked River by 8,000 acre feet. The 8,000 acre feet that NUID would have otherwise pumped from the Crooked River will be left instream. NUID's board or directors adopted a "Lottery Policy" that will, at random, identify and prioritize the Crooked River lands eligible to participate in Phase I, as well as future phases of the overall project. A copy of the policy is attached.

Ultimately, the goal will be for NUID to eliminate the mandatory requirement to pump water from the Crooked River. At the same time, it should be underscored that the multi-phase project will not affect NUID's supplemental water rights from the Crooked River for the 50,000 acres currently covered with primary Deschutes River water rights. Thus, while the goal is to eliminate NUID's reliance on the Crooked River for primary irrigation rights, NUID plans to maintain the Crooked River pumping facility indefinitely for supplemental irrigation needs.

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A landowner/water user meeting has been scheduled for December 8, 2011, at 1:00 pm at the Jefferson County Fairgrounds, Maccie Conroy building, to further explain the project, process, costs and benefits.

Sincerely,

Mike Britton General Manager

Enclosures (2)

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North Unit Irrigation District Water Supply Initiative Frequently Asked Questions

What will the project do?

The project will conserve Deschutes River water, and make the conserved water available to irrigate lands in NUID currently irrigated with primary Crooked River water rights. At the same time, water that would have otherwise been pumped by NUID from the Crooked River will be left instream in the form of a new Crooked River water right to benefit fish and wildlife. The current plan is to enter into a new agreement to ensure that a minimum bypass flow is maintained at NUID's pumps to ensure that NUID is not diverting water from the Crooked River that was effectively "replaced" with conserved water from the Deschutes River.

What benefits will the project provide to North Unit Irrigation District?

After the project, NUID will no longer need to pump water from the Crooked River to supply primary irrigation water. The District anticipates it will save over \$300,000 per year in costs associated with power use and operations and maintenance expenses at the Crooked River pumping facility. Reduced pumping from the Crooked River will also help to reduce risks to NUID associated with the Endangered Species Act.

What benefits will the project provide to the Crooked River?

The project will contribute to lower mid-summer water temperatures in the Crooked River downstream from NUID's pumps. According to state agencies, current water temperatures are preventing certain fish species from moving through the lower Crooked River. Preliminary draft modeling by the Oregon Department of Environmental Quality shows that increased stream flows will reduce water temperatures in the Crooked River downstream from NUID's pumps. State agencies also predict that the project will increase early and late summer stream flows to aid in steelhead trout and Chinook salmon migration.

What water rights will the project provide to North Unit Irrigation District?

The project will provide up to 22,250 acre-feet of conserved Deschutes River water to NUID. The project will replace up to 8,900 acres of Crooked River water rights with Deschutes River water rights at a duty of 2.5 acre-feet per acre. The new conserved Deschutes River water rights will have the same priority date as NUID's current Deschutes River water rights.

What water rights will the project provide to the Crooked River?

The project will provide up to 22,250 acre-feet of instream water rights to the Crooked River. The new instream water rights will retain the same priority date as North Unit Irrigation District's primary Crooked River water rights.

What about NUID's supplemental water rights?

NUID will replace up to all of its 8,900 acres of primary Crooked River water rights with Deschutes River water rights. NUID will retain 50,000 acres of supplemental Crooked River water rights. The supplemental water rights are appurtenant to the same 50,000 acres that currently receive primary irrigation water from the Deschutes River. These supplemental Crooked River water rights are senior to the primary Crooked River water rights.

How will the project protect water in the Crooked River?

The instream water rights created through the project will be junior to NUID's supplemental water rights. The project will create a new minimum bypass flow at NUID's pumps. It is expected that this new minimum bypass will be honored when NUID is diverting water under its Crooked River

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supplemental water rights. Stated another way, NUID will only be able to use its supplemental Crooked River water rights when stream flow in the Crooked River exceeds the minimum bypass flow. And the bypass flow amount will be set so as to reflect what NUID would have otherwise pumped at the Crooked River pumping facility had the project not been implemented. Along these lines, the bypass flow requirement will vary depending on whether it is a normal or dry water year.

How will a dry water year be determined?

