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Brian J. Posewitz

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	Number of Pages (Incl. 503.432.8249

BEFORE THE WATER RESOURCES DEPARTMENT OF THE STATE OF OREGON

In the Matter of Application: R87513 (John	ADVERSE COMMENTS,
Childs)	REQUEST FOR PARTY STATUS
	AND PUBLIC RECORDS
	REQUEST

Charles and Deborah Noble ("Noble") hereby submit the following adverse comments, request for party status and public records request regarding the above referenced application.

INTERESTS OF NOBLE

Noble owns and resides on property near Beavercreek, Oregon. A tributary to Beaver Creek runs through Noble's property. Noble desires healthy native fish populations in Beaver Creek and its tributaries because the presence of native fish in the tributary on Noble's property would enhance Noble's use and enjoyment of the property. Noble has invested money to improve fish habitat on Noble's property and to improve fish habitat and passage in downstream portions of the tributary that runs through Noble's property. Noble also desires the presence of healthy native fish populations in Beaver Creek and the Willamette River because healthy fish populations in the vicinity of Noble's property enhance Noble's use and enjoyment of their property and because Noble enjoys knowing that such fish populations exist.

COMMENTS

Pursuant to ORS 537.409(5), Noble requests that the Department deny the above application on grounds the proposed reservoir poses a significant detrimental impact to

PAGE 1 – COMMENTS, REQUEST FOR PARTY STATUS AND PUBLIC RECORDS REQUEST

10/30/2009 15:26 5034328427

PAGE 03/34

existing fishery resources. Fish distribution maps of the Oregon Department of Fish and Wildlife ("ODFW") show that fish, including native cutthroat trout, are present in Beaver Creek and its tributaries. The proposed reservoir, alone and cumulatively in combination with other reservoirs in the Beaver Creek watershed, poses a potential and/or significant detrimental impact to existing fishery resources because:

- 1. Impounding additional water from the tributary to Beaver Creek will diminish flows in the tributary and in Beaver Creek. Diminishing flows will have significant detrimental impacts on existing fishery resources by reducing the amount of water available for fish during low-flow periods and by reducing "peak" and "flushing" flows necessary for formation of fish habitat during high-flow periods. Moreover, reducing flows in warmer months will contribute to adverse warming of the water used by fish (because water exposed to higher air temperatures warms faster if there is less of it).
- 2. Even if the proposed reservoir is "off-channel" as claimed in the application (which should be verified by OWRD staff), the reservoir will contribute to warming of water in the tributary, Beaver Creek and the Willamette River, to levels detrimental to salmonid species, if stored water is released into the Beaver Creek drainage during warmer months. That is because impounded water is likely to be warmer than nearby streams due to increased exposure to solar radiation through increased surface area and (most likely) diminished shading. The Willamette River already exceeds water quality standards for temperature during summer months. The tributary and Beaver Creek likely exceed water quality standards for temperature during summer months as well (or at least there is a lack of data showing otherwise).

PAGE 2 – COMMENTS, REQUEST FOR PARTY STATUS AND PUBLIC RECORDS REQUEST

10/30/2009 15:26 5034328427

PAGE 04/34

Noble also opposes the application on grounds that, contrary to ORS 537.409(2), the application does not contain "sufficient information to demonstrate" that the proposed reservoir will not have significant detrimental impacts to existing fishery resources. "Sufficient information" should include, at a minimum: (a) information regarding flows in the tributary and in Beaver Creek for each time of the year; (b) information regarding flows needed by existing fishery resources at each time of year; (c) information regarding water temperatures of the tributary and of Beaver Creek at each time of year; and (d) information regarding expected water temperature impacts of the proposed additional reservoir.

Permit conditions cannot be applied to prevent the significant detrimental impacts to existing fishery resources. Seasonal limitations on storage and water releases cannot realistically be effective because there is no realistic probability of monitoring and enforcement, particularly in light of the Department's limited enforcement resources.

If the permit is nevertheless issued with conditions (which Noble opposes), the conditions should include, at a minimum: (a) seasonal limitations so that no water is diverted during periods when low flows are a limiting factor for fish populations or when thermal warming of water in the tributary and Beaver Creek are possible (May through October); (b) prohibition on release of stored water during warmer months (May through October); and (c) measuring and reporting requirements to ensure that diversions into the reservoir (both existing and new) do not exceed the amounts allowed under the permit and existing certificate and to ensure that no water is released from the reservoir in warmer months.

These comments are further supported by the attached documentary information.

PAGE 3 – COMMENTS, REQUEST FOR PARTY STATUS AND PUBLIC RECORDS REQUEST

10/30/2009 15:26 5034328427

PAGE 05/34

REQUEST FOR PARTY STATUS

To the extent Noble is not already a "party" that would be "affected" by allowance of the proposed permit, Noble hereby requests to participate before the Department as a "party" in this matter. Noble will be affected by the proceeding because the outcome will impact the fish populations in which Noble has an interest, as described above.

PUBLIC RECORDS REQUEST

Noble requests copies of all documents related to the above application, including but not limited to copies of all comments submitted by any other person, organization or agency, except to the extent such documents may be obtained via the Department's Internet website. Copies should be delivered to the undersigned counsel. The undersigned counsel will pay all reasonable copying charges upon receiving an estimate of such charges from the Department.

DATED: October 30, 2009.

By **Brian Posewitz**

BRIAN J. POSEWITZ, OSB No. 91400 8508 SE Eleventh Avenue Portland, OR 97202

Telephone: (503) 432-8249 Facsimile: (503) 432-8427

Email: brianposewitz@comcast.net

Attorney for Noble

APPENDIX 1.A: 303(D) LISTINGS

The following table summarizes the 303(d) listed waterbodies that have TMDLs developed for this Willamette Basin TMDL iteration.

