

BEFORE THE WATER RESOURCES DEPARTMENT
OF THE STATE OF OREGON

In the Matter of Water Rights Application
G-16674, Jefferson County

**PROTEST OF PROPOSED FINAL
ORDER** By The Confederated Tribes of
the Warm Springs Reservation of
Oregon

INTRODUCTION

The Confederated Tribes of the Warm Springs Reservation of Oregon (“Tribe”) protests the Proposed Final Order (“PFO”) issued by the Department on December 2, 2008. The PFO recommends that water right application G-16674 be approved as conditioned in the draft permit attached to the PFO. The Tribe protests the PFO because the Department has failed to determine adequately whether the proposed use will ensure the preservation of the public welfare, safety and health as described in ORS 537.525. ORS 537.621. Specifically, the Department’s water availability analysis is not complete because it fails to assess whether the proposed use will impact the surface waters of the Metolius River and its tributaries. As a result, the Department cannot determine as a matter of fact and law whether the proposed use ensures the preservation of the public welfare, safety and health.

The Department should schedule a contested case hearing to address the significant issues raised in this protest. The scope of the hearing should include, but not be limited to, the receipt and consideration of additional evidence regarding the likely effects of the proposed action on the surface waters of the Metolius River and its tributaries. Upon the conclusion of the hearing, the Department should then issue a final order in accordance with ORS 527.625.

PROTEST

In order to recommend approval of G-16674 in the PFO, the Department must determine whether the proposed use will ensure the preservation of the public welfare, safety and health as described in ORS 537.525. ORS 537.625(1). The Department is entitled to presume that the proposed use ensures the preservation of the public welfare, safety and health if: (1) the proposed use is allowed in the applicable basin program, (2) water is available, (3) the proposed use will not injure other water rights, and (4) the proposed use complies with the rules of the Water Resources Commission. ORS 537.621(2). That presumption may be overcome by a preponderance of evidence that one or more of the foregoing criteria are not satisfied. *Id.*

The Tribe is authorized to submit this written protest, which must contain certain information. ORS 537.621(7); OAR 690-310-0160. The Tribe sets forth that required information below.

I. Name, Address, and Telephone Number of Tribe.

For purposes of this protest, the name, address and telephone number of the Tribe are that of its attorneys, which are as follows:

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II. The Tribe's Interest in the PFO.

The Tribe's interest in the PFO is based on three primary grounds:

1. Whether the PFO impairs the Tribe's sovereign rights as a federally recognized Indian tribe and its rights contained, the Treaty With the Tribes and Bands of Middle Oregon of June 25, 1855, 12 Stat. 963 ("1855 Treaty"), which include its federally reserved Indian water rights;
2. Whether the PFO impairs Tribe's rights and obligations contained in the Pelton Round Butte Hydroelectric Project Relicensing Settlement Agreement, dated July 13, 2004 ("Pelton Settlement Agreement"); and
3. Whether the PFO is consistent with the Columbia River Basin Fish and Wildlife Program administered by the Northwest Power Planning Council.

Each ground is described in more detail below.

A. The Tribe's Sovereign and 1855 Treaty Rights.

The Tribe occupies the Warm Springs Indian Reservation, which is primarily located in Jefferson and Wasco Counties. The Metolius River--a federal wild and scenic river, a state scenic waterway, and a Tribal wild and scenic river--is located entirely within the Tribe's aboriginal lands, which were held and occupied by the Tribe from time immemorial. The Tribe ceded those lands to the United States in the 1855 Treaty, reserving for itself the Warm Springs Reservation and certain sovereign rights in its ceded lands. The Metolius River forms most of the southerly boundary of the Reservation.

The scope and attributes of the Tribe's fish and reserved Indian water rights are set forth in the November 17, 1997 Confederated Tribes of the Warm Springs Reservation Water Rights Settlement Agreement, as amended by the First Amendment to the Confederated Tribes of the Warm Springs Reservation Water Rights Settlement Agreement ("Water Settlement Agreement"). The Deschutes County Circuit Court incorporated the Water Settlement Agreement into a final judgment and decree that the Court entered in January 2003. The Water Settlement Agreement vests the Tribe with both consumptive and non-consumptive rights to water in the Metolius River above Lake Billy Chinook. The Tribe may withdraw up to 25 cfs from the Metolius River for consumptive uses. The Tribe has an in-stream right to maintain minimum flows in the Metolius River of between 1,080 cfs (October) and 1,240 cfs (May).

The Water Settlement Agreement expressly recognizes and supports the long-standing commitment of the Tribe to the protection of the aquatic ecosystem of the Deschutes River and its tributaries. The parties to the Water Settlement Agreement, including the state, agreed to continue cooperative efforts to manage the water resources subject to the agreement.

B. The Pelton Settlement Agreement.

The Tribe is concerned about the potential impact that the proposed action in the PFO may have on the Tribe's rights and obligations contained in the Pelton Settlement Agreement. Specifically, the Tribe is concerned about the potential impact to its rights and obligations contained in the Fish Passage Plan, which is attached as Exhibit D to the Pelton Settlement Agreement. The objectives of the Fish Passage Plan include the re-introduction of anadromous fish species above the Pelton Project and the maximum utilization of existing and potential fish habitats within and upstream of the Project.