We are currently working with the Oregon Water Resources Department and others to define a dry water year and a normal water year. We expect that 2 out of 10 years will be a dry water year, resulting in a lower bypass flow requirement. We expect that 8 out of 10 years will be a normal year.

How will the project legally move water between uses and users?

The project will use Oregon's Allocation of Conserved Water Program and water right transfer statutes. The project will conserve Deschutes River water, allocate the conserved water to NUID, and restore a volume of water in the Crooked River equivalent to the volume of water conserved in the Deschutes River. The Deschutes River conserved water and the new Crooked River instream water will be quantified and legally protected under state-issued water rights.

When will you complete the project?

We expect to complete this project incrementally. We expect to complete the first phase of the project, including the lining of 5 miles of NUID's main canal and the required water rights processes, by April 2012. The first phase of the project will provide a little over one-third of the water for this project. We expect to complete the remaining phases incrementally over the next five years.

Will the project provide water to NUID and the Crooked River before it is fully completed? This project will provide water rights to NUID and the Crooked River incrementally as we complete water conservation projects. As such, the project will incrementally increase the minimum stream flow in the Crooked River as individual phases of the project are completed.

Will this project reduce the amount of water that NUID is required to pump from the Crooked River?

An agreement with the Oregon Water Resources Department requires NUID to pump water from the Crooked River consistent with its water rights for primary irrigation. NUID needs to use a ratio of Crooked and Deschutes River water based on the ratio of their Crooked and Deschutes River primary water rights. This project will incrementally reduce the volume of water that NUID is required to pump from the Crooked River as NUID replaces its Crooked River primary water rights with Deschutes River water rights.

Will NUID be able to pump from the Crooked River following the project?

As described above, this project will incrementally reduce the amount of water that NUID is required to pump from the Crooked River. NUID will still be able pump supplemental and any remaining primary water from the Crooked River following each phase of the project. Once all primary Crooked River water is replaced with conserved Deschutes River water, NUID will only be able to pump supplemental water from the Crooked River when the District's primary Deschutes River water rights are insufficient to meet District needs (consistent with how OWRD regulates the use of primary and supplemental water use) and the new minimum bypass flow at the Crooked River pumping facility developed through the project is met.





2024 N.W. Beech Street Madras, Oregon 97741 (541) 475-3625 (541) 475-3652 Fax (541) 475-3905 nuid@northunitid.com

January 6, 2011

Dear North Unit Irrigation District Landowner/Water User:

On November 15, 2011, the North Unit Irrigation District ("District") sent a letter to all patrons regarding the District's plans to reduce reliance on the Crooked River as a source of irrigation water for District lands. Through conservation projects that will diminish the amount of Deschutes River water lost to canal seepage, the District intends to utilize this "new" conserved Deschutes River water to replace existing Crooked River water use within the District. In particular, the initial quantity of new conserved Deschutes River water will be obtained by lining portions of the NUID Main Canal. The letter also informed patrons of a December 8, 2011 landowner meeting held at the Jefferson County Fairgrounds. The meeting provided an opportunity for landowners to ask questions about the water conservation project and the process for replacing Crooked River water use with new conserved Deschutes River water. In the letter and at the meeting, the water right "conversion process" was explained, including a new lottery process by which all Crooked River lands would be randomly selected, by parcel, and prioritized for inclusion into the process. The lottery drawing was conducted on December 9, 2011. The results are posted on the NUID website along with the Lottery Policy. A copy of the lottery results and Lottery Policy may also be obtained by contacting the District office.

This letter is to inform you that the parcel(s) you currently own in the North Unit Irrigation District that contains Crooked River water rights has been selected and is eligible for conversion to the new conserved Deschutes River water, as previously communicated and per the District Lottery Policy.

What action do you need to take?

Per the Lottery Policy: "A Parcel owner for any Parcel eligible for an allocation of newly available Deschutes River water under the lottery may accept or decline the allocation by notifying the District within 7 business days of the district mailing notice to the Parcel owner that newly available water is available to the subject Parcel. If the Parcel owner fails to either accept or decline the allocation within 7 business days, the lack of response will be treated as a decline, and the District will move on to the Parcel in the next lottery position. You have 7 days to notify the district of your intent to participate in the exchange."