Basin	Waterbody Name	RM	Parameter	1 Seasone	Criteria/Text
CLACKAMAS	Bargfeld Creek	0 to 2.3	E. Coli	Summer	126 organisms
CLACKAMAS	Clackamas River	0 to 15	E. Coli	6/1 - 9/30	126 organisms
CLACKAMAS	Clackamas River	0 to 22.9	Temperature	Summer	Rearing: 17.8 C
CLACKAMAS	Cow Creek	0 to 2.6	Temperature	Summer	Rearing: 17.8 C
CLACKAMAS	Cow Creek	0 to 2.6	E. Coli	10/1 - 5/31	126 organisms
CLACKAMAS	Deep Creek	1.9 to 14.1	E. Coli	Summer	126 organisms
CLACKAMAS	Eagle Creek	0 to 20	Temperature	Summer	Rearing: 17.8 C
CLACKAMAS	Fish Creek	0 to 6.8	Temperature	Summer	Rearing: 17.8 C
CLACKAMAS	North Fork Deep Creek	0 to 9	E. Coll	Summer	126 organisms
CLACKAMAS	Rock Creek	0 to 6.1	E. Coli	10/1 - 5/31	126 organisms
CLACKAMAS	Sleben Drainage Ditch	0 to 1	E. Coli	10/1 - 5/31	126 organisms
CLACKAMAS	Sieben Drainage Ditch	1 to 1.8	E. Coli	10/1 - 5/31	126 organisms
CLACKAMAS	Tickle Creek	0 to 2.3	E. Coli	Summer	126 organisms
COAST FORK	Brice Creek	0 to 11.2	Temperature	Summer	Rearing: 17.8 C
COAST FORK	Coast Fork Willamette River	0 to 31.3	Temperature	Summer	Rearing: 17.8 C
COAST FORK	Coast Fork Willamette River	0 to 31.3	Fecal Coliform	W/S/F	Geometric Mean
COAST FORK	Coast Fork Willamette River	0 to 31.3	Fecal Coliform	Summer	Geometric Mean
COAST FORK	Coast Fork Willamette River	0 to 31.3	Mercury	Year Around	public health advisories
COAST FORK	Cottage Grove Reservoir/Coast Fork Willamette R	28,5 to 31.3	Mercury	Year Around	public health advisories
COAST FORK	Dorena Lake/Row River	7.4 to 11.3	Mercury	Year Around	public health advisories
COAST FORK	King Creek	0 to 1.6	Temperature	Summer	Rearing: 17.8 C
COAST FORK	Laying Creek	0 to 7.7	Temperature	Summer	Rearing: 17.8 C
COAST FORK	Martin Creek	0 to 3.4	Temperature	Summer	Rearing, 17.8 C
COAST FORK	Mosby Creek	0 to 21.2	Temperature	Summer	Rearing; 17.8 C
COAST FORK	Row River	0 to 7.4	Temperature	Summer	Rearing: 17.8 C
COAST FORK	Row River	11.3 to 20.8	Temperature	Summer	Rearing: 17.8 C
COAST FORK	Sharps Creek	0 to 12.5	Temperature	Summer	Rearing: 17.8 C
LOWER	Johnson Creek	0 to 23.7	Fecal Coliform	W/S/F	Geometric Mean
LOWER	Johnson Creek	0 to 23.7	Fecal Coliform	Summer	Geometric Mean
LOWER	Johnson Creek	0 to 23.7	Dieldrin	Year Around	Table 20
LOWER	Johnson Creek	0 to 23.7	DDT	Year Around	Table 20
LOWER	Johnson Creek	0 to 23.7	Temperature	Year Around	Administrative list removal, TMDL completed
LOWER	Kellogg Creek	0 to 5	E. Coli	10/1 - 5/31	126 organisms
LOWER	Mount Scott Creek	0 to 6.1	E. Coli	10/1 - 5/31	126 organisms
LOWER	Phillips Creek	0 to 1.2	E.Coli	10/1 - 5/31	126 organisms
LOWER	Smith Lake	1.7 to 3	рН	Summer	pH: 6.5 to 8.5
LOWER	Spring Brook Creek	0 to 2.3	Fecal Coliform	W/S/F	Geometric Mean

