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*Of Attorneys for* Amicus Curiae *The Confederated Tribes of The Warm Springs Reservation of Oregon*

UNITED STATES DISTRICT COURT

DISTRICT OF OREGON

DESCHUTES RIVER ALLIANCE, an Oregon nonprofit corporation,

Plaintiff,

v.

PORTLAND GENERAL ELECTRIC COMPANY, an Oregon corporation,

Defendant.

Case No. 3:16-cv-01644-SI

DECLARATION of Bradley S. Houslet In Support of The Confederated Tribes of the Warm Springs Reservation of Oregon Reply in Support of Motion to Dismiss

I, Bradley S. Houslet, declare and say:

1. I am the Manager of the Fisheries Department for the Branch of Natural Resources of the Confederated Tribes of the Warm Springs Reservation of Oregon (the "Tribe") and have held this position for 13 years. I have worked in the fisheries field for nearly 30 years. My formal education includes two degrees from the University of Wisconsin – Stevens Point: first, I have Bachelor of Science in Water Resources with an emphasis in Fisheries Management

and Limnology and, second, a Bachelor of Science in Biology with an emphasis in Aquatic Biology. I also have a Master's of Science degree in Aquatic Biology from Tennessee Technological University. I make this declaration based on my education, training, and experience. I provide this declaration in support of the Tribe's reply memorandum in support of its motion to dismiss this action.

2. I have worked on fisheries issues in the Deschutes Basin since 1996. My experience includes writing water quality restoration plans for the United States Forest Service for the Deschutes National Forest covering Crescent Creek, the Little Deschutes and Upper Deschutes watersheds, and the Metolius Watershed. After the Jefferson Fire in 1996, I also analyzed data to determine the physical and biological impacts of wildfire on the invertebrate community in Jefferson Creek as well as wildfire effects on the habitat and density of juvenile bull trout in the Metolius Watershed.

3. As the Tribe's Fisheries Department Manager, I oversee fisheries habitat, production, harvest, and research programs. Fall Chinook salmon is a species of significant cultural importance to the Tribe and the maintenance of a self-sustaining, harvestable population of Fall Chinook salmon in the lower Deschutes River is one of the Tribe's primary policy goals. The Tribe conducts research on and around the Reservation to further their understanding of anadromous fish and better provide for their protection. One such research program includes a project studying Fall Chinook salmon life cycles in the lower Deschutes River. The scope of the study encompasses the emergence, growth, migration patterns, and survival of the fish at every phase of life. The study includes an evaluation of the impacts of the Pelton Round Butte Hydroelectric Project ("Pelton Project" or "Project") on the Fall Chinook salmon.

4. Before the construction of the Pelton Project, the lower Deschutes River experienced a natural, annual warming and cooling cycle; water temperatures warmed during early spring and peaked in mid-July then slowly cooled during the fall and winter months to its lowest temperatures. To illustrate the phenomenon, I am attaching as Exhibit 1 a graph from the United States Geological Survey showing daily temperatures of the Deschutes River near Madras, Oregon, from March 1953 to February 1954.

5. The Pelton Project was completed in 1964. During the entirety of the original license period, the Project discharged water almost exclusively from the bottom of Lake Billy Chinook. That operating regime altered the natural warming and cooling cycle of the lower Deschutes River. In lay terms, the bottom water discharged from Lake Billy Chinook into the lower Deschutes River made the River below the Project unusually cold in the winter and spring months; the Project's cold-water discharge also shifted the peak warm water temperatures from mid-July to late September. Those changes negatively impacted Fall Chinook salmon survival rates.

6. Because Fall Chinook salmon are cold blooded, their metabolism is completely controlled by the environment's temperature. When water temperatures are too far below optimal levels, development of Fall Chinook salmon eggs is slower, the emergence from the eggs is delayed, and the juveniles suffer reduced growth rates. The Tribe has long been concerned that delayed emergence and reduced growth rates of the juvenile Fall Chinook salmon has contributed to their lower survival rates in the lower Deschutes River because they are smaller and more vulnerable to predation.

7. The Pelton Project's impact on the Fall Chinook salmon fishery is one of the reasons that the Tribe supported the design, construction, and operation of the Selective Water

Withdrawal ("SWW") facility as required by the Project license issued in 2001. Among other objectives, the SWW is intended to help meet temperature goals in the lower Deschutes River. The SWW works by blending surface water and bottom water from Lake Billy Chinook before it is discharged through the Round Butte Dam; the result is a water temperature that is closer to the natural, annual temperature cycle. It is the Tribe's hope that returning to the natural temperature cycle will restore the egg development and emergence timelines and the natural growth rates of the Fall Chinook salmon in the lower Deschutes River. In fact, the Tribe has started to see improvements in Fall Chinook salmon development and a return to more natural patterns.

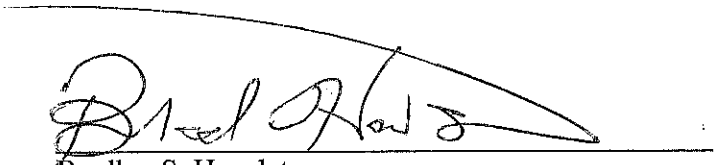
8. I have significant concerns about the negative impacts on the Fall Chinook salmon fishery in the lower Deschutes River if the Deschutes River Alliance ("DRA") obtains judicial relief that would require more bottom water withdrawal from Lake Billy Chinook. I am not aware of any analysis by DRA that can demonstrate how a return to a bottom water withdrawal, in whole or in part, will not harm the Fall Chinook salmon in the lower Deschutes River. Based on my experience, I believe that returning to a cold-water operating regime would harm the Fall Chinook salmon fishery in the lower Deschutes River.

