



CHRIS BERGER, PWS, CESCL

Principal Ecologist

Chris Berger is a certified Professional Wetland Scientist with 25 years of experience in habitat biology, wetland and stream ecology, ecological restoration, and environmental permitting/regulatory compliance. He has expertise in Endangered Species Act (ESA) compliance and National Environmental Policy Act (NEPA) documentation as well as a variety of local and state (e.g., State Environmental Policy Act; SEPA) environmental laws and regulations. Chris manages a wide variety of project types such as those involving habitat restoration, transportation, infrastructure, land development, mitigation planning, NEPA/SEPA documentation, third-party environmental review, and residential and commercial development. He has field expertise in wetland studies, stream assessments, impact assessments, and environmental compliance. Chris excels at synthesizing environmental and ecological data and documenting regulatory compliance.

REPRESENTATIVE PROJECTS

State Route (SR) 520 Bridge Replacement and HOV Program, Washington State Department of Transportation (WSDOT), Seattle to Redmond, and Grays Harbor, WA, 2008-Present. *ESA, Permitting, Mitigation Task Lead.* Chris has managed ESA consultation and environmental permitting for multiple phases of WSDOT's SR 520 Program. He is a key team member for the NEPA, ESA, mitigation planning, and permitting. Chris provided technical review and input into the NEPA ecosystems discipline reports and supporting studies and was a primary author for the biological assessment (BA). He continues to provide ongoing support for ESA compliance, including regular project updates and re-initiations with the National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife Service (USFWS). He has provided extensive permit document preparation and regulatory agency coordination, and continues ongoing management of a complex multi-agency permitting process for the project with the City of Seattle, Washington departments of Fish and Wildlife and Ecology, the U.S. Army Corps of Engineers, and Coast Guard, and has permitted several ancillary prerequisite projects such as studies and exploratory activities. Chris participated in multiple technical working sessions with outside experts to investigate the potential project effects on focal species and habitats related to pile driving, juvenile fish migration, lake circulation, and water temperature. He led characterization and assessment of impacts to wetlands and aquatic habitats for regulatory purposes and successfully advanced the impact assessment framework through technical work sessions with the relevant regulatory agencies and stakeholders. Chris facilitated jurisdictional determinations of wetland boundaries and OHWM determinations with regulatory agencies. Ongoing work includes technical review for development of compensatory wetland mitigation proposals, authoring compensatory aquatic mitigation plans, and participating as an interdisciplinary team member for the final design of compensatory mitigation projects. Chris also participates in the integration of environmental requirements into construction Plans, Specifications, and Estimates, and coordinates environmental compliance with construction activities including environmental monitoring, fish exclusion, and change management with regulatory agencies.

Downtown Redmond Link Extension (DRLE) Project, Sound Transit, Redmond, WA. *Environmental Compliance Inspector/Environmental Permitting.* Chris is supporting erosion control and stormwater compliance during design and construction of the project. Work includes reviewing Temporary Erosion and Sediment Control plans in design, conducting site inspections, documenting the status of best management practices on areas of active construction, and ensuring environmental compliance of work near streams and wetlands and during inwater work windows. Chris also reviews environmental elements of the various design packages, confirms critical area locations, and verifies clearing limits prior to clearing and grading work.



EDUCATION

B.S., Conservation Biology, University of Wisconsin, Madison, WI, 1994
 Certificate, Wetland Science and Management, University of Washington, Seattle, WA, 1998

CERTIFICATIONS

Professional Wetland Scientist, #2784, Society of Wetland Scientists, 2017 – present
 Certified Erosion and Sediment Control Lead (CESCL), #81609, Northwest Environmental Training Center, April 2019
 Qualified Senior Writer for Biological Assessment, WSDOT, 2006-Present

EXPERTISE

Wetland / Freshwater Ecology
 Restoration / Mitigation
 Endangered Species
 Environmental Planning and Permitting
 Watershed Analysis

AFFILIATIONS

Society of Wetland Scientists, Member



On-Call for SEPA, Critical Areas, Shorelines, and Development Projects, City of Monroe, WA. *Principal Ecologist.* Chris provides on-call planning services for the City of Monroe. Projects include third-party review for projects' critical areas, shorelines, and SEPA compliance; environmental permitting and regulatory compliance; SEPA; and review and refinement of existing or new regulatory codes and comprehensive plan elements on an as-needed basis.

