From:	Sharla Arledge on behalf of Comments
To:	Kourtney Romine; Mike Ahmer
Subject:	FW: IDL CASE NO. PH-2020-PUB-22-002, NORTH IDAHO MARITIME
Date:	Thursday, July 23, 2020 11:34:53 AM
Attachments:	2020-7-22 Carlson comment on NIM Bathymetric Map.docx

From: Colton Carlson <Colton@northidahomaritime.com>
Sent: Wednesday, July 22, 2020 4:31 PM
To: Comments <comments@idl.idaho.gov>
Subject: IDL CASE NO. PH-2020-PUB-22-002, NORTH IDAHO MARITIME

I would like this attached comment to be submitted to the record for the Administrative Hearing listed above.

Thanks, Colton Carlson

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North Idaho Maritime
4020 N Huetter Rd
CDA, ID 83814
(208)818-6267

July 22, 2020

RE: IDL CASE NO. PH-2020-PUB-22-002, NORTH IDAHO MARITIME

My comments concern the bathymetric map supplied by North Idaho Maritime.

The Idaho Department of Environmental Quality requested bathymetric data on Wolf Lodge Bay where the proposed encroachment is located. Because the request came from this department, I felt it was safe to deduct that they did not have a bathymetric map themselves.

Through my research, I was able to find multiple sources that supplied such data. These maps came from resources such as the U.S. Geological Survey, and data procured from nautical GPS services. The problem was each of these map's data conflicted each other. Because of all of this conflicting information, I felt the only way to find the true water depths was to do it the old school way; to go out and physically measure the depths.

By taking measurements from shore I was able to pinpoint where the end of the encroachment would be, and started taking water depth measurements from there. This was done while the lake water was at low pool. By cross-referencing data (supplied daily by Avista) on the current elevation of the lake, it was a simple and accurate process to find the high pool levels of the bay. I used multiple data points to start to form the beginning of a bathymetric map. With the limited resources of a boat and a tape measure, while you can find actual water depths, it can be difficult to accurately depict the specific and intricate contours of the lake. To find these contours, I used an equally simple method. I observed the water levels of the lake at incremental periods while the water was rising. This allowed me to see the actual contours of the lake bottom at different depths. By observing these, and again referencing lake elevation data from Avista, it allowed me to map the contours at what the depth levels would be at high pool.

From my findings, it does not seem bathymetric data is consistently a perfect science. I recently saw that the DEQ and KEA collaborated to produce bathymetric data on the bay, and observed that this data also somewhat conflicts with the data we collected, data collected by the U.S. Geological Survey, and data found from multiple nautical GPS services. What I can definitively say is, I was in a boat while the water was at low-pool and there was adequate water depth for me to access the area. While doing so, I took actual measurements at multiple locations to derive data points. I believe our data to be gathered in a sound process. If the data were accurate from the other sources collected, it would have been literally impossible for me to be floating in a boat at that time and at that location.

Colton Carlson
North Idaho Maritime