Willamette Basin TMDL: Overview

September 2006

Basin	Waterbody Name	BANK TO THE RESERVE T	. Parameter	Season	Criterja/Text
UPPER	South Fork Berry Creek	0 to 2.1	Temperature	Summer	Rearing: 17.8 C
WILLAMETTE	Willamette River	0 to 24.8	Fecal Coliform	Winter/Spring/ Fall	Geometric Mean of 200, No more than 10%>400
WILLAMETTE	Willamette River	0 to 24.8	Mercury	Year Around	public health advisories
WILLAMETTE	Willamette River	0 to 24.8	Temperature	Summer	Rearing: 17.8 C
WILLAMETTE	Willamette River	24.8 to 54.8	Fecal Coliform	Winter/Spring/ Fall	Geometric Mean of 200, No more than 10%>400
WILLAMETTE	Willamette River	24.8 to 54.8	Mercury	Year Around	public health advisories
WILLAMETTE	Willamette River	24.8 to 54.8	Temperature	Summer	Rearing: 17.8 C
WILLAMETTE	Willamette River	54.8 to 108	Fecal Coliform	Winter/Spring/ Fall	Geometric Mean of 200, No more than 10%>400
WILLAMETTE	Willamette River	54.8 to 108	Mercury	Year Around	public health advisories
WILLAMETTE	Willamette River	54.8 to 108	Temperature	Summer	Rearing: 17.8 C
WILLAMETTE	Willamette River	108 to 119.7	Fecal Coliform	Winter/Spring/ Fall	Geometric Mean of 200, No more than 10%>400
WILLAMETTE	Willamette River	108 to 119.7	Mercury	Year Around	public health advisorles
WILLAMETTE	Willamette River	108 to 119.7	Temperature	Summer	Rearing: 17.8 C
WILLAMETTE	Willamette River	119.7 to 148.8	Fecal Coliform	Winter/Spring/ Fall	Geometric Mean of 200, No more than 10%>400
WILLAMETTE	Willamette River	119.7 to 148.8	Mercury	Year Around	public health advisorles
WILLAMETTE	Willamette River	119,7 to 148.8	Temperature	Summer	Rearing: 17.8 C
WILLAMETTE	Willamette River	148.8 to 174.5	Mercury	Year Around	public health advisories
WILLAMETTE	Willamette River	148.8 to 174.5	Temperature	Summer	Rearing: 17.8 C
WILLAMETTE	Willamette River	174.5 to 186.4	Mercury	Year Around	public health advisorles
WILLAMETTE	Willamette River	174.5 to 186.4	Temperature	Summer	Rearing: 17.8 C

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IN THE CIRCUIT COURT OF THE STATE OF OREGON
 1
 2
                        FOR THE COUNTY OF CLACKAMAS
 3
      CHARLES and DEBORAH NOBLE,
                 Petitioners/Plaintiffs, )
 5
               v.
                                          ) No. CV-06-070096
                                                CV-06-100666
 6
                                                CV-05-120804
 7
      OREGON WATER RESOURCES
      DEPARTMENT and VICTOR and VERA
      VITYUK,
                 Respondents/Defendants.
 9
10
      CHARLES NOBLE, DEBORAH NOBLE, and )
      DAVID HILLISON,
11
                Petitioners/Plaintiffs,
12
               V.
13
      OREGON WATER RESOURCES
      DEPARTMENT; RAY C. MARTIN,
14
      III, and NORTHWEST FARM CREDIT
15
      SERVICES, FLCA,
                  Respondents/Defendants. )
16
      CHARLES NOBLE, DEBORAH NOBLE,
17
      and DAVID HILLISON,
                Petitioners/Plaintiffs,
18
19
                 V.
      OREGON WATER RESOURCES
20
      DEPARTMENT and ROBERT LYTLE,
21
                Respondents/Defendants. )
22
                        DEPOSITION OF DANETTE EHLERS
23
                        Taken on behalf of Plaintiff
24
25
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1	BE IT REMEMBERED THAT, pursuant to the
2	Oregon Rules of Civil Procedure, the deposition
3	of DANETTE EHLERS was taken before Rosemary
4	Tanzer, a Certified Shorthand Reporter for
5	Oregon, on Thursday, November 9, 2006,
6	commencing at the hour of 9:06 a.m., in the law
7	offices of JORDAN SCHRADER, 2 Centerpointe
8	Drive, 6th Floor, Lake Oswego, Oregon, 97035.
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23	•
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1	APPEARANCES:
2	BRIAN J. POSEWITZ
	BY MR. BRIAN J. POSEWITZ
3	8508 S.E. Eleventh Avenue
	Portland, OR 97202
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	(503) 598-5583
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	Attorney for Defendant
11	Troy Martin
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14	1162 Court Street N.E.
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15	(503) 378-6313
	karen.moynahan@doj.state.or.us
16	Attorney for Defendant
	Oregon Water Resources Department
17	
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20	
21	
22	
23	
24	
25	

1.		various research projects and monitoring
2		juvenile populations. And then I moved back to
3		The Dallas at the NRS1 position working on the
4		Hood River Project again and spent an
5		additional two years there as a project
6	•	biologist or crew leader type position, and
7		from there I came to Clackamas where I am an
8		assistant district fish biologist.
9	<u>Q</u>	Your current position is assistant district
10		fish biologist?
11	A	Correct.
12	Q	And that's for the Clackamas office of the
13		Oregon Department of Fish and Wildlife?
14	A	Yes, it's the North Willamette Watershed
15		District.
16	Q	That's the formal name of the office?
17	А	I don't know if the office has a formal name.
18	Q	You said it's the North Willamette Watershed
19		District?
20	A	Yes, that's my position, the assistant district
21		fish biologist for the North Willamette
22		Watershed District.
23	Q	Does the North Willamette Watershed District
24		have an office other than in Clackamas?
25	A	No.

- 1 A Yes.
- 2 Q Are you aware that when a river gets too warm,
- 3 that's bad for fish?
- 4 A Yes.
- 5 Q Would you agree that when that happens it's
- 6 very often the result of cumulative impacts on
- 7 lots of tributaries, even very small
- 8 tributaries?
- 9 MS. MOYNAHAN: Object to the form of the
- 10 question.
- 11 A Can you rephrase the question?
- MR. POSEWITZ: Would you just read it
- 13 back?
- 14 (Record read.)
- 15 A What was the "that"?
- 16 Q BY MR. POSEWITZ: Let me just start the whole
- line of questioning over. Would you agree that
- one of the problems that a watershed sometimes
- 19 has with respect to being able to support fish
- 20 is that the water gets too warm for them?
- 21 A Yes.
- 22 Q And that's particularly a problem with respect
- 23 _____ to what we talked about earlier, which is
- 24 salmonid species. Right?
- 25 A Yes.

