



GRANT NOVAK

Principal Aquatic Ecologist

Grant Novak is a natural resources management specialist with 21 years of experience designing and conducting environmental monitoring studies, quantitatively assessing construction/restoration project-related impacts to endangered species, and successfully managing complex projects with tight budget constraints and unique logistical challenges. His expertise includes salmon life-cycle modeling, GIS analysis, and in-water flora and fauna surveys using SCUBA in marine and freshwater environments. Grant's thorough understanding of ecology, especially nearshore marine, riverine, and riparian ecosystems, melds efficiently with his knowledge of current development issues and technical writing experience to make him a valuable asset and effective author for projects with aquatic components. He has authored numerous technical memos, environmental assessments, environmental impacts statements (EISs) and study reports concerning project-related impacts to the aquatic environment to meet clients' regulatory responsibilities. Grant has considerable experience using SCUBA equipment to conduct preliminary as well as advanced aquatic vegetation and macroalgae surveys. He also has conducted numerous surveys using underwater video equipment — both hand- and remotely operated. Grant is an experienced and safety-conscious boat captain. He has developed numerous boating safety plans in support of marine survey projects that include a boating element.

Representative Projects

Lower Green River Corridor Flood Hazard Management Plan Programmatic Environmental Impact Statement, King County Flood Control District. *Senior Aquatic Ecologist.* Grant devised the methodology for using GIS and CAD data to assess impacts on riparian habitat, wetlands, aquatic species, and aquatic habitat from alternative flood control designs. The alternatives include one no-action alternative and four programmatic alternatives with varied proportions of different flood control structure designs. Designed analyses of aquatic and riparian resources for evaluation of Green River flood control design alternatives. Designed GIS analyses of alternatives to assess impacts to wetland, riparian, and aquatic habitats. Prepared data collection protocols and designed database for storage of GIS/CAD data and analysis outputs. Identified relevant, available datasets for analysis and, where data were missing, designed field studies to collect additional data for analysis.

Willapa Bay Critical Areas Studies, Shoalwater Bay Tribe, Tokeland, WA. *Project Manager.* Grant designed and led large-scale critical areas studies to delineate the extent of important resources (e.g., eelgrass, macroalgae, habitats) to inform potential impacts of development on over 300 acres of intertidal habitat in Willapa Bay. The large-scale nature of these surveys required strong organization skills and an ability to understand ramifications of study design on the ability to meet future needs. Early coordination with regulatory agencies informed study design to better answer future questions and needs.

South Fork Wind Farm (SFWF) Environmental Impact Statement, Biological Assessment (BA), and Essential Fish Habitat (EFH) Analysis, Deepwater Wind South Fork, LLC, Outer Continental Shelf Offshore of Rhode Island and Massachusetts. *Project Manager.* Managing preparation of the following resource sections of a National Environmental Policy Act (NEPA) EIS for a proposed Construction and Operations Plan for the SFWF: Benthic Habitat, Essential Fish Habitat, Invertebrates, and Finfish;



EDUCATION

M.S., Environmental Sustainability Management, University of Washington, 2013
 B.S., Marine Biology, Minor in Geography (GIS/Remote Sensing), Florida Atlantic University, 2004

CERTIFICATIONS

Open Water SCUBA certified since 1992, PADI
 U.S. Department of Transportation, Remote Pilot License, Certificate Number Pending (Application ID 1331139)
 Certified Forage Fish Spawning Surveyor, WDFW, 2009
 Surf Smelt Spawning Surveys, WDFW, 2009

EXPERTISE

Aquatic Biology and Ecology
 GIS Analysis
 Habitat/Fish Surveys and Field Assessments
 Endangered Species Act
 NEPA
 Project Management

ADDITIONAL TRAINING

Eelgrass Delineation Guidance Workshop, U.S. Army Corps of Engineers, June 2017



Marine Mammals; Turtles; Land Use. Also managing preparation of BAs for both the U.S. Fish and Wildlife Service (USFWS) and NMFS, as well as an EFH assessment for NMFS. The proposed wind energy project would construct 15 wind turbines on Bureau of Ocean Energy Management land leased by Deepwater Wind.