Existing and potential fish habitats include the Metolius River and its tributaries including Lake Creek. Historically, anadromous sockeye salmon ascended the Deschutes and Metolius rivers, and migrated up Lake Creek and through Suttle Lake to spawn in Link Creek. The Tribe is especially concerned about potential impacts that the proposed action in the PFO may have on the surface waters of Lake Creek and the resulting potential adverse consequences to existing and potential fish habitats.

C. The Columbia River Basin Fish and Wildlife Program.

The Northwest Power Act of 1980 directs the Northwest Power Planning Council ("Council") to develop a program to protect, mitigate and enhance fish and wildlife of the Columbia River Basin that have been impacted by hydropower dams.¹ As part of the Fish and Wildlife Program, the Council adopted the Deschutes Subbasin Plan in 2005.² That Plan identifies the key findings, biological objectives, habitat objectives and management strategies for the Middle Deschutes Assessment Unit. *See* Deschutes Subbasin Plan, Management Plan, 66-73. The Middle Deschutes Assessment Unit includes the Metolius River and its lesser tributaries such as Lake Creek. The Tribe participated extensively in the development of the

¹ An overview of the Fish and Wildlife Program can be found at www.nwcouncil.org/LIBRARY/2000/2000-19/Default.htm.

² A copy of the Deschutes Subbasin Plan can be found at www.nwcouncil.org/fw/subbasinplanning/deschutes/plan/.

Deschutes Subbasin Plan and supports and actively implements its fisheries objectives in a wide variety of activities in the exercise of its sovereign natural resources management authority.

The biological objectives contained in the Deschutes Subbasin Plan include an objective to provide suitable habitat conditions for restored self-sustaining populations of sockeye salmon in the Metolius River/Lake Billy Chinook and Link Creek/Suttle Lake habitat complexes when fish passage is re-established at the Pelton Project. Moreover, the Deschutes Subbasin Plan includes a habitat objective to provide suitable habitat conditions for adult and juvenile redband and bull trout and re-established Pacific lamprey to maintain stable or increasing trends in abundance and adaptiveness in the Metolius River. The Tribe is concerned whether the Department has adequately analyzed whether the proposed action in the PFO is consistent with the Fish and Wildlife Program, including without limitation the foregoing objectives.

III. How the Proposed Action in the PFO Will Impair or be Detrimental to the Tribe's Interest.

The Tribe engaged Natural Resources Consulting Engineers, Inc., ("NRCE") to conduct a hydrologic assessment of the PFO. NRCE conducted the assessment and produced a written report, a copy of which is attached as Exhibit 1. NRCE used a groundwater model of the Deschutes River Basin developed by the United States Geological Survey to simulate ground water response functions for the proposed action in the PFO. Those response functions were then used in conjunction with a model of the Metolius River to calculate the alterations to streamflow as a result of the proposed action. NRCE concludes that the modeling effort reveals "*a direct connection between the groundwater pumping and the surface water of the Metolius basin*" not addressed in the PFO. (Emphasis added.) NRCE also concludes that the modeled scenarios reveal "*significant changes in one Metolius tributary, Lake Creek.*" (Emphasis added.)

The action proposed in the PFO impairs or is detrimental to the Tribe's interest because the PFO fails to address the potential impacts of the proposed action on the surface waters of the Metolius River and its tributaries. As a result, and as analyzed more fully below, the Department has not adequately addressed whether (1) the proposed use is allowed in the applicable basin

program, (2) water is available, (3) the proposed use will not injure other water rights, and (4) the proposed use complies with the rules of the Water Resources Commission.

ORS 537.621(2).

A. The Department has not addressed adequately whether the proposed use is allowed by the Deschutes Basin Program.

The Deschutes Basin Program is contained in OAR 690, division 505. The portion of the program applicable to the Metolius River limits proposed new uses of water from the mainstem of the Metolius above mile 13.0 to domestic, livestock, irrigation of lawn or noncommercial garden not to exceed one-half acre in area, power development, recreation, wildlife and fish life. ORS 690-505-0010(1)(a)(B). No out-of-basin diversions of the waters of the mainstem Metolius, above river mile 13.0 are allowed. ORS 690-505-0010(1)(a)(C).

The Public Interest Review for G-16674 shows that the wells are located in the Whychus Creek subbasin of the Deschutes Basin. Given that the NRCE's report shows that there is the potential for substantial interference with the Metolius River and its tributaries, the Tribe is concerned that the proposed use in the PFO may violate the prohibition against out-of-basin diversions from the mainstem of the Metolius.

The Tribe is also concerned whether the type of use contained in the PFO, quasi-municipal, is allowed by the Deschutes Basin Program. The Tribe recognizes that ground water in the Deschutes Basin is generally classified for any beneficial use. *See* 690-505-0400. Nevertheless, new uses of water from the mainstem of the Metolius River above mile 13.0 are limited to domestic, livestock, irrigation of lawn or noncommercial garden not to exceed one-half acre in area, power development, recreation, wildlife and fish life. ORS 690-505-0010(1)(a)(B). Those uses do not include quasi-municipal uses.

Based on the foregoing, the Department has failed to adequately consider whether the PFO complies with the Deschutes Basin Program. If it does not, the Department must either reject G-16674 or modify the PFO as necessary to ensure the preservation of the public welfare, safety and health.

