## **Bonneville Dam PH 2 Fish Ladder ROV Inspection Report**

**Report Date:** August 18th, 2023

Inspection Conducted for: Jeanette Flemmer and Fisheries

**ROV Inspection by:** NWP Office of Dive/ROV Operations and Safety

Insp. Site Date/ Location: Aug 14<sup>th</sup>, 2023/ ODB PH1 and PH2 FL

**Desired Inspection Targets:** Fish Ladder Collection Channel /

structures

## **ROV** and inspection description:

The Bonneville Dam Fish Ladder inspection was conducted utilizing an Outland Technologies 1000 remotely operated vehicle (ROV). Visual inspection was conducted using the installed high-resolution camera and documenting video on HDD. Sonar imaging was conducted utilizing a Tritech Micron Sector/ Polar Scanning sonar.



Figure 1 Outland 1000 ROV system.

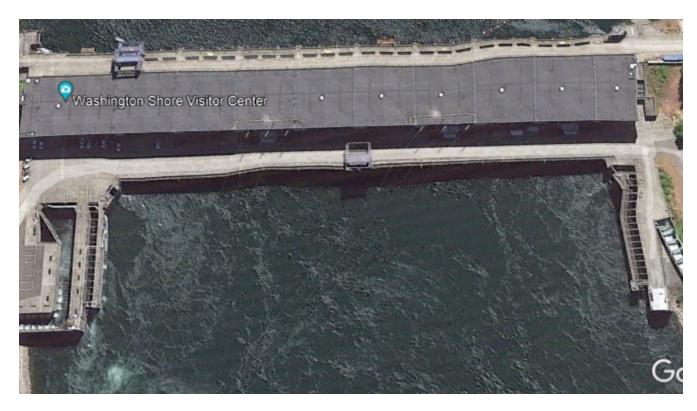


Figure 2 Bonneville Dam PH2. Location of inspection area on downstream side of the structure.



Figure 3 Bonneville Dam PH1. Location of inspection area on downstream side of the structure.

## Inspection description and findings:

The purpose was to inspect facility structural conditions and to assist in determining if any grates have been blown out of place and get a general condition of the fish collection channel.

The inspection commenced by deploying the NWP ROV from the deck of the facility into the corner of PH2 and working across the grates East to West. No areas of displaced diffuser grating were found, but at two areas (time stamp 0925 and 1042) the grate corners have risen slightly but all fasteners are in place and in good condition.

Continuing to PH1, all grates are in place and fasteners are intact and in good condition. Sand build up is typical in the areas that are not used frequently

The following images highlight portions of interest during this inspection:



Figure 4. Raised corner grating.



Figure 5. Raised corner at the edge of a sand pile.

## Point of contact for inspection results and report:

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