

**WHATCOM COUNTY
PUBLIC WORKS DEPARTMENT**

**Jon Hutchings
Director**



NATURAL RESOURCES

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MEMORANDUM

TO: The Honorable Satpal Singh Sidhu, Whatcom County Executive, and The Honorable Members of the Whatcom County Council, collectively serving in their capacity as the Whatcom County Flood Control Zone District Board of Supervisors.

THROUGH: Jon Hutchings, Public Works Director

FROM: Gary S. Stoyka, Natural Resources Manager

RE: Contract with S.S. Papadopoulos & Associates, Inc. to make refinements and upgrades to the Whatcom County Groundwater Model

DATE: August 24, 2022

Requested Action

Public Works respectfully requests that the County Executive, and the County Council, acting as the Flood Control Zone District Board of Supervisors, enter into a contract for the sum of \$286,016 with S.S. Papadopoulos & Associates, Inc., for the purpose of making refinements and improvements to the Whatcom County Groundwater Model.

Background and Purpose

The work in this contract includes refinements and improvements to the Whatcom County numerical Groundwater Model. The goal of the groundwater modeling project is to develop a model which will adequately assess the impacts to surface water flow from groundwater pumping and to inform the development of a water management plan that balances the needs of salmon and other aquatic resources with out-of-stream water needs. The model is envisioned to be a crucial tool in developing solutions that are necessary to resolve the long-standing water management issues in Whatcom County. The initial steady-state numerical model was completed in 2019 on behalf of WRIA 1 Watershed Management Board agencies and other partners (Whatcom County, Whatcom PUD, City of Bellingham, Nooksack Indian Tribe, Lummi Nation, Bertrand Watershed Improvement District, and Washington Department of Ecology), with the Whatcom County Flood Control Zone District acting as the contracting agent and project manager. Following completion of the initial numerical model, a peer review of the model was conducted to ensure it is scientifically sound and meets industry standards prior to conducting further modeling work. The peer review identified several refinements that would improve the performance of the model. Furthermore, it has been concluded that the current steady-state model will need to be converted to a transient model in order to adequately simulate the effects of groundwater pumping and other activities on stream flows. This contract implements the recommended refinements and initiates modifications necessary to develop the transient model for later use in running simulations.

Funding Amount and Source

The contract is not to exceed \$286,016. There are sufficient funds in the 2022 FCZD budget to fund this agreement.

Please contact Gary Stoyka at extension 6218 for any clarification or additional information on the agreement and the associated project.