B. The Department has not addressed adequately whether water is available.

Because the PFO fails to address the potential impacts of the proposed action on the surface waters of the Metolius River and its tributaries, the Department has not addressed adequately whether water is available as required by ORS 537.621. The Department must develop additional information quantifying the potential impacts of the proposed actions on the surface waters of the Metolius River and conduct a water availability analysis for that subbasin.

C. The Department has not addressed adequately whether the proposed use will not injure other water rights.

Like Section III B. above, the Department's failure to address the potential impacts of the proposed action on the surface waters of the Metolius River and its tributaries prevents it from addressing adequately whether the proposed use will not injure other water rights. Simply put, how can the Department reach such a conclusion without engaging in a factual investigation of the proposed actions on the Metolius subbasin. Given the hydrologic connection between the proposed action and the surface waters of the Metolius River and its tributaries, the Tribe believes that further analysis is needed to assess whether other water rights may be injured.

D. The Department has not addressed adequately whether the proposed use complies with rule of the Water Resources Commission.

The Department found that the proposed ground water use has the potential for substantial interference with the Deschutes River. (PFO, Findings of Fact ¶ 11.) That finding triggered the public interest review process contained in OAR 690, division 33, which requires the Department to determine whether the proposed use is consistent with the Fish and Wildlife Program. *See* OAR 690-033-0120. The Department must consult with the Tribe in making that determination. *Id.*

Despite those obligations, there is nothing in the PFO showing that the Department followed the public interest review process and determined that the proposed use is consistent with the Fish and Wildlife Program. The Department did not consult with the Tribe despite its obligation to do so. Now that NRCE has determined that there is a "direct connection" between

the proposed action and the surface water of the Metolius basin--including most significantly Lake Creek--the Tribe is seriously concerned about the adverse consequences to fish habitat and consistency with the Fish and Wildlife Program and the Pelton Settlement Agreement.

IV. How the PFO is Deficient and How It May Be Corrected.

The PFO is deficient. The Tribe believes that it may only be corrected by scheduling a contested case hearing, during which additional information should be submitted addressing the potential impacts of the proposed action on the surface waters of the Metolius subbasin, including a water availability analysis and an assessment of whether the proposed use injures existing water rights. The Department should also submit information showing its compliance with OAR 690, division 33. After information is submitted, the Water Resources Director must then make a determination whether the proposed use ensures the preservation of public welfare, safety and health in accordance with ORS 537.525. ORS 537.625. If it does, the Director should issue a final order approving the PFO. If it does not, the Director should modify the PFO as necessary to ensure the preservation of public welfare, safety and health. If no such modification is possible, the Director must deny G-16674.

V. Citation of Legal Authority.

The legal authority supporting this protest is set forth generally throughout this memorandum.

VI. Protest Fee.

The Tribe has submitted together with this protest, the \$350 fee required by ORS 536.050.

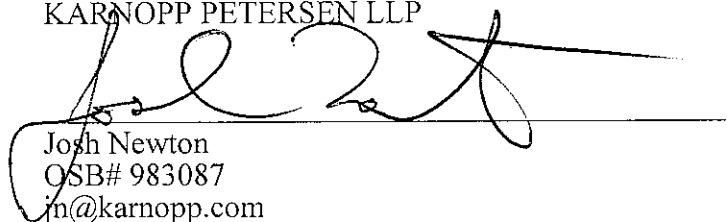
CONCLUSION

For the foregoing reasons, the Tribe respectfully requests that the Department schedule a contested case hearing to address the significant issues raised in this protest.

Respectfully submitted.

DATED this 15th day of January, 2009.

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**HYDROLOGIC ASSESSMENT
OF PROPOSED FINAL ORDER
ON WATER RIGHTS APPLICATION G-16674**

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January 2009

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1 INTRODUCTION

According to OWRD (2006a), Application G-16674 was filed on May 18, 2006, for 4,685.47 gallons per minute (gpm) (10.44 cfs) for quasi-municipal use in Townships 12 and 13 South, in Range 10 East. The location of the proposed points of appropriation is just north of Fly Creek, which is tributary to Lake Billy Chinook. On June 19, 2008, Application G-16674 was reduced from 10.44 cfs to 8.8 cfs (OWRD, 2008a).