The attached sheet provides the parcel number, lottery position, and number of acres selected. Once all of the acres have been confirmed, the District will start the water right transfer process. The landowner will be contacted to complete paperwork required by the Oregon Water Resources Department. Please contact the District office should you have any questions about the process or next steps.

Sincerely,

Mike Britton General Manager

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North Unit Irrigation District 2024 NW Beech Street Madras, OR 97741 Phone: (541)475-3625

Fax: (541)475-3905

Email: nuid@northunitid.com

Allocations of Newly Available Deschutes River Water

John Doe	
Lottery Position:	xxx
Parcel Number:	1212121212
Crooked River Acres	s: 2.8
ACCEPT:	DECLINE:
	opriate box to accept or decline newly available Deschutes River water ked River water rights.
Please sign this form a of receiving this notice	and return to the district office by fax, mail or email within 7 business days e.
You may also call the the signed form for the	district office with your selection within the 7 days, but then please submit e district records.
Signature	
Signature	
Date	





October 11, 2011

Tod Heisler, Executive Director Deschutes River Conservancy 700 NW Hill Street Bend, OR 97701

Re: North Unit Irrigation District Water Supply Initiative

Dear Tod,

Thank you for involving WaterWatch in discussions regarding the North Unit Irrigation District Water Supply Initiative. Because we are still analyzing the many legal and resource issues associated with this project, we cannot provide you with an unqualified letter of support at this time. That said, we can say that we will not oppose the first phase of the project moving forward, if it is in accordance with representations made in the September 15, 2011 proposal. These include the protection of the specific flow amounts set forth in the document (as adjusted for this first increment), certainty that the minimum bypass flow to which NUID supplemental and primary diversions are subject to will be protected via administrative order and mechanisms in place to ensure that this project will not result in injury of lower Deschutes River instream water rights, as required by the Conserved Water Act. On our part, we will continue to evaluate the project with the eye towards reaching full support once we flush out some of the details.

We appreciate that DRC has put together a collaborative approach to restoring streamflows to the Crooked River. The increase of minimum bypass flows at the NUID diversion is an important component of a larger restoration effort for the Crooked River, which would ultimately include releases of stored water for fish from Bowman Dam. We appreciate the movement forward that this proposal embodies.

Sincerely,

Kimberley Priestley Senior Policy Analyst

K. P8 6

APR 1 8 2012
WATER RESOURCES DEPT
SALEM, OPEGO:

Main Office: 213 SW ASH SUITE 208 PORTLAND, OR 97204 TEL: 503-295-4039 FAX: 503-295-2791

Visit us at: www.waterwatch.org

2012 NUID Conserved Water Application

Exhibit F – District Conserved Water Policy

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NORTH UNIT IRRIGATION DISTRICT Jefferson County, Oregon

RESOLUTION No. 2008-16

A RESOLUTION ADOPTING A CONSERVED WATER POLICY

The Board of Directors of the North Unit Irrigation District (Jefferson County, Oregon) (hereinafter referred to as "the District") hereby adopts the following Conserved Water Policy.

"North Unit Irrigation District Conserved Water Policy"

Authority & Purpose for Policy

The Board of Directors (Board) of the District is required to adopt a Conserved Water Policy pursuant to Oregon Administrative Rule (OAR) 690-018-0025. The rule requires that the District adopt a policy that, at a minimum:

- Describes how water saved by conservation measures will be allocated by the District;
- Describes how the District will address the allocation of conserved water percentages under ORS 537.470;
- Provides District patrons the opportunity to fund a share of the conservation project that
 is proportionate to the patron's share of the water rights involved in the allocation of
 conserved water and to receive a corresponding share of the conserved water;
- Provides District patrons an opportunity to petition for a vote by all district patrons on the Policy pursuant to applicable statutes governing elections or recalls in the subject districts; and
- Provides District patrons an opportunity to appeal a proposed District conservation project to the District Board for failure to follow this Policy.

Conserved Water Program

Oregon's "conserved water program" is a voluntary program under which the District may develop a water conservation project and then apply for use of the conserved water. ORS 537.455 through 537.500. This Policy directs how the District will assess proposed water conservation projects and details the required elements of OAR 690-018-0025.

