Oregon
Tina Kotek, Governor

Department of Fish and Wildlife
East Region
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July 16, 2024

Debbie-Anne Reese, Acting Secretary
Federal Energy Regulatory Commission
888 First Street NE
Washington D. C. 20426

BY ELECTRONIC FILING

Subject: Central Oregon Irrigation District Siphon Power Project (P – 3571)
Overflow Incident – Observations of the Oregon Department of Fish and Wildlife

Dear Secretary Reese:

The Oregon Department of Fish and Wildlife (ODFW) is submitting this letter regarding an incident that occurred on July 5, 2024, at the Central Oregon Irrigation District (COID) Siphon Power Project (Project) (P-3571). At approximately 9pm on Friday July 5th, ODFW staff became aware of a situation near the Project through a social media post that showed muddy water conditions in the Deschutes River, and water running down the hillside. The ODFW staff member contacted the Project operator by phone and was informed that a malfunction caused the powerhouse to trip, which led to the open penstock overflowing and spilling water down the hillside for about 30-60 minutes. At the time of the phone call, the Project was said to be back online and that no more water was overtopping the penstock/forebay. On Monday July 8th, ODFW requested a written summary of the incident via email to better understand the possible impacts. As of July16th, a written summary of the incident has not been received. This letter provides observations of the incident made by ODFW.

On July 11th, ODFW staff were able to walk the site and locate the overflow areas and scour channels formed by the spilling water. The water was observed to have overtopped the Project forebay in two main areas near the inflow and outflow structures. ODFW surveyed multiple scour channel profiles to estimate the volume of sediment transported to the river. One sub-section of a scour channel surveyed measuring 88 yards long, was estimated to have a volume of 99 cubic yards. As this was only one of many drainage paths taken by the spilled water, the amount of sediment that entered the river is unknown. The sediment and debris that had been carried downhill contained a large amount of pumice. A portion of the Project access road and recreation trail were also observed to have been impacted, with repairs already having been made.

The Siphon Project bypass reach and the Deschutes River downstream were affected by both a significant input of sediment into the river causing a spike in turbidity and an abrupt drop in flow followed by a quick rise in water levels as measured at gage Deschutes River below Bend (Station ID 14070500). In additional to recreational impacts reported by various groups of river users, impacts to fish and aquatic resources are likely to have occurred. The Deschutes River is a

spring-fed groundwater dominated system and typically has good water clarity at the Project at the time of the incident. The Deschutes River at the Project and downstream reaches supports populations of native migratory inland Columbia Redband Trout, Mountain Whitefish, other native fishes, recreationally important Brown Trout, and a healthy macro invertebrate community. Redband Trout are an Oregon Conservation Strategy species, a species of special concern by the U.S. Fish and Wildlife Service and American Fisheries Society and are recognized as a sensitive species by the State of Oregon (ODFW), U.S. Forest Service, and the Bureau of Land Management. While impacts to aquatic resources are unknown at this time, the taxa present in the Deschutes River are not well adapted to the sediment laden turbid water conditions that resulted from the overflow incident. ODFW anticipates that non-mobile macroinvertebrates and early life stages of fish were most vulnerable to being impacted by the sediment, turbidity, and quick fluctuation in stream flow.

We request that COID provide ODFW with a written summary of the incident that includes the results of the overflow, follow up actions, and steps taken to prevent a recurrence. As ODFW is tasked with protecting and enhancing Oregon's fisheries and wildlife resources, it is important that prompt notification occur in the event of any future incidents so that an accurate assessment can be made of the potential impacts to fisheries and wildlife. In addition, we request that COID notify ODFW within 24 hours of all future project incidents that may impact fish and wildlife.