Manke Marine Pier Replacement and Aquaculture Expansion Permitting, Manke Resources, Shelton, WA. Project Manager. Provided permitting support for project to replace an existing commercial pier and install additional shellfish aquaculture facilities in Oakland Bay, including floating upwelling systems (FLUPSYs). Work included completing environmental surveys and habitat mapping, and preparing the following documents: biological evaluation for Endangered Species Act (ESA) consultation, Joint Aquatic Resources Permit Application (JARPA), State Environmental Policy Act checklist, Washington Department of Fish and Wildlife (WDFW) Hydraulic Project Approval, and a water quality monitoring plan to meet Washington State Department of Ecology requirements.

Marine Mammal Monitoring During Manke Pier Repair and Replacement, Manke Lumber Company, Shelton, WA. Project Manager. Prepared and implemented a marine mammal monitoring plan to meet Corps of Engineers Marine Mammal Protection Act compliance requirements during the 14-day removal, repair, and replacement of an over 100-foot-long pier in south Puget Sound. This project entailed preparation of a stringent monitoring plan followed by active monitoring of the surroundings for marine mammals within specified stop-work zones near pile removal and installation.

Methow EDT Model Development, Confederated Tribes of the Colville Reservation (CCT), Okanogan County, WA. Senior Aquatic Ecologist/GIS Specialist. Providing scientific expertise and spatial analysis on project to develop an updated EDT model platform for the Methow River subbasin. Collaborated with teaming partners to develop the new Methow EDT model, which built upon an existing model developed for Subbasin Planning and incorporated empirical habitat data collected since that model was completed 15 years ago.

Point Defiance Right Timber Floating Dolphin Replacement, Washington State Department of Transportation (WSDOT), Tacoma, WA. Senior Aquatic Biologist. Conducted 3 years of post-construction monitoring to determine effects to eelgrass beds and confirm recovery in areas disturbed by the project. Survey methods included underwater video and diver transects to map resources according to methods approved by regulatory agencies. Completed survey report including all information necessary to satisfy WDFW eelgrass/macroalgae survey guidelines.

State Route (SR) 520 Pontoon Construction Project EIS, WSDOT, Grays Harbor, WA. Task Manager/Aquatic Ecologist. Completed numerous eelgrass and macroalgae surveys using submersible video equipment. This work was instrumental to WSDOT's site selection for the replacement pontoon construction site. Conducted a study to monitor rates of attachment and growth of marine organisms on concrete plates moored in Grays Harbor. Because pontoons were moored in Grays Harbor for an extended length of time, this multi-year study characterized the floral and faunal habitat likely to attach to the submerged portions of the pontoons. Study results were used to aid in development of measures to prevent transport of non-native species from Grays Harbor into Puget Sound and Lake Washington.

Chehalis Basin Flood Storage Project, Washington Office of Financial Management, Olympia, WA. Project Manager/Aquatic Ecologist. Advised and organized a team of consultants, agency personnel, and local stakeholders during planning phases of this large flood storage assessment project. Project required daily communication with a large project team to coordinate a complex environmental assessment of flood control alternatives and associated impacts. The team modeled and analyzed potential project-induced flow, temperature, and habitat alterations that would result in direct impacts to aquatic species. Led the development of innovative GIS analyses to determine the spatial extent of flooding effects to aquatic habitat utilized by fish and amphibians. Assessed impacts to aquatic species in the face of climate change by developing action hypotheses to relate flood reduction and climate change alternatives to habitat and species effects, thereby providing an approach for incorporating climate change into technical and policy considerations.

Chelan County Riparian Parcel Prioritization, Chelan County Natural Resources Department, Wenatchee, WA. Project Manager. Analyzed multi-spectral imagery and LiDAR-derived elevation data to support an examination of riparian habitat quality in the Wenatchee River watershed. Goal of project was to aid in the identification and prioritization of parcels for riparian restoration.