District water conservation efforts benefit all patrons within the District. Water conserved by improving or modifying the District's water delivery system or practices shall be considered water conserved by the District. All conserved water allocations resultant from District conservation efforts shall be made to the District, subject only to the right of District patrons to fund water conservation efforts as described below.

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Conserved Water Application

As a prerequisite to utilizing conserved water under Oregon's conserved water program, the District must submit an application to the Oregon Water Resources Department (WRD) requesting an allocation of conserved water. ORS 537.465. The application must be accompanied by the appropriate fee and there may be costs required to provide notice. There is a state public review process for such applications.

To initiate a water conservation project proposal, District staff shall prepare either (i) the state application form according to WRD requirements, or (ii) a project summary including all project specifications, and an analysis of projected water savings, to the Board for review and approval. Because every conserved water project is unique, each Board approval shall specify how conserved water shall be used within the District and will describe the allocation of conserved water percentages under ORS 537.470. If approved by the Board, the District may submit the application to WRD for its review.

Allocation of Conserved Water

The Board will observe Oregon law when allocating conserved water, including without limitation the following regulations:

OAR 690-018-0020(4) "Conserved Water" means that amount of water that results from conservation measures, measured as the difference between:

- (a) The smaller of the amount stated on the water right or the maximum amount of water that can be diverted using the existing facilities; and
- (b) The amount of water needed after implementation of conservation measures to meet the beneficial use under the water right certificate.

OAR 690-018-0012(1) Pursuant to ORS 537.470(3), after determining the quantity of conserved water, if any, required to mitigate the effects on other water rights, the Commission shall allocate 25 percent of the remaining conserved water 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 public sources. If more than 25 percent of the funds used to finance the conservation measures comes from federal or state public sources and is not subject to repayment, the Commission shall allocate to the state a percentage equal to the percentage of public funds used to finance the conservation measures and allocate to the applicant a percentage equal to the percentage of other funds used to finance the conservation measures. In no event, however, shall the applicant receive less than 25 percent of the remaining conserved water unless the applicant proposes a higher allocation to the state.

OAR 690-018-0012(2) A water right affected by an allocation of conserved water under this program shall retain its original priority date. The priority date of the conserved water rights shall be either the same as or one minute after that of the original right.

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Patron Funding

District patrons may fund a water conservation project in an amount that is proportionate to the patron's share of the water rights involved in the allocation of Conserved Water. Patrons that provide funding to the District for a water conservation project in advance, or within one year of, the District first making expenditures for the conservation project shall be a "Funding Patron" and receive the portion of the conserved water allocated to the District by the Commission (the "District Allocation") to which the Funding Patron is entitled under this Policy.

Except for a Funding Patron, no patron shall be entitled to any of the District Allocation other than the amount necessary to maintain the patron's full rate and duty at its regular turn out(s). A Funding Patron shall be entitled to a portion of the District Allocation equal to the percentage of the funding for the water conservation project paid to the District by the Funding Patron.

Appeal Process

If the Board approves a particular proposed water conservation project, any District patron in good standing may appeal the Board's decision.

Form of Request for Appeal: A District patron wishing to appeal a Board decision to pursue a water conservation project must submit to the Board a request for appeal. All such requests must:

Ш	be in writing;
	be submitted within two weeks following the date of the Board's decision;
	include the name, address, and telephone number of the District patron appealing the Board's decision and a concise statement of the reasons the patron believes the proposed water conservation project should be modified to comply with this Policy.

Upon receiving a properly submitted request, the Board shall consider the appeal at one of the next two regularly scheduled meetings. The District shall provide notice to the requesting patron of the date the appeal will be heard.

Grounds for Appeal: The Board shall limit its consideration to whether the proposed water conservation project complies with this Policy. The District patron appealing the Board's decision shall have an opportunity to address the Board concerning the appeal.