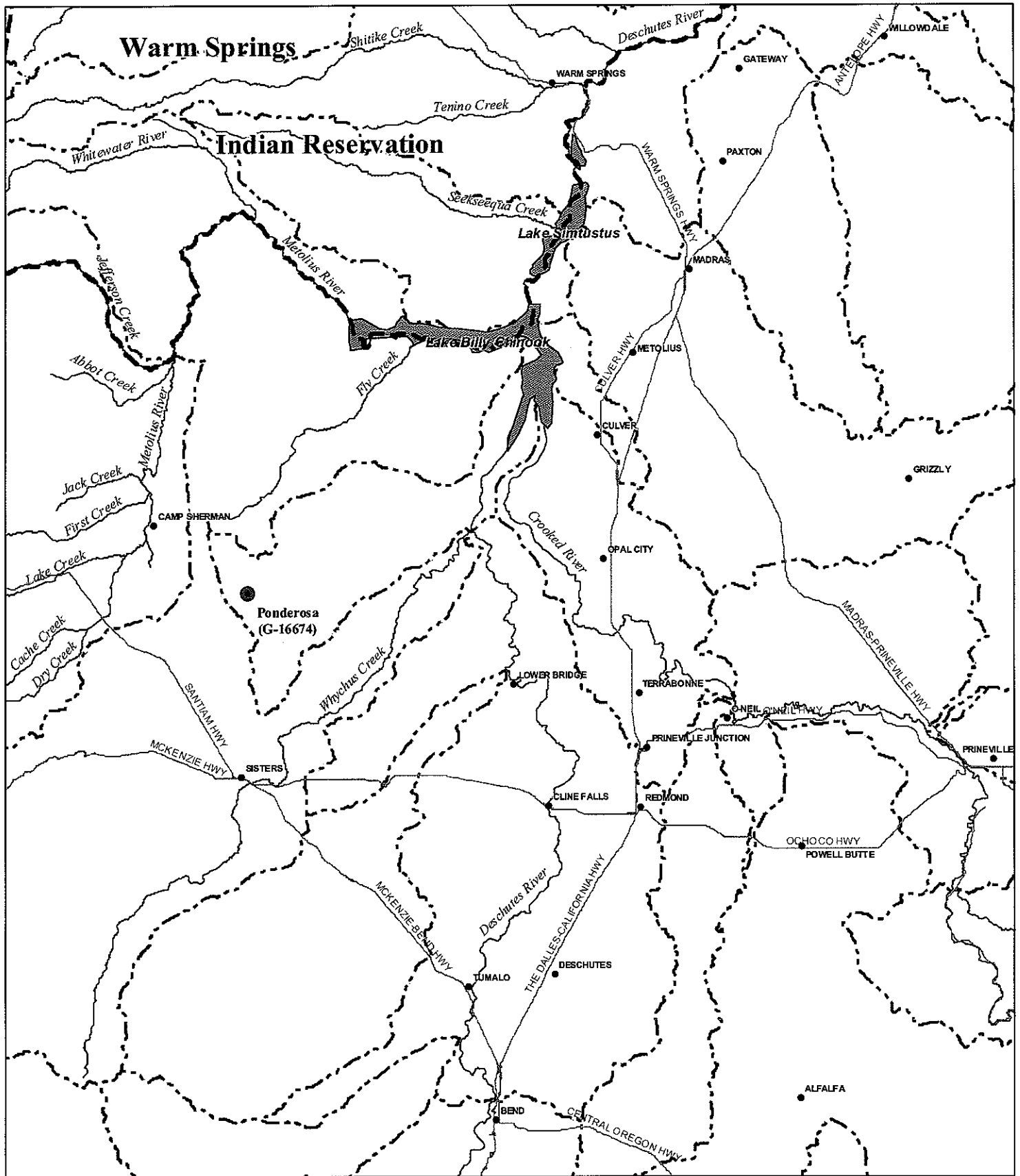
The Oregon Water Resources Department (OWRD) acknowledged the following statement: “the Ground Water Review states that the wells are located in the Metolius subbasin of the Deschutes Basin, that the ground water in this location is not over appropriated, and if the use is properly conditioned, will avoid injury to existing ground water rights.”

Throughout this report, water rights application G-16674 will be referred to by the name of the applicant, Ponderosa Land and Cattle Co., LLC or “Ponderosa.” The proposed point of use is shown in Figure 2-1.

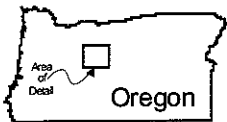
The Tribes are concerned that, should the applications be approved, there will be harm to their water rights in the Metolius River basin and tributaries. The Proposed Final Order (PFO) issued by OWRD (2008b) on December 2, 2008 makes no mention of mitigation of flows in the Metolius River. This report examines potential effects upon the Metolius basin due to the Ponderosa proposed groundwater extraction.

2 METHODS

The groundwater response function approach has been employed to simulate surface water-groundwater interactions in a surface water model. This approach is used to determine the time and space distribution of changes in surface water flows due to changes in groundwater (i.e., due to irrigation return flows, pumping from wells, recharge, etc.). The response function approach assumes that the principle of linear superposition is valid for the conditions being modeled. This means that the total response at a given location, for example a stream reach, may be computed as the sum of independent responses from multiple sources (e.g., canals, irrigated lands, wells, etc.) and that the response at that location in any given month may be computed by adding all these responses from the current month, as well as responses that are presently arriving from previous months (due to the slow movement of water through the ground). The response function approach has been used successfully in other modeling studies, such as the Snake River basin in Idaho, (Cosgrove et al., 2004; Miller et al., 2003).



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LEGEND

- City or Town
- Proposed Source
- Highway
- ~ River or Creek
- ▨ Reservoir
- - - HUC Boundary
- ▭ Reservation Boundary



Map Projection: Lambert Conformal Conic
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 Grid Units: Feet

