### WHATCOM COUNTY PUBLIC WORKS DEPARTMENT

JON HUTCHINGS DIRECTOR



# MEMORANDUM

 TO: The Honorable Satpal Singh Sidhu, Whatcom County Executive, and Honorable Members of the Whatcom County Flood Control Zone District Board of Supervisors
THROUGH: Elizabeth Kosa, Public Works Director
FROM: Paula J. Harris, P.E., River and Flood Manager Gary Stoyka, Natural Resources Manager
RE: Interlocal Agreement with Department of Natural Resources for Nooksack River Lidar Topographic and Bathymetric Mapping (Work Order No. 23747)

DATE: December 15, 2023

Enclosed is an interlocal between the Department of Natural Resources (DNR) and the Whatcom County Flood Control Zone District (FCZD) for your review and signature.

## **Requested Action**

Public Works respectfully requests that the FCZD Board of Supervisors authorize the County Executive to enter into the above referenced agreement with the DNR for Nooksack River topographic bathymetric mapping services (Work Order No. 23747).

### **Background and Purpose**

River modeling is an important tool that informs comprehensive planning for the FZCD as well as flooding predictions, design parameters, and sedimentation monitoring. An accurate model requires detailed, up-to-date measurements of the bed and banks of the river (bathymetric data). The most recent comprehensive bathymetric survey was completed in 2022, and since that survey there has been changes in river alignment, geometry, and sediment loading. Additionally, having a record of bathymetric changes will provide insight into dynamic river processes and potential future conditions.

In 2015, the Washington State Legislature mandated that the DNR collect, analyze, and publicly distribute detailed information about our state's geology using the best available technology – LIDAR. If local entities need mapping in areas that are not in the DNR's plan, they are able to partner with the DNR to utilize their existing contracts to map those needed areas. DNR provides the contract administration reviews the final LIDAR product for quality at no cost. Local entities pay the direct cost of the LIDAR consultant to perform the work. The final product is sent to the local entity as well as published online broader public use.

## **Funding and Source**

The agreement amount is \$349,600 will be reimbursed 100% by the Department of Ecology Proviso. There is adequate budget authority for this expenditure. The contract will be executed January 2024 with the LiDAR work and PO execution anticipated in February or March of 2024 when flow conditions are favorable and boat-based survey following approximately 2 months later.

Please contact Paula Harris at extension 6285, if you have any questions or concerns regarding the terms of this contract.