Decisio

on by the Board: On appeal, the Board may make one of the following determinations:
☐ grant the appeal and reject the proposed water conservation project;
\square modify the proposed water conservation project as proposed by the appealing water user;
direct the District manager to work with the applicant to modify the proposed water conservation project so as to comply with this Policy; or
reject the appeal and approve the proposed water conservation project as proposed.
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Petitions to Vote on Policy

District patrons may petition the Board to hold a vote of all District patrons on the approval of this Policy. The petition must be signed by fifteen percent of the total number of votes that may be cast in an election for a director pursuant to ORS 545.189(1) to be valid and to cause the District to hold a vote. Upon receiving a valid petition, the District shall hold a vote of all District patrons. The vote shall be whether to approve or reject this Policy. The vote shall be conducted according to the laws and procedures that govern District elections.

Policy Review and Updates

The Board shall review and update this Policy at the first regularly scheduled Board meeting following every fifth anniversary of the Board either adopting or reviewing and updating this Policy. The Board may, in its sole discretion, review and update this Policy at any other Board meeting. The Board shall follow the process and provisions of this Policy, as required by OAR 690-018-0025(2), whenever reviewing and updating this Policy.

Applicability

This Policy applies to all applications for allocations of conserved water filed with WRD by the District following the date of adoption described below. Pursuant to OAR 690-018-0025(3), this Policy does not apply to applications for allocations of conserved water filed by individuals, including District patrons.

THIS RESOLUTION SHALL TAKE EFFECT IMMEDIATELY.

ADOPTED BY THE BOARD OF DIRECTORS OF NORTH UNIT IRRIGATION DISTRICT AT A REGULAR MEETING HELD ON THE 1Th DAY OF OCCOSER, 2008, BY THE FOLLOWING VOTES.

AYES:

<u>5</u>

RICHARD MACY, Chairman

ATTEST:

MIKE BRITTON, Secretary-Manager

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APR 1 8 2012

PortInd1-2412527.2 0099999-00010

2012 NUID Conserved Water Application

Exhibit G - Land Use Information Form

RECEIVED

APR 1 8 2012



Date:

3/28/2012

TO:

Crook County County Planning Department

300 NE 3rd St, Rm 11 Prineville, OR 97754

FROM:

Brett Golden

Deschutes River Conservancy

700 NW Hill St. Bend, OR 97701

SUBJECT:

Proposed Instream Water Right Transfer In Your Jurisdiction

We are notifying you of our intent to transfer a water right to instream use. We will be submitting an application to the Oregon Water Resources Department changing the place of use of the water right from the Crooked River at the North Unit Irrigation District Pumps to where the Crooked River joins the Deschutes River at Lake Billy Chinook.

The project is known as the "NUID Main Canal Lining Project," is lining approximately 4.9 miles of North Unit Irrigation District's Main Canal. As a result of irrigation canal lining, we propose to transfer an estimated 7,880 acre-feet of conserved water instream. If you have any questions regarding the proposed application, or are interested in receiving additional information, please call me at 541.382.4077.

Sincerely,

Brett Golden Program Manager

Deschutes River Conservancy

RECEIVED

APR 1 8 2012



Date:

3/28/2012

TO:

Deschutes County Planning Department

1300 NW Wall Street, Suite 200

Bend, OR 97701-1947

FROM:

Brett Golden

Deschutes River Conservancy

700 NW Hill St. Bend, OR 97701

SUBJECT:

Proposed Instream Water Right Transfer In Your Jurisdiction

We are notifying you of our intent to transfer a water right to instream use. We will be submitting an application to the Oregon Water Resources Department changing the place of use of the water right from the Crooked River at the North Unit Irrigation District Pumps to where the Crooked River joins the Deschutes River at Lake Billy Chinook.

The project is known as the "NUID Main Canal Lining Project," is lining approximately 4.9 miles of North Unit Irrigation District's Main Canal. As a result of irrigation canal lining, we propose to transfer an estimated 7,880 acre-feet of conserved water instream. If you have any questions regarding the proposed application, or are interested in receiving additional information, please call me at 541.382.4077.

Sincerely,

Brett Golden Program Manager

Deschutes River Conservancy

RECEIVED

APR 1 8 2012



Date:

3/28/2012

TO:

Jefferson County Community Development Department

85 SE "D" St Madras, OR 97741

FROM:

Brett Golden

Deschutes River Conservancy

700 NW Hill St. Bend, OR 97701

SUBJECT:

Proposed Instream Water Right Transfer In Your Jurisdiction

We are notifying you of our intent to transfer a water right to instream use. We will be submitting an application to the Oregon Water Resources Department changing the place of use of the water right from the Crooked River at the North Unit Irrigation District Pumps to where the Crooked River joins the Deschutes River at Lake Billy Chinook.