1	Q	They like cool water. Right?
2	A	Correct.
3	Q	Would you agree that when a watershed has a
4		problem because it's too warm for salmonids
5		that that's very frequently the result of
, б [.]		cumulative impacts from tributaries, including
7		very small tributaries?
8	A	Yes.
9	Q	I want to talk a little bit about just what I
10		refer to as small impoundments. And by that I
11	~	mean impoundments that hold an acre foot to two
12		acre feet of water. Okay?
13	A	Okay.
14	Q	And by impoundment I mean some kind of dam or
15		hole that backs up the water that otherwise
16		flows through a creek. Okay?
١7	A	Okay.
L 8	Q	And you would consider yourself today to be a
19		fish biologist. Right?
5 Ó	<u></u>	Correct.
21	Q	And as a fish biologist, would you agree that
22		small impoundments, as I have described them,
23		have the potential to harm fish?
24	А	<u>Yes.</u>
25	0	How is it that they can do that?

1	A	They can block fish passage. They can cause
2		disturbances in the hydrology of the watershed.
3		They can increase temperature.
4	<u>Q</u>	Anything else that you can think of?
5	A	It impacts the gravel distribution throughout a
6		system, often traps sediments.
7	Q	Anything else?
8	A	Displaces habitat.
9	Q	Anything else?
10	A	Can decrease dissolved oxygen in a system. I
11		guess, if stocked with fish, that the pond
12		doesn't have proper screening they could escape
13		and impact native fish.
14	Q	Anything else?
15	A	I forgot what I said already.
16	<u>Q</u>	Let me tell you what's on my list. They can
17		impact fish passage. They can impact
18		temperature. They can displace habitat. They
19		can cause disturbances in hydrology of the
20		watershed. They can affect gravel
21		distribution. They can trap sentiments. They
22		can affect dissolved oxygen. And stocked fish
23,		in a pond can escape the pond if there is no
24		screening and impact native fish. Anything
25		besides that?

- 1 A It could impact pH I suppose too.
- 2 Q Anything else?
- 3 A _ That covers the main points.
- 4 Q And I want to go through each of these a little
- 5 bit. Passage I think is easy. If there is a
- 6 dam, the fish can't get up and down the river
- 7 anymore.
- 8 A Correct.
- 9 Q By the way, why is fish passage important?
- 10 A Depends on the species that are present in the
- 11 stream, but a lot of fish are migratory and
- 12 like to move up and down a system. Salmonids
- in particular will move to the upper watersheds
- 14 to spawn.
- 15 Q Can you have migratory fish even in a water
- system where the fish can no longer get to the
- 17 ocean?
- 18 A Yes.
- 19 Q And so even within a closed system, you have
- 20 fish that like to migrate around the system.
- 21 Right?
- 22 A Correct.
- 23 Q And salmonids in particular like to do that.
- 24 Right?
- 25 A Cutthroat in particular.

```
IN THE CIRCUIT COURT OF THE STATE OF OREGON
               FOR THE COUNTY OF CLACKAMAS
     CHARLES and DEBORAH NOBLE, )
 4
                    Plaintiffs,
 5
                                   ) No. CV-06-070096
         V.
 6
    OREGON WATER RESOURCES DEPT., )
    and VICTOR and VERA VITYUK,
 8
                    Defendants.
     CHARLES and DEBORAH NOBLE,
     and DAVID HILLISON,
10
                   Plaintiffs,
11
                                  ) No. CV-05-120427
12
     V.
    OREGON WATER RESOURCES DEPT., )
13
      and RAYMOND "TROY" MARTIN,
14
                    Defendants.
15
    CHARLES and DEBORAH NOBLE,
      and DAVID HILLISON,
17
                   Plaintiffs,
18
                                   ) No. CV-05-120804
         V.
19
      OREGON WATER RESOURCES DEPT., )
20
     and ROBERT LYTLE,
21
                    Defendants.
22
23
              DEPOSITION OF KAREN WILLIAMS
24
              Taken on behalf of Plaintiffs
25
```

. 1	BE IT REMEMBERED THAT, pursuant to the
2	Oregon Rules of Civil Procedure, the deposition
3	of KAREN WILLIAMS was taken before MARILYNN T.
4	HOOVER, a Registered Professional Reporter and
5	a Certified Shorthand Reporter in Oregon,
6	Washington, and California; on Monday, October
7	23, 2006, commencing at the hour of 9:55 A.M.;
8	at JORDAN SCHRADER, P.C., 2 Centerpointe Drive,
9	Lake Oswego, Oregon.
10	
11	APPEARANCES:
12	LAW OFFICES OF BRIAN J. POSEWITZ
	BY MR. BRIAN J. POSEWITZ
13	8508 S.E. 11th Avenue
	Portland, Oregon 97202
14	Attorney for Plaintiffs
IS	
	OREGON DEPARTMENT OF JUSTICE
1,6	TRIAL DIVISION
	BY MS. KAREN MOYNAHAN
17	158 12th Street N.E.
	Salem, Oregon 97301
18	Attorney for Oregon Water Resources Dept.
19	
	JORDAN SCHRADER, P.C.
20	BY MR. STEVEN L. SHROPSHIRE
	2 Centerpointe Drive, 6th Floor
21	Lake Oswego, Oregon 97035
	Attorney for Raymond "Troy" Martin
22	
23	
24	
25	

1	Q.	1992?

- 2 A. 1992.
- 3 Q. Okay. And then what?
- 4 A. And then I went to graduate school at the
- 5 University of Nevada, Reno; and approximately
- 6 two and a half years later, received an M.S. in
- 7 hydrogeology, in April of 1995 -- actually,
- 8 officially, in May of 1995, but I finished in
- 9 April of 1995.
- 10 Q. Okay.
- 11 A. Then I went back to work in environmental
- 12 consulting at the same company, although they
- 13 were no longer called RZA; they were called
- 14 AGRA Earth and Environmental at that time,
- 15 A-G-R-A. And I worked there until November of
- 16 1998, when I came to the department -- the
- 17 _____state Oregon -- the Oregon State Department of
- 18 Environmental Quality in the laboratory
- 19 division. And my work there was as the
- 20 volunteer monitoring coordinator in the water
- 21 quality monitoring section; and in that
- 22 capacity, I worked with watershed councils,
- 23 soil and water conservation districts, and
- 24 other entities that wanted and needed training
- in water quality monitoring.