Sincerely,

Ben Campbell
ODFW – East Region Hydropower Coordinator
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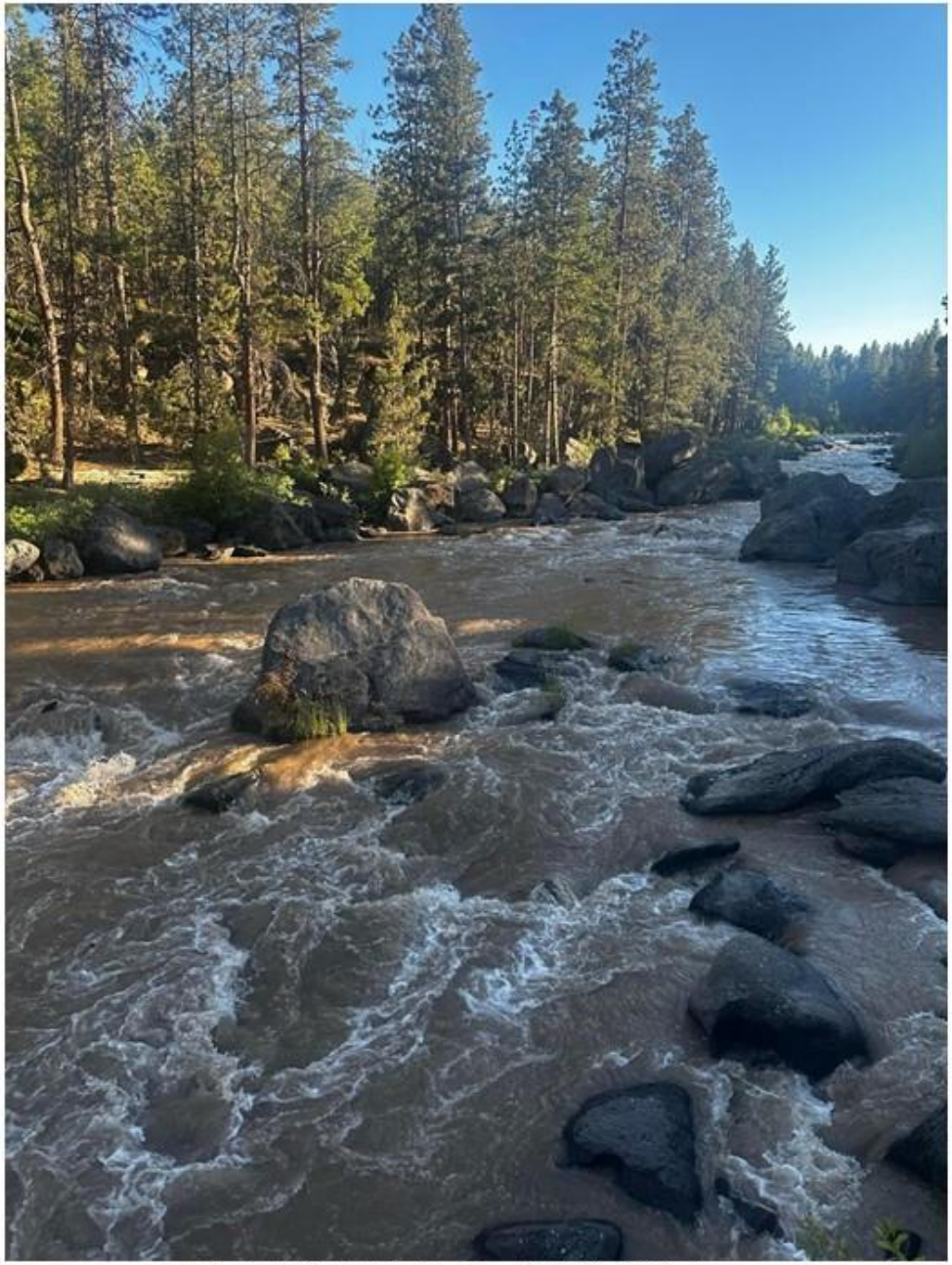
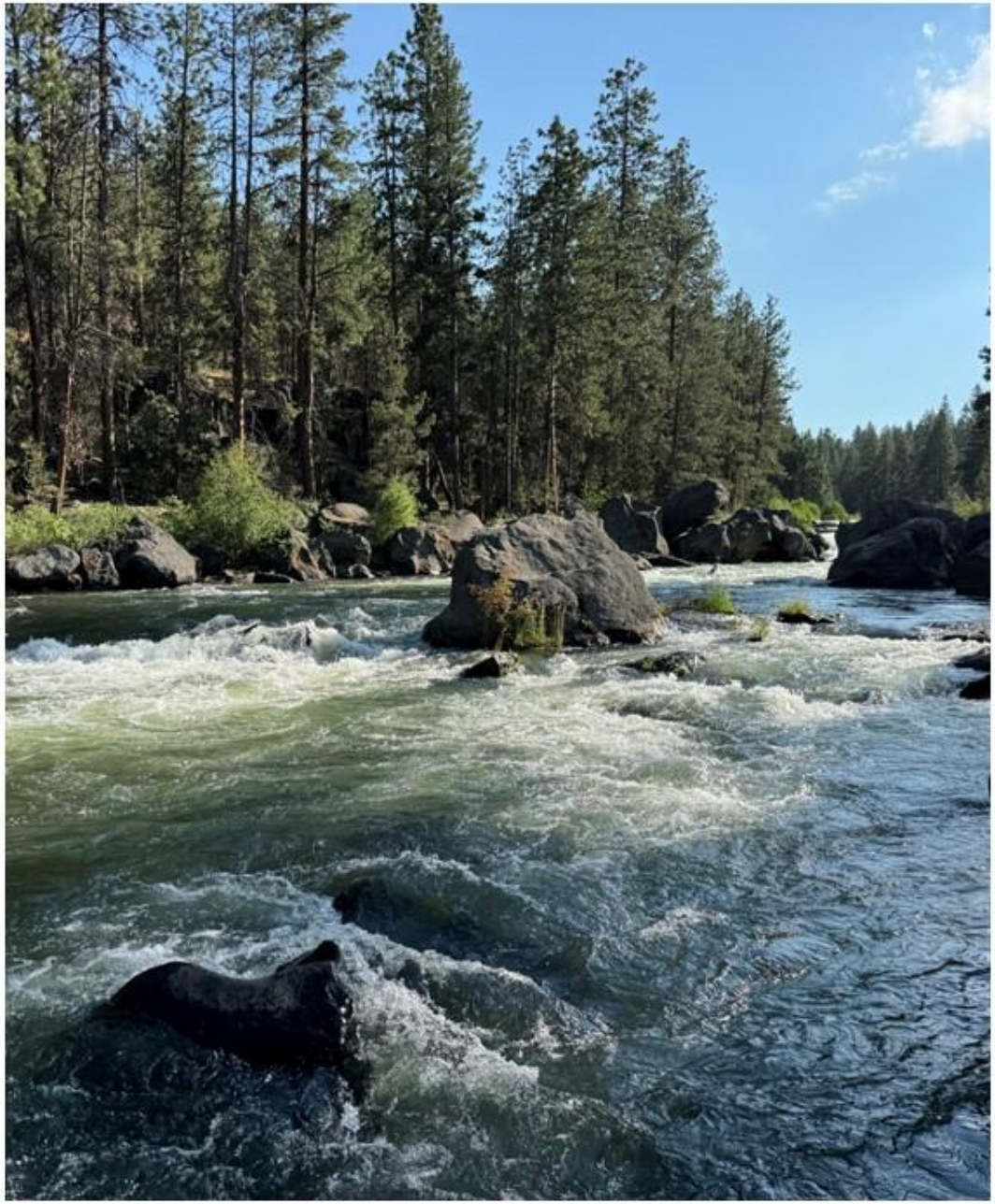
Figures:



July 5, 2024, Photo Credit: Nick Birdseye



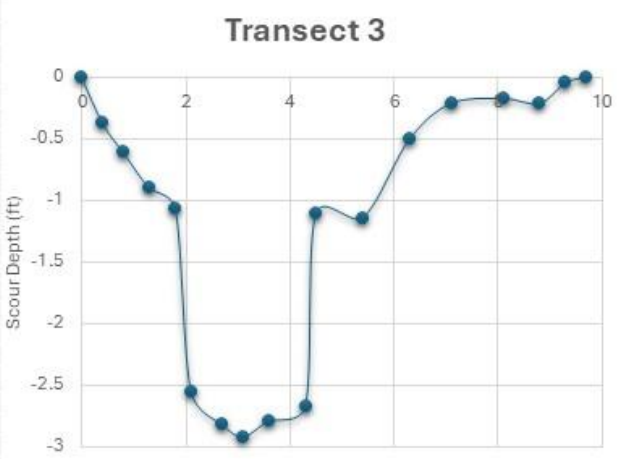
July 11, 2024

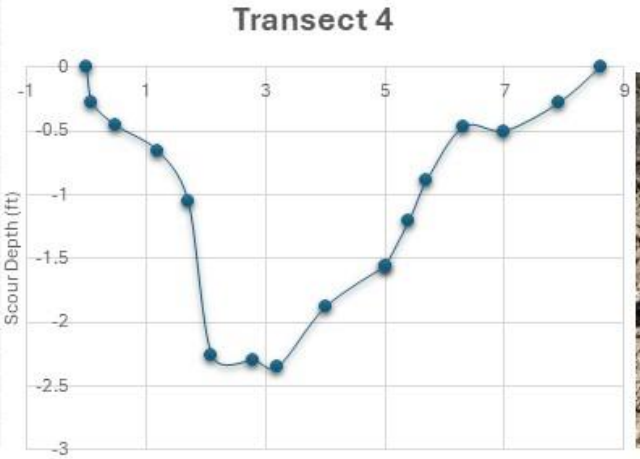
Observed overflow areas and approximate flow paths of sediment. Transect locations in yellow.

Transect 3					
Lat	44.029988	Long	-121.33535		
Station (ft)	Distance	Height to tape (ft)	Depth (ft)	Trapezoid	Notes
1.1	0	0.93	0	0.074	Top of scour line
1.5	0.4	1.3	-0.37	0.196	scour
1.9	0.8	1.54	-0.61	0.3775	scour
2.4	1.3	1.83	-0.9	0.4925	scour
2.9	1.8	2	-1.07	0.543	scour
3.2	2.1	3.48	-2.55	1.611	scour, deep rut
3.8	2.7	3.75	-2.82	1.148	scour, deep rut
4.2	3.1	3.85	-2.92	1.4275	scour, deep rut
4.7	3.6	3.72	-2.79	1.911	scour, deep rut
5.4	4.3	3.6	-2.67	0.378	scour, deep rut
5.6	4.5	2.04	-1.11	1.0125	scour
6.5	5.4	2.07	-1.14	0.738	scour
7.4	6.3	1.43	-0.5	0.284	scour
8.2	7.1	1.14	-0.21	0.19	scour
9.2	8.1	1.1	-0.17	0.133	scour
9.9	8.8	1.14	-0.21	0.0625	scour
10.4	9.3	0.97	-0.04	0.008	scour
10.8	9.7	0.92	0		Top of scour line
Area	10.5865	Sq Ft			
Area	1.1762	Sq Yards			

Transect 4					
Lat	44.02944	Long	-121.335307		
Station (ft)	Distance	Height to tape (ft)	Depth (ft)	Trapezoid	Notes
1.1	0	0.8	0	0.014	Top of scour line
1.2	0.1	1.08	-0.28	0.148	scour
1.6	0.5	1.26	-0.46	0.392	scour
2.3	1.2	1.46	-0.66	0.4275	scour
2.8	1.7	1.85	-1.05	0.662	scour
3.2	2.1	3.06	-2.26	1.596	scour, deep rut
3.9	2.8	3.1	-2.3	0.93	scour, deep rut
4.3	3.2	3.15	-2.35	1.692	scour, deep rut
5.1	4	2.68	-1.88	1.72	scour, deep rut
6.1	5	2.36	-1.56	0	scour, deep rut
6.1	5	2.36	-1.56	0.552	scour
6.5	5.4	2	-1.2	0.312	scour
6.8	5.7	1.68	-0.88	0.405	scour
7.4	6.3	1.27	-0.47	0.3395	scour
8.1	7	1.3	-0.5	0.351	scour
9	7.9	1.08	-0.28	0.098	scour
9.7	8.6	0.8	0		Top of scour line
Area	9.639	Sq Ft			
Area	1.071	Sq Yards			

Average scour volume	1.1236	Sq Yards
Length of scour channel	88.333	Yards
Volume of scour channel	**99.2509588**	**Cubic Yards**





Estimated scour volume of 88-yard section at 99 cubic yards.