The project is known as the "NUID Main Canal Lining Project," is lining approximately 4.9 miles of North Unit Irrigation District's Main Canal. As a result of irrigation canal lining, we propose to transfer an estimated 7,880 acre-feet of conserved water instream. If you have any questions regarding the proposed application, or are interested in receiving additional information, please call me at 541.382.4077.

Sincerely,

Brett Golden Program Manager

Deschutes River Conservancy

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APR 1 8 2012

2012 NUID Conserved Water Application

Exhibit I - Support Letters from ODFW, DEQ and OPRD

RECEIVED



Department of Fish and Wildlife

High Desert Region 61374 Parrell Road Bend, Oregon 97702 (541) 388-6363 FAX (541) 388-6281



October 10, 2011

Tod Heisler, Executive Director Deschutes River Conservancy 700 NW Hill Street Bend, OR 97701

Dear Todd,

This letter is in support of the North Unit Irrigation District (North Unit Irrigation District) Water Supply Initiative, as described in the September 15, 2011 draft process document. The purpose of the initiative is to support both agricultural and environmental needs. When the entire project is completed, 22,250 acre-feet of water that was historically used by NUID will be legally protect for in-stream use downstream of NUID's pumps in the Lower Crooked River. Flows provided in-stream during dry and normal precipitation years, respectively will range from 87 to 125 cfs, and 108 to 220 cfs for minimum flow in the lower Crooked River down stream of the NUID pumps. As the project is implemented, it will incrementally eliminate the need for NUID to pump water from the Crooked River to meet their primary irrigation needs, reducing energy demand and irrigation costs while improving in-stream flows.

The project provides an incremental improvement in the health of the Crooked River and is a good first step to improving water quality and fish habitat in the Crooked River. By increasing stream flows and reducing water temperatures downstream from NUID's pumps, this initiative will improve conditions for resident and reintroduced anadromous fish in the lower Crooked River. By itself, this initiative does not meet temperature criteria needed for anadromous fish, but makes significant progress toward this objective. In addition to temperature, the initiative will provide higher spring and fall streamflows in order to assist the downstream migration of steelhead Chinook salmon smolts and fall migration of upstream migrating adults.

While the water temperature in the lower canyon is not likely to reach the water temperature standard in the summer, implementing this project, in combination with other stream flow restoration projects in the Crooked River mainstem in the future, will likely decrease water temperatures in the lower canyon from above 25C to close to 20C and is likely to allow the lower Crooked River canyon to support redband trout and steelhead at a reduced but sustainable population level. After full implementation of this project a major spike in water temperatures received.

that occurs now below the NUID pumps will be eliminated helping reduce the temperature block for fish in the lower Crooked River. In the long term, as other stream improvement actions are undertaken, smoothing out water withdrawals to maintain consistent higher flows over the summer will improve habitat throughout the lower canyon reach, provide lower consistent water temperatures and maintain forage and refuge areas for fish populations that choose to reside in the lower canyon.

This initiative reflects a collaborative approach to meeting multiple water needs in the Crooked River basin. The collaborative approach fostered by this initiative aligns closely with how the Oregon's Integrated Water Resources Strategy is envisioned to be implemented. To date, few opportunities have existed to restore stream flow in the Crooked River Basin. The NUID Water Supply Initiative will be the first project to restore stream flow in the lower Crooked River and is one piece of a larger effort needed to restore flows in the Crooked River.

Thank you for your efforts to improve flows and instream habitat conditions for native fish in the Crooked River.