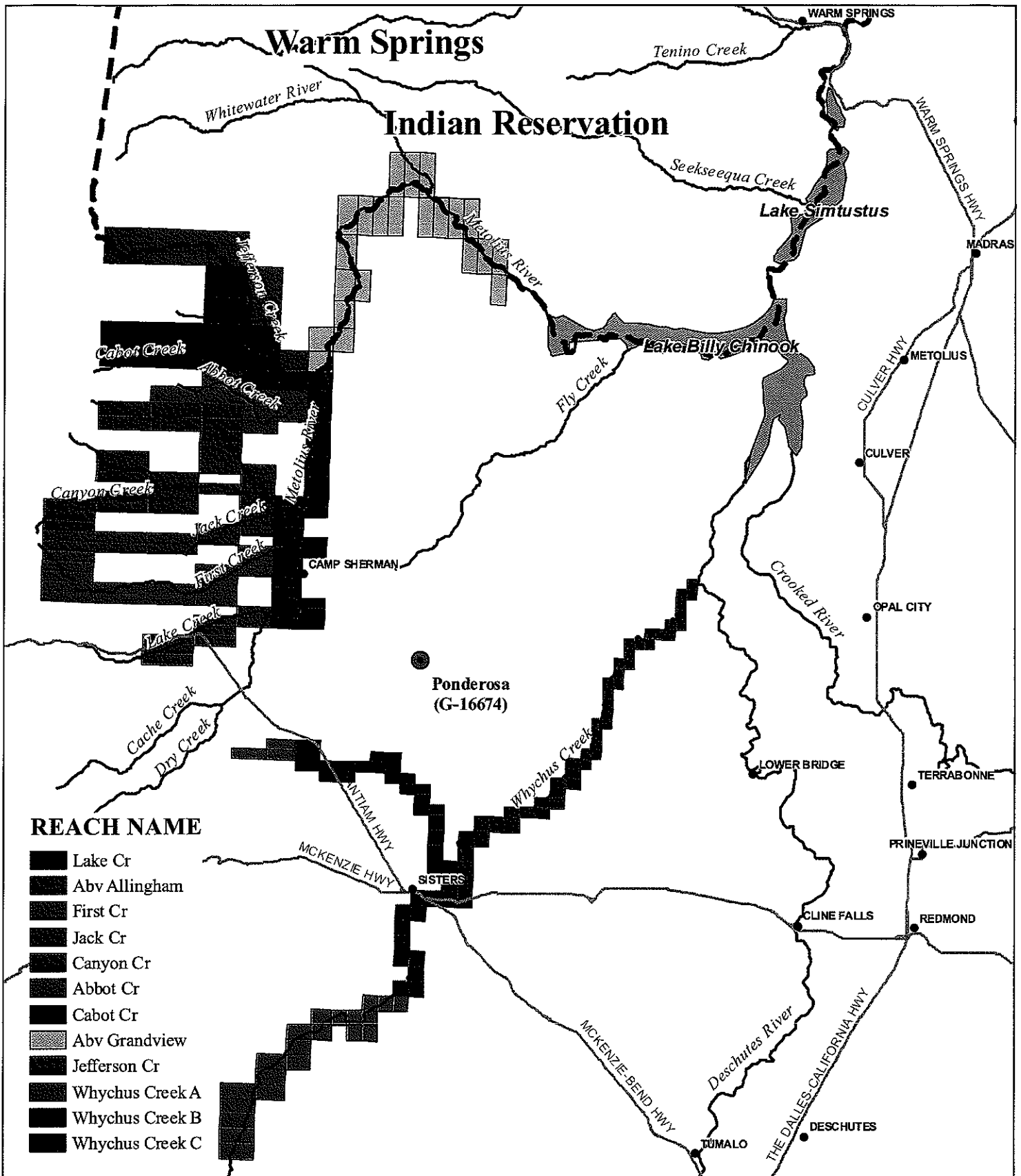
Figure 2-1: Location of Proposed Groundwater Extraction Point for Application G-16674

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Groundwater response functions for the Deschutes River basin have been developed by the USBR using the USGS MODFLOW model of the Deschutes basin (Gannett and Lite, 2004). These response functions represent the unit response to a groundwater stress at a response area throughout time. That is, if one unit of water is removed from a particular stress area (area of groundwater pumping), the temporal response is calculated at each of a number of defined river reaches. Groundwater drawdowns for unit responses are shown in Figure 2-3, showing which model cells are affected by the pumping. Hence, no scale is applied to the drawdowns; colors show relative drawdown but provide no information as to the actual magnitude.



REACH NAME

- Lake Cr
- Abv Allingham
- First Cr
- Jack Cr
- Canyon Cr
- Abbot Cr
- Cabot Cr
- ▨ Abv Grandview
- Jefferson Cr
- Whychus Creek A
- Whychus Creek B
- Whychus Creek C