1		And then approximately in the summer of
2		let's see, '92 in 2002, I believe, the
3		summer of 2002, I changed jobs, still at the
4		Department of Environmental Quality, and began
5		working in the northwest region of DEQ as a
6		natural resource specialist. And my work there
7		primarily involved implementation of what we
8		called total maximum daily loads, which are
9		essentially water quality plans for basins.
LO		And just in October of this year, this
l l		month, I was promoted to a Natural Resource
12		Specialist 4, and my work now involves
L 3	_	developing those water quality plans, the
L 4	244	TMDLs, for the Molalla-Pudding Basin.
1.5	Q.	You said you received an M.S. in hydrogeology;
Ĺ6		correct?
L 7	Α.	Correct.
18	Q.	What is that?
L9	A.	What is hydrogeology? It is the study of water
20		and soil or rock interactions, very generally
21		speaking; the movement of soil through
22		subsurface media sorry movement of water
23		through subsurface media.
24	Q.	Okay. Does hydrogeology deal with water
25		quality issues?

- deep and it covers an acre; right?
- 2 A. That's right.
- 3 Q. Okay. Can reservoirs of that size, let's say,
- 4 3 acre-feet or <u>less</u>, can they affect the
- 5 temperature of the water in a water body?
- 6 A. The temperature in the reservoir or the
- temperature in the stream that they are --
- 8 Q. Well, let's say -- let's say the temperature in
- 9 the stream -- Well, let's talk about the
- 10 _____temperature of the water of the reservoir. Can
- 11 they affect the temperature of the water in the
- 12 reservoir?
- 13 A. Yes.
- 14 Q. And does that affect the temperature of the
- water downstream from the reservoir?
- 16 A. It can.
- 17 Q. And how does it do that?
- 18 A. Because a larger amount of surface area is
- exposed to solar radiation, so it absorbs more
- 20 heat.
- 21 Q. Does it have to do also with how long the water
- 22 stays in one place?
- 23 A. Yes.
- Q. How does that impact temperature?
- 25 A. Because the water is, again, able to absorb

- 1 more solar radiation because it's moving more
- 2 slowly or not moving at all.
- 3 Q. Does it also increase the likelihood that the
- 4 water -- I'm sorry. Does it -- Do reservoirs
- of that sort also decrease the likelihood that
- 6 the water will be shaded from streamside
- 7 vegetation?
- 8 A. I suppose it could.
- 9 Q. Just because it's a bigger surface area; right?
- 10 A. Sure. Sure.
- 11 Q. So you need taller vegetation to shade the
- 12 stuff in the middle; right?
- 13 A. Correct. Right.
- 14 Q. Okay. And if you reduce shading, that
- increases the temperature as well; right?
- 16 A. If you reduce the shading, it can increase the
- 17 temperature, sure.
- 18 Q. Okay. Wouldn't it always increase the
- 19 temperature?
- 20 A. Well, they're -- not -- generally speaking,
- 21 yes, it would.
- 22 Q. Okay.
- 23 A. There may be other factors that would affect
- 24 it. If you had a large amount of ground water
- 25 influx at a cooler temperature, you may

- adverse impact on temperature, let's just say,
- in the waterway on which it's located?
- 3 MS. MOYNAHAN: Objection. Calls for
- 4 speculation.
- 5 A. So I know the inflow and I know the size of the
- 6 reservoir and I know the outflow, but I have no
- 7 actual temperature measurements?
- 8 Q. BY MR. POSEWITZ: Correct.
- 9 A. And the question is, could I --
- 10 Q. Could you conclude from that whether it's
- 11 _____having an -- whether it will have an adverse
- 12 effect on temperature, first of all, just in
- 13 that tributary?
- 14 A. Not without temperature data.
- 15 Q. Okay. You think you would need to actually do
- some measuring and monitor -- monitoring, to
- know whether a reservoir is having an adverse
- impact on temperature?
- 19 A. To know whether it would, yes.
- 20 Q. Okay.
- 21 A. You could do some kind of a water quality model
- 22 and predict and speculate with some uncertainty
- if it would have an effect on temperature.
- Q. Haven't those been done? Haven't those kinds
- of water quality models been done?

- · l A. Yes.
 - Q. And you're saying that there's no
 - 3 generalizations you can make, based on those,
 - 4 about the impact that a small reservoir will
 - 5 have on the temperature of a stream?
 - 6 A. I can't make a generalization, because those
 - 7 water quality models are not completed without
 - 8 any data, without any temperature measurement
 - 9 data.
- 10 Q. I don't know -- What do you mean by that?
- 11 A. Perhaps you should repeat the question, because
- 12 I'm not sure I'm answering it.
- 13 Q. Haven't there been -- Hasn't there been
- 14 modeling done in order to determine the
- probable effects of temperature of a reservoir
- 16 based on just information such as the inflow,
- the outflow, and the size of the reservoir,
- 18 without actual monitoring data?
- 19 A. I don't think so.
- 20 Q. So is it your testimony today that in order for
- 21 you to know whether a small reservoir is going
- 22 to have an impact on stream temperature, you
- 23 have to actually test?
- 24 A. In order to know, yes, I would require data.
- 25 Q. Can you predict with any degree of certainty,