Sincerely,

Amy M. Stuart

Amy Stuart

cc. ODFW – Dale, Kepler, McIntosh, Hodgson
ODEQ –Nigg, Lamb





Department of Environmental Quality

Eastern Region Bend Office 475 NE Bellevue Drive, Suite 110 Bend, OR 97701-7415 (541) 388-6146 Fax (541) 388-8283

October 4, 2011

Tod Heisler, Executive Director Deschutes River Conservancy 700 NW Hill St Bend, OR 97701

Mike Britton, Manager North Unit Irrigation District 2024 NW Beech St Madras, OR 97741

Re: North Unit Irrigation District Water Supply Initiative

Dear Mike and Tod:

The Oregon Department of Environmental Quality supports the North Unit Irrigation District Water Supply Initiative, as described in the draft proposed process document of September 15, 2011.

River temperatures in the Crooked River are elevated above state water quality criteria during summer months. Based on data we collected in 2005, river temperatures increase rapidly below the NUID diversion from the Crooked River, in large part due to the low river flows below this diversion in July and August. Preliminary temperature modeling results indicate that decreased pumping will contribute to lowered river temperatures below the point of diversion.

We appreciate the work that has gone into drafting the proposed pumping scenarios and look forward to working with you as the details are finalized. We expect that the proposed new minimum river flows below NUID's pumps will benefit water quality in the Crooked River. If the proposed scenarios are altered from those presented in the draft document dated September 15, 2011, we will re-evaluate our support at that time.

Thank you again for your efforts to improve instream conditions in the Crooked River below the NUID pumps. Let me know if you have any additional questions. I can be reached at (541) 633-2035.

Sincerely,

Eric Nigg

DEQ Water Quality Manager

cc: Amy Stuart, Deschutes Watershed Manager, ODFW

Linda Hayes-Gorman, Eastern Region Division Administrator, DEQ

Bonnie Lamb, Basin Coordinator, DEQ

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APR 1 8 2012



Parks and Recreation Department Region 3 Office 1645 NE Forbes Road, Suite 112 Bend, OR 97701 (541) 388-6211 FAX (541) 388-6391 www.oregonstateparks.org

> OREGON STATE PARKS

November 10, 2011

Brett Golden Program Manager for Planning, Monitoring, and Evaluation Deschutes River Conservancy 700 NW Hill St Bend, OR 97701

Re: North Unit irrigation District Water Supply Initiative

Dear Mr. Golden,

Thank you for the opportunity to comment on the North Unit Irrigation Water District (NUID) Water Supply Initiative.

According to the information provided, it is our understanding that NUID will be lining portions of its canals that will result in conserved Deschutes River water. It will apply the conserved water to lands in North Unit Irrigation District currently served by the Crooked River. The result of this project is to provide up to 22,250 acre-feet of conserved Deschutes River water, simultaneously providing up to 22,250 acrefeet of in-stream water rights to the Crooked River. This project will contribute to low mid-summer water temperatures in the Crooked River downstream of NUID's pumps, thus benefiting flows past Smith Rock State Park.

As a landowner providing recreational opportunities on both the Deschutes and Crooked rivers, Oregon Parks and Recreation Department (OPRD) supports water conservation that allows for more water instream. Furthermore, as the administrator for the State Scenic Waterway Program on the Deschutes River, this flow improvement project will add considerably to the scenic value of the river.

Please do not hesitate to contact me should any further questions arise.

Sincerely,

Greg Ciannella

Natural Resource Specialist/Scenic Waterway Coordinator

Les lienelle

OPRD - Region 3 541.388.6236

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APR 1 8 2012

2012 NUID Conserved Water Application

Exhibit K – Evidence that the Project was Implemented Within 5 Years

Per OAR 690-018-0040(12)(a), the conservation project described in this Application was implemented during 2011 and 2012. The attached progress report from the construction contractor demonstrates that implementation of this conservation project occurred during the last five years.