9. In addition to my concerns about the harm to the Fall Chinook salmon, I am also concerned about the decrease in the withdrawal of surface water that will result from an increase in the withdrawal of bottom water from Lake Billy Chinook. Surface water withdrawal through the SWW is essential for creating the "attraction flows" necessary to collect the downstream migrating anadromous fish, including ESA-listed steelhead and bull trout. The collection of those juvenile fish is essential for achieving the Fish Passage Plan's objective to re-establish self-sustaining populations of anadromous fish above the Project. In my view, reducing withdrawal of surface water at any time of year would impair fish passage through the Project and would be

inconsistent with the Tribe's policy objectives for management of the anadromous fisheries in the Deschutes River.

**I declare under penalty of perjury that the foregoing is true and correct.**

Executed on April 18, 2018



Bradley S. Houslet

CERTIFICATE OF SERVICE

I hereby certify that on this April 18, 2018, I filed a true and correct copy of the foregoing document with the Clerk of the Court for the United States District Court – District of Oregon via the CM/ECF system. Participants in this case who are registered CM/ECF users will be served by the CM/ECF system.

KARNOPP PETERSEN LLP

/s/ Josh Newton
Josh Newton, OSB# 983087

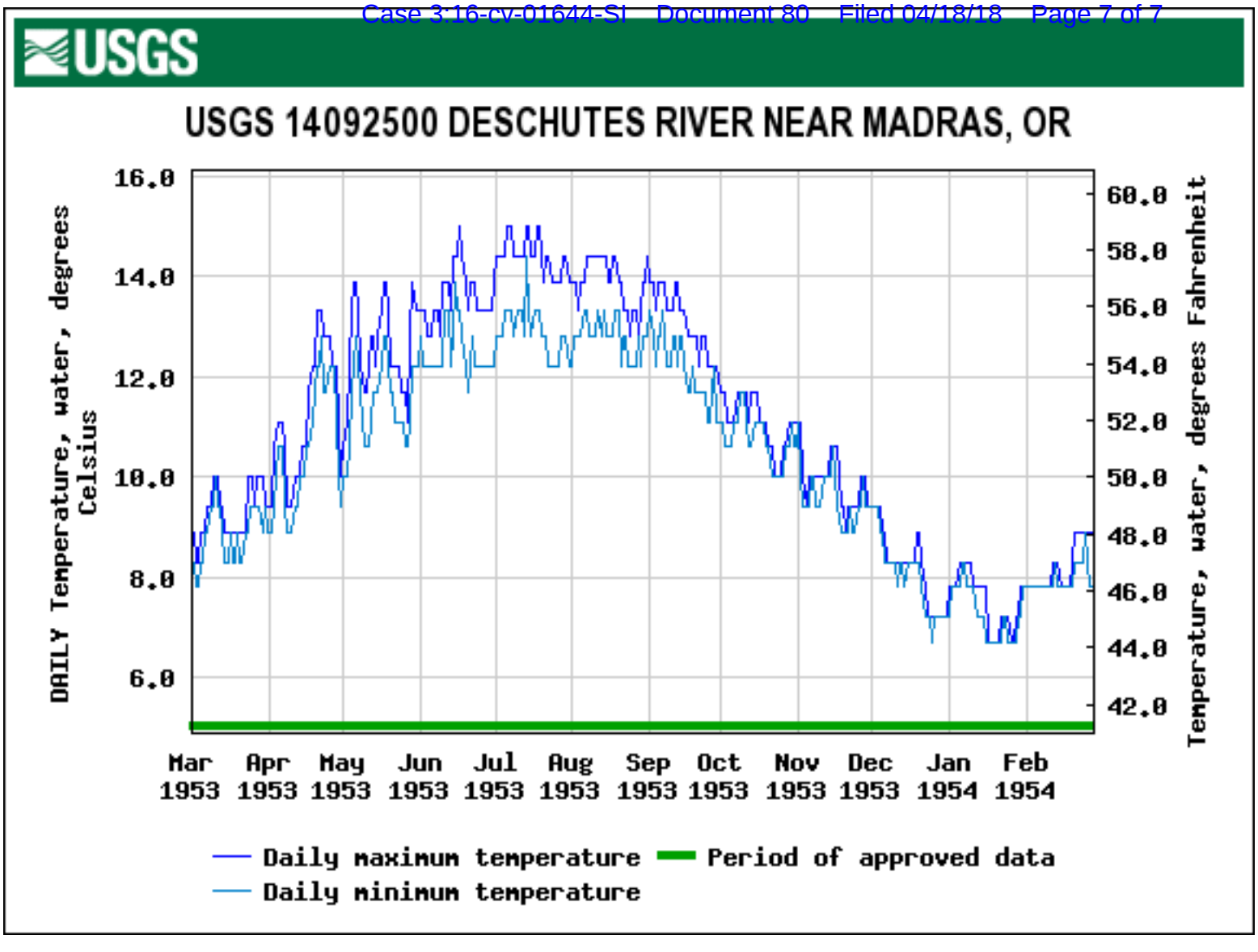

USGS
USGS 14092500 DESCHUTES RIVER NEAR MADRAS, OR
DAILY Temperature, water, degrees Celsius
Temperature, water, degrees Fahrenheit
16.0
14.0
12.0
10.0
8.0
6.0
60.0
58.0
56.0
54.0
52.0
50.0
48.0
46.0
44.0
42.0
Mar 1953
Apr 1953
May 1953
Jun 1953
Jul 1953
Aug 1953
Sep 1953
Oct 1953
Nov 1953
Dec 1953
Jan 1954
Feb 1954
Daily maximum temperature
Daily minimum temperature
Period of approved data

Exhibit 1