- 2 A. No.
- 3 Q. With no degree of certainty?
- 4 A. With a very small degree of certainty.
- 5 Q. By the same token, you cannot predict that it
- 6 ____will not have an impact on temperature, can
- 7 you?
- 8 A. Correct.
- 9 Q. And that's true with respect both to the
- tributary and the Willamette; correct?
- 11 A. Correct.
- 12 Q. Okay. So let's look at chapter -- Exhibit 47
- 13 again. And would you just flip to the second
- 14 page of it, which is -- the page number at the
- 15 bottom is actually 5-4. And this is the
- introduction to chapter 5 of the September 2004
- 17 TMDL document; right?
- 18 A. Yes.
- 19 Q. Okay. And the top section has got a heading,
- "reason for action." Do you see that?
- 21 A. Yes, I do.
- 22 Q. And if you go down about two-thirds of the way,
- 23 there's a sentence that starts "the lower
- 24 Willamette subbasin." Do you see that?
- 25 A. Yes.

- 1 Q. That says: The lower Willamette subbasin has
- 2 stream segments listed on the Oregon 303-D list
- for bacteria, p.H., aquatic weeds or algae,
- 4 temperature, and toxics." Right?
- 5 A. Yes.
- 6 Q. Okay. That refers to stream segments, and do
- 7 you know what stream segments those are?
- 8 A. I could not say which stream segments
- 9 specifically are listed for each of those
- 10 parameters.
- 11 Q. But what about temperature? Can you say which
- 12 stream segments are listed for that?
- 13 A. Not without referring to a table or some more
- 14 documentation.
- 15 Q. Okay. And you'd want the 303-D list?
- 16 A. That would be the most helpful.
- 17 Q. Okay. And is that what was produced to me in a
- spreadsheet?
- 19 A. Yes, it is.
- 20 Q. Do you know whether Beaver Creek itself is
- 21 listed under 303-D?
- 22 A. I do know that.
- 23 Q. What do you know about that?
- 24 A. I know that it's not.
- 25 Q. Okay. Is that because the water quality's fine

- or because nobody's gotten around to checking?

 A. It could be either.
- 3 Q. But you don't know one way or the other?
- 4 A. I don't know.
- 5 Q. Is there anything that would tell you that?
- 6 A. Data collection would tell me that.
- 7 Q. And did you -- You got the document request in
- 8 this case; right?
- 9 A. Yes, I did.
- 10 Q. And did you look for any data on that in
- 11 responding to the data request?
- 12 A. Yes, I did.
- 13 Q. What did you find?
- 14 A. I found that we don't have any data on Beaver
- 15 Creek.
- 16 Q. Okay. Would that suggest to you that nobody
- has ever checked to see if it is or is not in
- 18 compliance with water quality standards?
- 19 A. It would suggest that.
- 20 MR. POSEWITZ: Can you just read the last
- 21 guestion and answer back. I just want to...
- 22 (Record read.)
- 23 Q. BY MR. POSEWITZ: Okay. Would you look at the
- next page of this, which is 5-5. And that says
- 25 "TMDL summaries" and then it says

- 2 Q. Would that include tributaries to Beaver Creek?
- 3 A. Yes.
- 4 (Exhibit No. 48 marked.)
- 5 Q. BY MR. POSEWITZ: So you've been handed what's
- 6 _____been marked as Exhibit 8. And --
- 7 THE REPORTER: Exhibit 48.
- 8 Q. BY MR. POSEWITZ: I'm sorry, Exhibit 48. And I
- 9 will represent to you that this is -- the first
- 10 page is the title page for the executive
- summary to the Willamette Basin TMDL as adopted
- by DEQ, or as approved -- I'm sorry -- as
- 13 adopted by EPA.
- I mean, first of all, can you recognize at
- least the form of that first page as such?
- 16 A. I do not recognize it; but your statements are
- 17 correct, that's what it is.
- 18 Q. Okay. And here, again, I've just included in
- 19 this exhibit selected pages from the executive
- 20 summary and the overview. And you were -- you
- 21 were involved in the work at creating these
- 22 TMDLs for the Willamette; right?
- 23 A. I was involved actually in the Clackamas Basin.
- 24 Q. Was that part of the Willamette?
- 25 A. It was -- It was part of. That was one of the

1		tributary subbasins to the main stem.
2	Q.	Okay. So you were a contributing source to the
3		TMDL work?
4	A.	Yes.
5	Q.	All right. And would you look at the second
6		page of this exhibit, which is actually page, I
7		guess, Roman numeral six, of the executive
8		summary. And do you see where it says "key
9		issues" there?
10	Α.	I do.
11	Q.	And at the top, it says: "The Willamette Basin
12		is home to a number of threatened and
13		endangered species of fish. Warm water
14		temperatures are a factor in their decline."
15		Do you agree with that?
16	Α.	Yes.
17	Q.	And then the next bullet point says:
18		"Temperatures frequently exceed biological
19		criteria for rearing and migration, and exceed
20		spawning criteria during portions of the
21		spawning period." Do you agree with that?
22	Α.	Yes.
23	Q.	And the next bullet point says: "The
24		Willamette River and many of its tributaries
25		have been greatly altered hydrologically by

1		dams, urbanization, and stream channelization
2		activities." Do you agree with that?
3	_A.	Yes.
4	<u>Q.</u>	And do you agree that that is a reason that the
5		Willamette River has temperature problems?
б	<u> </u>	The third bullet is a reason?
7	<u>Q.</u>	Yes.
8	<u>A.</u>	Yes.
9	Q.	And the reference to dams, do you agree that
10		that includes dams for small reservoirs as well
11		as dams for large reservoirs?
12	_A.	I would agree, although I don't think that
13		that's what this bullet is referencing.
14	Q	Okay. And would you look, then, there at the
15		findings.
16	Α.	All right.
17	Q.	And the second bullet point says: "Impacts of
18		major dams, reservoirs, and loss of riparian
19		vegetation are the major sources of river
20		warming." Do you agree with that?
21	Α	Yes.
22	Q.	And then the next bullet point says: "Other
23		potential causes of river warming include loss
24		of wetlands, channel modifications, and flow
25		modifications." Do you agree with that?