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APR 1 8 2012

WATER RESOURCES DEPT

JACK ROBINSON SONS, INC. P.O. BOX 5006 BEND, OR 97708

Contract #
Project #
PROJECT:

DATE:

30-Jan-12

NUID Canal Lining Project

PERIOD ENDING: PROGRESS BILLING NO: 27-Jan-12 111202-2

		1111000		11117 00105	TAT 01/44/77	205110110 077	2250515 474		
NO.	ITEM	UNITS	QUANTITY	UNIT PRICE	TOT QUANTITY	PREVIOUS QTY	PRESENT QTY	TOT TO DATE	PRESENT AMT
1	Mobilization	LS	1	\$90,000.00	\$90,000.00		25%	67,500.00	22,500.00
2	Clearing & Grubbing	LS	1	\$15,000.00	\$15,000.00	<u>75%</u>		11,250.00	
3	Detail A Shotcrete Application								
4	Ramps	SF	371,890	\$0.03	\$11,156.70	200000	171890	11,156.70	5,156.70
5	Excavate & Place Rock	SF	371,890	\$0.81	\$301,230.90	8000	168160	142,689.60	136,209.60
6	Weather Protection	SF	371,890	\$0.13	\$48,345.70	220000	115380	43,599.40	14,999.40
7	Shotecrete	SF	371,890	\$1.21	\$449,986.90		53631	64,893.51	64,893.51
8	Application	SF	371,890	\$0.88	\$327,263.20		53631	47,195.28	47,195.28
9									
10	Detail B Shotcrete Application								
11	Ramps	SF	188,196	\$0.03	\$5,645.88			0.00	0.00
12	Excavate & Place Rock	SF	188,196	\$0.81	\$152,438.78			0.00	0.00
13	Weather Protection	SF	188,196	\$0.13	\$24,465.48			0.00	0.00
14	Shotecrete	SF	188,196	\$1.34	\$252,182.64		38891	52,113.94	52,113.94
15	Application	SF	188,196	\$0.88	\$165,612.48		38891	34,224.08	34,224.08
16									
17	Seeding Disturbed Areas								
18	Initial Seeding	LS	1	\$3,250.00	\$3,300.00			0.00	0.00
19	1 yr Reseeding	LS	1	\$1,500.00	\$1,500.00			0.00	0.00
20	1 yr Weeding	LS	1	\$2,400.00	\$2,400.00			0.00	• 0.00
21	2 yr Weeding	LS	1	\$2,400.00	\$2,400.00			0.00	0.00
22	3 yr Weeding	LS	1	\$2,400.00	\$2,400.00			0.00	0.00
23									
24									
25									
26									

APR 1 8 2012
WATER RESOURCES DEPT
SALEM, OREGON

TO: NUID

Attn: Mike Britton

2024 NW Beech St

Madras, OR 97741

1

TO: NUID

2024 NW Beech St Madras, OR 97741 Attn: Mike Britton

JACK ROBINSON SONS, INC. P.O. BOX 5006 BEND, OR 97708

Project #

PROJECT: DATE:

NUID Canal Lining Project

PERIOD ENDING:

30-jan-12 27-Jan-12

PROGRESS BILLING NO: 111202-2

NO.	ITEM	UNITS	QUANTITY	UNIT PRICE	TOT QUANTITY	PREVIOUS QTY	PRESENT QTY	TOT TO DATE	PRESENT AMT
27	Aggregate on Ditch Rider Road								
28	Aggregate	LS	1	\$17,878.00	\$17,878.00			0.00	0.00
29	Place & Grade	LF	1	\$17,622	\$17,622.00			0.00	0.00
30									
31	Furnish Install 20cy of Shotcrete								
32	Shotecrete	CY	20	\$110.00	\$2,200.00			0.00	0.00
33	Application	CY	20	\$89.25	\$1,785.00			0.00	0.00
34	Prep & Weather Protection	CY	20	\$10.75	\$215.00			0.00	0.00
35									
36	Repair Work								
37	Shotecrete	CY	104	\$104.00	\$10,816.00		80	8,320.00	8,320.00
38	Application	CY	104	\$89.25	\$9,282.00		80	7,140.00	7,140.00
39	Prep & Weather Protection	CY	104	\$6.75	\$702.00		80	540.00	540.00
40									
41	Testing	LS	1	\$15,000.00	\$15,000.00		20%	3,000.00	3,000.00
	CONTRACT TOTAL	_			\$1,930,828.64			493,622.51	396,292.51

PRESENT BILLING

396,292.51

LESS 5% RETENTION

19,814.63

TOTAL AMOUNT DUE

\$ 376,477.88

TOTAL AMOUNT BILLED TO DATE **TOTAL RETENTION WITHHELD TO DATE**

493,622.51 24,681.13