Fauntleroy Creek Culvert Replacements Project, Seattle Public Utilities (SPU), West Seattle, WA. *Senior Ecologist.* This work has involved project-specific and planning elements for culvert replacement. Chris supported planning for 2 culvert construction projects and prioritization of city-wide fish passage barrier corrections. He evaluated ecological gains and losses associated with different approaches to addressing fish passage barrier corrections. This task involved developing a decision framework for prioritizing fish passage barrier corrections and alternative mitigation options. Work included reviewing available data for stream culverts, evaluating available stream habitat data, and identifying recommendations for future data collection that may facilitate assessment efforts and improve fish passage planning. Chris reviewed 5 stream function analysis frameworks for their potential use by SPU to quantify the relative impacts and benefits associated with fish passage barriers in the city's creeks and provided conclusions and recommendations in a memorandum. Chris also identified applicable permits and prepared permit matrices for the culvert projects at 30% design.

Copper Mine Remediation Impact Assessment and Mitigation Plan/Biomonitoring, Rio Tinto, Holden Valley in Chelan County, WA. *Project Manager.* The Holden Mine Remediation Project is supporting compliance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) regulatory requirements of the Holden Mine remediation. The remediation site encompassed 170 acres and the Remedial Action resulted in a total of 5.79 acres of impact to "waters of the United States" (WOTUS). Chris managed the WOTUS assessment involving 24 wetlands and 3 streams to evaluate impacts of the Remedial Action, and he developed and implemented a creative solution to satisfy the CERCLA compensatory mitigation requirements. Finding an appropriate mitigation opportunity had been delayed for years due to the scarcity of wetlands and largely undisturbed conditions in the Chelan watershed. After an extensive evaluation of options within the watershed, Chris proposed and obtained approval for a resource trade-off approach involving acquisition and long-term management of a 2,100-acre property on Bear Mountain that would result in the creation of 8,500 contiguous acres of protected land. Chris and his team prepared a detailed terrestrial and aquatic habitat assessment for the site to support the documentation of important ecological functions provided by its protection. This creative solution saved the client time and money, as the site requires no construction or monitoring and will provide a mitigation bank to Rio Tinto for other wetland and stream impacts that might occur during Phase 2 of remediation at the Holden Mine site. This project also includes completing extensive annual fish and macroinvertebrate sampling along Railroad Creek to assess the effectiveness of the remediation efforts. Findings of the biomonitoring are compiled into reports, which, in conjunction with past and future monitoring reports, will be used to assess the health of Railroad Creek.

Broodstock Collection Facility Replacement Project, Seattle Public Utilities, Renton, WA. *Senior Ecologist.* Chris provided natural resources assessment, ESA compliance, compensatory mitigation, and general environmental permitting support. Work involved stream and riparian habitat assessment, ordinary high water mark (OHWM) delineation, pebble counts, impact assessments, determination of mitigation needs, preparation of a biological assessment to support ESA Section 7 consultation, a critical areas report to satisfy City of Renton permitting, and development of compensatory mitigation to support state and federal permitting requirements.

First Avenue Tribal Fishing Facility Improvements, Muckleshoot Indian Tribe, Seattle, WA. *ESA & Mitigation Lead.* Chris led the ESA consultation and assisted with the strategy for the federal permitting process and compensatory mitigation associated with facility improvements. The Muckleshoot Indian Tribe proposed to improve the Tribe's existing fishing pier facility on the Lower Duwamish Waterway to better accommodate the existing tribal fishing operations; to provide for safer and more secure moorage for tribal fishing vessels; and to provide safer fish off-loading conditions for tribal fishers. Chris analyzed the project-related effects of in-water construction and over-water cover and shoreline modification on ESA-listed fishes. He prepared a BA as well as an In-Lieu Fee Use Plan to offset unavoidable impacts to Waters of the United States. He facilitated agency approval of the compensatory mitigation credit purchase through the King County Mitigation Reserves Program.

Lake Roesiger Park Shelter Environmental Studies, Snohomish County Parks and Recreation, Snohomish, WA. *Senior Ecologist.* Completed a wetland delineation, lake and stream OHWM determinations, and critical areas study at Lake Roesiger County Park for proposed construction of a picnic shelter on an existing gravel parking area along the shoreline of Lake Roesiger. Work included a site investigation to evaluate the potential presence of regulated wetlands and fish and wildlife habitat conservation areas on the subject properties.