- l A. Yes.
- 2 Q. Do you agree that small reservoirs on
- 3 tributaries to the Willamette create channel
- 4 modifications?
- 5 A. Yes.
- 6 Q. And do you agree that they create flow
- 7 modifications?
- 8 A. Yes.
- 9 Q. And that, therefore, they're part of the
- 10 problem described in findings?
- 11 A. Yes. Can I clarify: You did say "part of the
- 12 problem"?
- 13 Q. Yes.
- 14 A. Yes.
- 15 Q. And would you look at the next page, which is
- 16 Roman numeral seven.
- 17 A. (Complies.)
- 18 Q. And then there's a heading there that says:
- 19 "What will happen." Do you see that?
- 20 A. I do.
- 21 Q. And then if you go down, it says "subbasin."
- Do you see that?
- 23 A. I do.
- Q. Okay. And subbasin means a basin that's
- 25 contributing flow to the Willamette?

STATE OF OREGON

BEFORE THE OREGON WATER RESOURCES DEPARTMENT

In the Matter of Water Right Application)
R 84677 in the Name of David Patterson)
Applicant and Protestant
FINAL ORDER IN CONTESTED CASE

HISTORY OF THE CASE

On February 28, 2001, applicant David Patterson applied to the Oregon Water Resources Department ("OWRD" or "department") for a permit to store water in two reservoirs. On June 28, 2002, the department issued a Final Order denying the requested permit. The applicant requested a contested case hearing of the matter on August 8, 2002. On January 7, 2003, the contested case hearing was held by telephone. Applicant David Patterson appeared on his own behalf. The OWRD appeared through agency representative Renee Moulun. Witnesses Steve Pribyl and Dick Nichols appeared and testified on behalf of the department. The record was closed after the receipt of testimony and argument. A Proposed Order recommending denial of the Applicant's request to approve application R 84677 without any restrictions was issued on April 11, 2003. Exceptions to this Proposed Order were filed by Applicant on May 7, 2003. On August 7, 2003, the Director heard Applicant's exceptions and gave Applicant until September 30, 2003 to decide whether he wanted to build his pond off channel as ODFW recommends. The Director provided Applicant with thirty days to determine if he could agree to build the pond off channel, then OWRD could upon review of the proposed plans to build an off channel pond, grant application R 84677. The OWRD has received no written indication from Applicant that he intends to move his pond off channel nor has the OWRD received any plans and specifications of an off channel pond.

The record of this proceeding, consisting of a tape recording of the hearing, all evidence received, and all hearing papers filed, has been considered. The findings of fact and conclusions of law are based upon the entire record for application R 84677.

ISSUE PRESENTED

The issue in this matter was identified in the Notice of Contested Case Hearing as follows:

Pursuant to ORS 537.409, whether the proposed use under water right application R 84677 has the potential to pose a significant detrimental impact to existing fishery resources.

EVIDENTIARY RULINGS

WRD Exhibits 1 and 2 were admitted without objection.

FINDINGS OF FACT

- 1) On February 28, 2001, applicant David Patterson applied to the department for a permit to store water in a reservoir under the alternate review process in ORS 537.409. The reservoir is to be located at Township IN, Range 10, Section 7, NW NW; tax lot 100. The source water is listed as Birdie Creek, a tributary to the East Fork Hood River. The applicant proposes to store between ½ acre foot to less than 1.0 acre foot of water. The proposed reservoir would be located in-stream. The proposed use was for fire protection / multi-purpose. (Exs. 1-1 to 1-2; Ex. 1-18; Ex. 1-23). The application was assigned application number R 84677 by the department. (Ex. 1-5).
- 2) On April 13, 2001, a DEQ Division 33 Application Review Sheet was prepared for this application by Dick Nichols, Supervisor, Bend Water Quality Section, Oregon Department of Environmental Quality. Nichols' Section is responsible for establishment of the total maximum daily load (TMDL) under Section 303(d) of the Federal Clean Water Act (hereinafter Section 303(d)) for the Hood Basin. TMDL's are written plans and analyses established to ensure that water bodies will attain and maintain water quality standards. Water right application R 84677 is within Nichols' jurisdiction within the Hood River System, on Birdic Creek, also known as "Birdie Creek," a tributary of the East Fork of the Hood River. Nichols concluded that the proposed use did not comply with state and federal water quality standards because of its impact on water temperature in the East Fork Hood River, which is "limited for temp[erature]." (Testimony of Dick Nichols; Ex. 1-34; Ex. 2-2). Nichols also opined that if the permit were conditioned to permit storage "only during winter/spring high flow period" the DEQ could recommend approval of the permit. (Testimony of Dick Nichols; Ex. 1-34).
- 3) Impoundments placed on a creek reduce flows downstream, thereby increasing temperatures downstream. Temperature is a measurement of energy within the system. If the volume of water is reduced, the temperature down stream will increase. When water is stored, there is necessarily less water going down stream. When water is stored in an impoundment, it generally increases the surface area of the water, thereby spreading solar energy over a larger area, and again increasing the temperature of the water. Finally, widening of a stream often reduces the amount of available shade through the destruction of bank-side vegetation, which also increases water temperature. (Testimony of Dick Nichols; Ex. 2).
- 4) On April 27, 2001, an ODFW Division 33 Application Review Sheet was prepared for this application by ODFW representative Steve Pribyl, Assistant District Fish Biologist, Mid-Columbia Fishery District. (Ex. 1-32; Testimony of Steve Pribyl). Pribyl's duties include assisting his supervisor, the Mid-Columbia Fishery District Fish Biologist. The district generally covers the High Desert Region and includes tributaries of the Columbia River from the eastern city limits of Cascade Locks to the John Day dam, including the entire Hood Basin. The district includes all areas pertinent to this application. Pribyl is personally familiar with Birdic Creek, also known locally as "Birdic Creek." Birdic Creek is small stream, with a flow of only 1-2cfs in the summer months. There are no identifiable fish resources present in Birdic Creek upstream of a falls located approximately 100 yards from the confluence of Birdic Creek with the East Fork Hood River. However, the East Fork Hood River and the mainstem Hood River are very diverse in fish resources. Fish resources present in the system include: wild and hatchery

