

720 Olive Way, Suite 1900 Seattle, Washington 98101 Phone 206.287.9130 Fax 206.287.9131 www.anchorgea.com

MEMORANDUM

To: Bruce Mackey, ESA Adolfson **Date:** May 13, 2011

From: Carmen Andonaegui, Anchor QEA Project: 100705-01.01

cc: Paul Schlenger, Anchor QEA

Re: Update on Activities Underway for Chehalis River Fish Study

This memorandum describes the activities underway by the Anchor QEA Team for the Chehalis River Fish Study. Update information is provided on three main topics: field work, data compilation and analysis, and upcoming activities.

FIELD WORK

Collection of water samples and water quality data for use in the study analysis has been completed for this project. Continuously-logging temperature data loggers (Tidbits) are still deployed at the ten water quality sample locations where they were installed in August 2010.

Data collection at low and high flow conditions at the survey locations for IFIM has been completed.

Gravel sampling (surface pebble counts and sub-armor grab samples) has been completed.

DATA COMPILATION AND MODELING

Work continues on modeling fish habitat availability (PHABSIM) and fish population survival (SHIRAZ). Draft reports on both analyses are in progress.

Modeling simulations of hydrologic and hydraulic conditions with and without proposed project alternatives have been completed. The draft report has been completed.

The sediment and large woody debris transport evaluation has been completed, along with the draft report.

Water quality evaluations and modeling of conditions have been completed, along with the draft report has been completed.

UPCOMING ACTIVITIES PLANNED

Data collection during the middle-flows range on the Chehalis River will be conducted if river flows recede enough to safely allow access to IFIM survey locations. Staff is anticipating that this may occur in the last two weeks of May. In order to meet the project completion date of June 30, 2011, there may not be time to incorporate this data into final modeling simulations; however the data will be available for future model simulations for use by the Flood Authority.

A final download by Anchor QEA of the data stored in the Tidbit data loggers will occur Friday, May 13th, assuming river flows allow safe access to the sites. Barry Pickernell, Confederated Tribes of the Chehalis Reservation, will accompany Anchor QEA staff on the final download to learn the locations and process for downloading data. It is agreed that the data loggers will be left in place for use by the Flood Authority.

A Data and Model Transfer Workshop is being scheduled prior to the end of the contract period, June 30, 2011, to provide to the Flood Authority the models and modeling files developed as part of this contract's Statement of Work. The workshop will include a walk-through of the steps on how to set up and run the models. The workshop is intended to provide the Flood Authority and stakeholders the knowledge to conduct subsequent model runs with new or revised data, if desired.