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- City or Town
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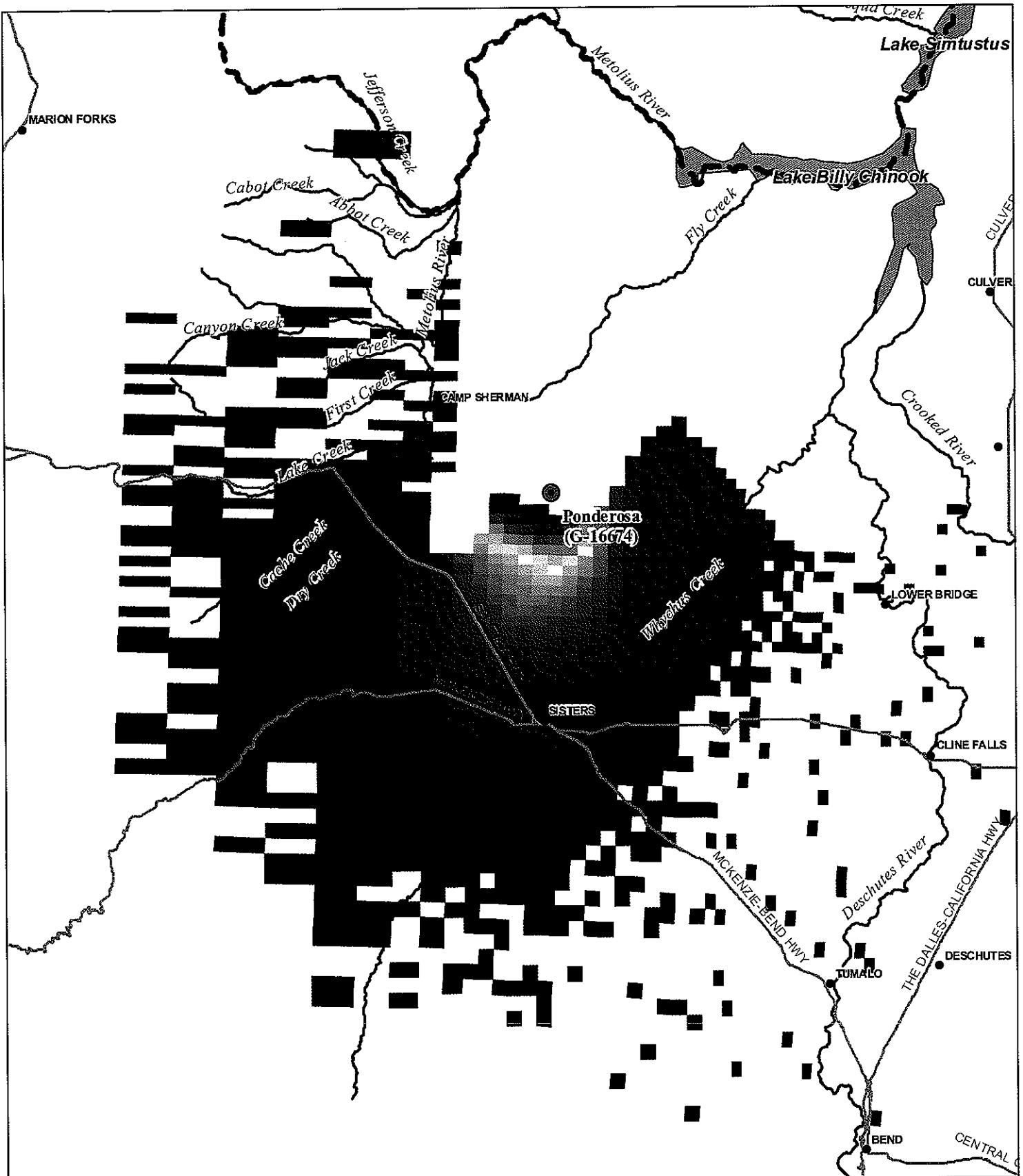
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Figure 2-2: Cells Defined as Stream Reaches in Deschutes River MODFLOW Model

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- City or Town
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Map Projection: Lambert Conformal Conic
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 Datum: NAD 83
 Grid Units: Feet



Figure 2-3: Modeled Drawdown Ponderosa Well

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Response functions were calculated for a total of 600 months following a unit stress. Response functions for the proposed groundwater pumping are shown in Figure 2-4 below.

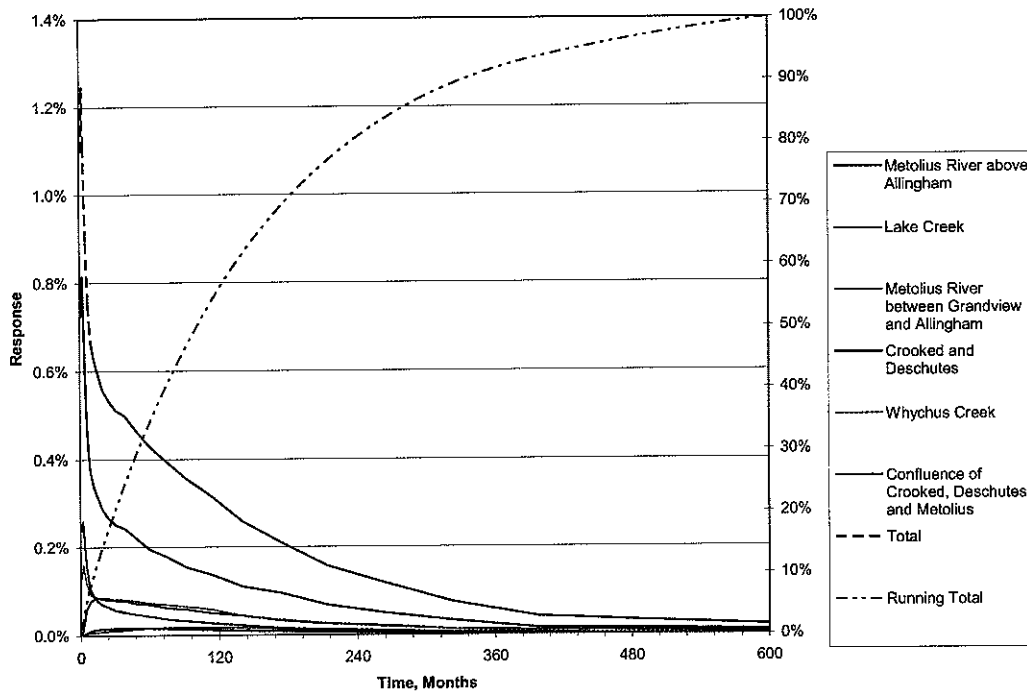


Figure 2-4: Temporal responses to unit groundwater pumping from the Ponderosa Wells.