summer and winter steelhead (both summer and winter wild steelhead are listed as threatened under the Federal Endangered Species Act); wild populations of both spring and fall Chinook salmon; wild Coho salmon; bull trout (also listed as threatened under the endangered species act); and both resident cutthroat trout and a small population of migratory sea-run cutthroat trout. (Testimony of Steve Priby!).

- 5) Pribyl reviewed application R 84677 in compliance with OAR Chapter 690, Division 33, for its impact on sensitive, threatened or endangered species. Pribyl concluded that the proposed reservoir was likely to raise the water temperature of Birdic Creek, thereby transferring warmer water downstream into E. Fork of Hood River and further into the mainstream Hood River. He believes that this will have a detrimental impact on water quality in the system. He relies on the DEQ TMDL for temperature in reaching this conclusion. The TMDL shows that Hood River currently exceeds desired standards for water temperature. There are two temperature standards that effect fish in the system. First, salmonid fish rearing standards as a beneficial use are exceeded if surface temperatures exceed sixty four degrees Fahrenheit. Second, the spawning and egg incubation and fry emergence from egg standard is exceeded if water temperatures exceed fifty five degrees Fahrenheit. Both standards are currently exceeded in the Hood River system during summer months. (Testimony of Steve Pribyl; Ex. 2).
- 6) Impoundment of water on Birdic Creek will cause it to warm both through consumptive use and/or exposure to solar radiation. The Western Hood Subbasin TMDL emphasizes the importance of riparian vegetation to decrease warming. If the reservoir size exceeds the stream banks, there will be a destruction of riparian vegetation. Further, Birdic Creek is high gradient stream (i.e., it moves quickly down steep, confined channel). If the dam is built across the stream channel in such a system, it will collect gravel and other bed materials that would normally move downstream; eventually, the bed will fill with gravel behind the dam. There are benefits (e.g., creation of gravel spawning beds) to fishery resources when this "bed load" is allowed to travel unhindered downstream. If a dam is built, the benefits of this bed load will never accrue to downstream reaches because they will be trapped behind the dam. (Testimony of Steve Pribyl).
- 7) If the proposed pond was not placed over the existing stream bed, completely off-stream, the concerns raised by ODFW would be eliminated. In order to do this, the pond would have to receive water from a diversion from Birdic Creek and have a means of controlling spill from the dam. Water diversion from Birdic Creek and spillage from the reservoir would be restricted to from July 15 to September 1 each year in order to eliminate temperature pollution during those time periods identified in the TMDL as periods during which water quality standards were not met in the Western Hood Subbasin. (Testimony of Steve Pribyl; Ex. 1-32, Ex. 2). It would not be sufficient to restrain water to the current creek bed, thus avoiding loss of riparian vegetation, because of concerns regarding cumulative effect of non-point source pollution in the Subbasin. Even if restricted to the stream bed, the amount of warmed water contributed by Birdic Creek to the Hood River system would be significant. The cumulative impact of non-point source pollution in the subbasin means that any in-stream pond would create a significant detrimental impact. The only way to eliminate the risk of water warming during the periods of concern would be to require flash boards be removed from the dam to allow the free flow of the stream through the reservoir site. (Testimony of Steve Pribyl; Ex. 1-42).

statutory time frame prevents the department from denying his request for a permit. Applicant raised this contention both at hearing and in a letter to this Hearing Officer on December 11, 2002 which stated:

According to ORS 537.420(4): "Within 180 days after the department receives an application for a permit under subsection (1) of this section, the department shall issue a final order granting or denying the permit or granting the permit with conditions." My position is that because statute ORS 537.409(4) was not answered within the clearly stated 180 days, and actually took some 546 days, the Final Order denial is a [moot] point.

(Applicant's Protest, dated December 11, 2002.)

While applicant is correct in stating that the statute mandates action on the permit review within 180 days, the statute simply does not afford an applicant the remedy requested. Accordingly, I deny claimants request to issue a permit without restriction.

ORDER

Application R-84677 is denied.

DATED this /3th day of October, 2003.

Paul R. Cleary, Director

Oregon Water Resources Department

NOTICE:

You are entitled to judicial review of this order. Judicial review may be obtained by filing a petition for review within 60 days from the date of service of this Final Order On Contested Case. The date of service is the date on which the order is delivered or mailed. Judicial review, pursuant to the provisions of ORS 536.075, is in the Oregon Court of Appeals.