Table 2-1 shows a summary of groundwater response fractions by reach. As an example, if 100 acre-feet are pumped by the Ponderosa wells, the confluence of the Crooked and Deschutes River will see a reduction of 15.7 acre-feet, 46.5 acre-feet will come from other Crooked and Deschutes River sources, and 15.9 acre-feet will come from Lake Creek. To simplify surface water modeling, only those reaches with greater than 1% of the total returns were included. To maintain a mass balance, the other responses were adjusted accordingly.

Table 2-1: Summary of total response fractions determined from the Deschutes River MODFLOW model.

		Total Unit Response over 600 Months (%)
Return Reach Name	Whychus Creek	9.8%
	Confluence of Crooked, Deschutes, and Metolius	15.7%
	Metolius River above Allingham	3.3%
	Lake Creek	15.9%
	First Creek	1.2%
	Jack Creek	0.9%
	Cabot Creek	0.4%
	Jefferson Creek	1.7%
	Metolius River between Grandview and Allingham	4.3%
	Crooked and Deschutes	46.5%

These response functions were added to a MODSIM model of the Metolius River. The model was used to evaluate the effects on streamflow for the Metolius River and tributaries. Very limited data were available for tributaries of the Metolius River; hence, this data was only used for the reaches. The surface water modeled each of the reaches defined above (with the exception of Canyon Creek and Abbot Creek, as neither had significant pumping response for the wells).

The effects of the proposed pumping were simulated for a 100-year period to ensure the system reached steady-state conditions. The model was run at a monthly timestep, repeating the average of the observed monthly flows for each of the reaches. The streamflows of modeled nodes are shown below in Table 2-2.

Table 2-2: Mean flow for Metolius River gage stations and reaches.

	14088000 Lake Creek Near Sisters	14088500 Metolius R At Allingham Rs Nr Sisters	14089000 First Creek Near Sisters	14090350 Jefferson Creek Near Camp Sherman	14090400 Whitewater River Near Camp Sherman	14091500 Metolius River Near Grandview	Cache And Dry Creeks	Gains Between Allingham And Grandview	1407500 Whychus Creek near Sisters
	cfs	cfs	cfs	cfs	cfs	cfs	cfs	cfs	cfs
January	64	387	15	85	81	1,519	323	951	71
February	64	424	23	87	83	1,570	361	952	70
March	58	389	15	83	78	1,540	331	975	61
April	64	378	19	93	93	1,556	314	973	77
May	78	434	33	117	111	1,608	356	913	143
June	63	419	20	127	122	1,626	356	939	214
July	38	327	5	110	104	1,514	289	967	179
August	32	315	2	93	83	1,418	284	923	114
September	31	315	2	81	63	1,366	284	907	77
October	32	332	3	76	53	1,344	300	881	65
November	40	357	14	82	65	1,392	317	873	76
December	59	369	16	80	73	1,482	310	944	82
Average	52	370	14	93	84	1,495	319	933	102

Two models were created in order to analyze the proposed groundwater pumping. The first model represented baseline conditions, i.e., that of the current situation without any groundwater pumping. This is used as a point to evaluate the changes in the model representing groundwater pumping.

Because no information about timing of groundwater withdrawals was available, the proposed application was represented with a constant rate of 8.8 cfs throughout the year.

3 RESULTS

The steady-state results of the modeling effort showed a constant decrease in streamflows in proportion to the groundwater responses shown in Table 2-1. Because the modeled groundwater demands were inter-annually constant, the resulting effects upon streamflow were also constant throughout the year.

Table 3-1: Summary of Streamflow Changes due to Proposed Groundwater Pumping.

Reach	Change, cfs	Mean flow, cfs	% Change
Metolius at Allingham	1.69	370	0.46%
Cache Creek/Dry Creek	0.29	319	0.09%
Deschutes & Crooked River	5.47		
First Creek	0.11	14	0.75%
Metolius River at Grandview	2.44	1495	0.16%
Jack Creek	0.08		
Jefferson Creeek	0.15	93	0.16%
Lake Creek	1.40	52	2.69%
Whychus Creek	0.86	102	0.84%
Total Change	8.80		

As can be seen from Table 3-1, the most significant effects of the proposed groundwater pumping as a fraction of average streamflow occurs in Lake Creek, where 2.7% of the total mean annual streamflow is consumed due to the proposed wells. In dry years, this fraction is significantly higher. Figure 3-1 shows the exceedence probability of observed and modeled flows on Lake Creek and the fraction of total flow consumed by the proposed wells; Figure 3-2 shows the same for Whychus Creek. At the lower flows that were observed, the proposed pumping would consume upwards of 10% of the total flow of Lake Creek.

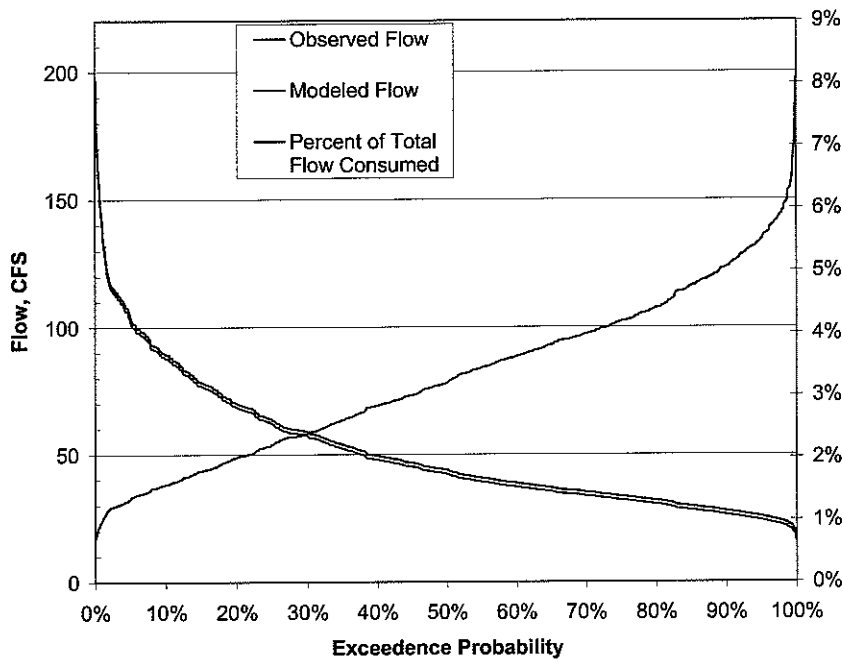


Figure 3-1: Exceedence Probability for Streamflows in Lake Creek Under Observed and Modeled Conditions.

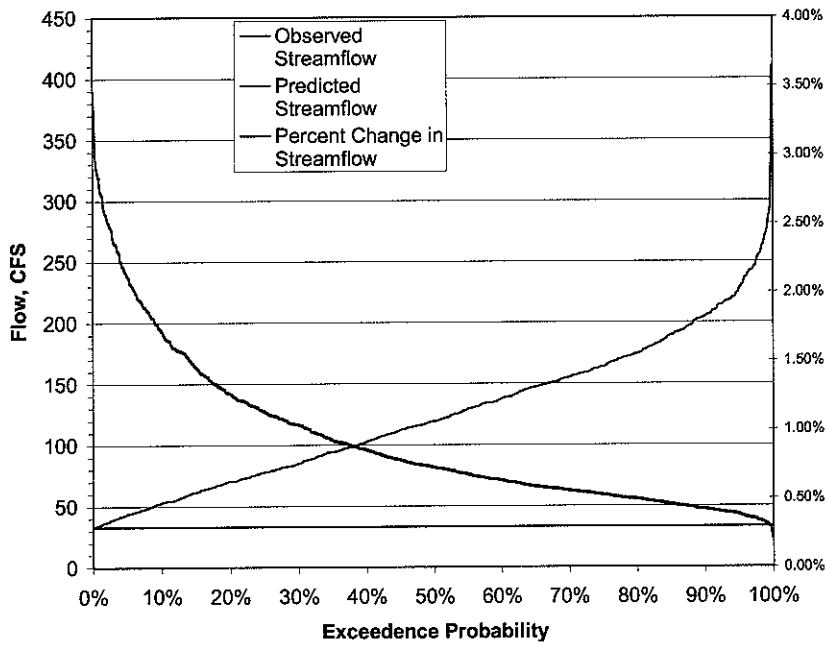


Figure 3-2: Exceedence Probability for Streamflows in Whychus Creek Under Observed and Modeled Conditions.

While the greatest effects observed within the Metolius basin are at Grandview, where the combined effects on upstream tributaries and the mainstem can be seen, it is relatively small in proportion to the overall flow at that point. The alterations to flow comprise only 0.46% of average flow at the gage at Grandview. The minimum instream flows were compared to the observed and modeled streamflows, and there were no additional violations of the instream flows under the modeled scenarios.

4 SUMMARY

A groundwater model of the Deschutes River Basin developed by USGS was used to develop groundwater response functions for proposed groundwater pumping near the Metolius basin. These groundwater response functions determined the fraction and timing, as well as spatial distribution of alterations to surface water flows, for the proposed wells.

These groundwater response functions were used in conjunction with a model of the Metolius River to calculate the steady-state alterations to streamflow due to proposed groundwater withdrawals. This modeling effort reveals a direct connection between the groundwater pumping and surface water in the Metolius basin that was not addressed in either OWRD (2006b) or OWRD (2008b). The modeled scenarios revealed significant changes in one Metolius tributary, Lake Creek.

5 REFERENCES

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CERTIFICATE OF SERVICE AND FILING

I hereby certify that on January 15, 2009, I filed the foregoing Protest and a \$350 check by UPS overnight delivery to the Water Resources Department at the address set forth below.

Water Resources Department
Attention: Patricia McCarty
725 Summer Street N.E., Suite A
Salem, OR 97301-1271


I further certify that I served a copy of the said Protest upon the applicant by mailing said copies to the addresses set forth below, first-class mail, postage pre-paid, in the United States Mail from Bend, Oregon on January 15, 2009.

Bruce Thorn
Ponderosa Land and Cattle Company, LLC
c/o Holiday Retirement Corporation
P.O. Box 14111
Salem, OR 97309-5026

Martha Pagel
Schwabe, Williamson & Wyatt
Equitable Center
530 Center Street, NE Suite 400
Salem, OR 97301

DATED this 15th day of January, 2009.

KARNOPP PETERSEN LLP



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