



STATEMENT OF QUALIFICATIONS



Owl Ridge Natural Resource Consultants, Inc.

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About Owl Ridge

Owl Ridge Natural Resource Consultants, Inc. (Owl Ridge) was formed in 2012 as a small business enterprise to provide a full range of environmental consulting services including planning, permitting, and compliance. Professionals with high levels of experience, competence, and expertise form the



foundation of our business. Key staff have more than 20 years of experience in their field. Our flexible business model allows for adaptation to specific project needs by crafting the most qualified team with personal attention to our clients. Our effective use of networked senior staff and our approach to project team organization can result in cost savings for our clients. There is no need for our team to learn “on the job” at the client’s expense. In addition, our staff are recognized experts in the industry and we frequently contribute our subject-matter expertise to larger consulting firms in cooperative teaming arrangements.

Expertise and Services

- National Environmental Policy Act (NEPA) analysis, and agency and internal evaluations
- Endangered Species Act (ESA) Analysis – Biological Assessment (BA)
- Bureau of Land Management (BLM) and USDA Forest Service (Forest Service) Sensitive Species Assessment
- Marine Mammal Protection Act (MMPA) Compliance – Incidental Harassment Authorization (IHA) Application
- Protected Species Observer (PSO) Program Management and Training
- Magnuson-Stevens Act Analysis – Essential Fish Habitat (EFH) Analysis
- Fisheries and Aquatic Surveys and Monitoring
- Wildlife Survey and Monitoring
- Clean Water Act Compliance
- Ports and Harbors Act Compliance
- Regulatory Risk Assessment
- Waste Management
- Public Involvement
- Geographic Information System (GIS) and Database Management

Service Sectors

- Oil and Gas Exploration & Development
- Mineral Exploration and Project Development
- Remediation
- Renewable Energy
- Water Source Development and Restoration
- Hydroelectric and Wind Power
- Telecommunications
- Transportation
- Recreational Development
- Land Use Planning and Management
- Forest Practices and Planning

The Owl Ridge Commitment

Owl Ridge is committed to providing high quality, cost-effective, and responsible solutions to protect both the interest of our clients and the natural environment. We do this through recognizing the unique aspects of each project and applying our technical knowledge, innovation, sociocultural awareness, and effective communication.



NEPA ANALYSIS AND RELATED SERVICES

Owl Ridge brings expertise and proven experience in conducting environmental impact assessments (EIAs) for a variety of federal agencies under NEPA. Collectively, we have conducted hundreds NEPA EIAs documented in Environmental Impact Statements (EISs) and Environmental Assessments (EAs). Many of these analyses involved complex, highly visible proposed projects that required coordination among many stakeholders and diverse interests. Most also involved aggressive schedules.

Types of projects and facilities for which we have conducted NEPA analyses:

- Mine Planning, Development, and Expansion (hard rock, coal, aggregate)
- Oil and Gas Leasing, Exploration, and Development
- Gas Plant
- Compressor/Pumping Station
- Gas Storage Field
- Clean Fuels Refinery
- Oil and Gas Pipeline
- Seismic Data Acquisition
- Electrical Transmission Line
- Hydroelectric Power Facility
- Telecommunications Facility
- Recreational Development (winter and summer facilities)
- Highway Development and Expansion
- Water Development/Pipeline
- National Park Facility (e.g., Yellowstone, Everglades, and Yosemite National Parks)
- Wildlife Management Plan (e.g., elk, deer, bison, birds)
- IHA applications for Marine Mammals
- Vegetation Management
- National Defense System (U.S. Air Force and U.S. Army)
- Army Stationing Action
- Integrated Natural Resources Management Plan (U.S. Air Force, U.S. Army, U.S. Navy)

Federal agencies involved in projects we have supported include:

- Forest Service
- BLM
- U.S. Fish and Wildlife Service (USFWS)
- National Marine Fisheries Service (NMFS)
- U.S. Army Corps of Engineers (USACE)
- U.S. Environmental Protection Agency (EPA)
- National Park Service
- Bureau of Indian Affairs
- Federal Energy Regulatory Commission (FERC)
- Bureau of Reclamation
- U.S. Army
- U.S. Air Force
- U.S. Navy
- Housing and Urban Development

AQUATIC AND WETLAND STUDIES

Fisheries and Aquatic Survey and Monitoring

Owl Ridge’s fisheries biologists specialize in field investigations of freshwater, coastal, and marine fish populations and habitats. Owl Ridge staff have conducted scientific investigations on fish populations throughout Alaska and the Pacific Northwest for more than 30 years. Owl Ridge fisheries expertise includes pre- and post-project evaluations of fish populations and habitats. We design and implement aquatic baseline and biomonitoring, including collecting and analyzing fish heavy metals loading data.



Our work has analyzed effects on fisheries resources from causeways and culverts, recreational development, offshore and onshore oil and gas exploration and development, mine development and operation, and other industrial development. Our fisheries biologists have prepared EFH Assessments under the federal Fishery Management Plan to support EFH consultation under the Magnuson-Stevens Act. We evaluate subsistence resources and harvest, analyze risk, and develop impact mitigation. We also provide expert testimony on fisheries issues.

Vegetation and Wetland Assessment

Owl Ridge wetland scientists provide both remotely sensed and on-ground mapping of vegetation communities and wildlife habitat using the latest satellite-imagery and GIS technology. Our wetland scientists conduct wetland delineations and rare plant surveys, with special emphasis on northern

vegetation communities. They understand the ever-changing regulations regarding wetlands and rare plants and provide up-to-date expertise and guidance for our clients’ projects.



MARINE MAMMAL PROTECTION ACT COMPLIANCE

IHA Applications and Marine Mammal Monitoring and Mitigation Plans

Owl Ridge marine mammal scientists assist industry and government entities with meeting obligations under the MMPA. Our services include preparing IHA applications and Marine Mammal Monitoring and Mitigation Plans (4MPs) as required under MMPA. Owl Ridge also addresses potential impacts to marine



mammals under NEPA. Owl Ridge has secured permits for activities such as exploratory oil and gas drilling, seismic data acquisition survey, barging, impact and vibratory pile driving, dynamic positioning of tankers, construction of wind farms, offshore liquefied natural gas (LNG) ports, ferry terminals, underwater and seafloor buried pipelines, and communication cables. Our scientists implement marine mammal monitoring programs in compliance with IHA stipulations.

Protected Species Observer Program Training and Management

In addition to MMPA compliance, Owl Ridge provides PSO program management and training. The PSOs are trained and equipped to monitor from vessels, aircraft, stationary drill rigs, and shorelines. Our PSO staff conduct marine mammal and seabird surveys and monitoring onshore and from offshore vessels for various marine operations as an obligation under 4MPs. Our staff have monitored marine mammal activity associated with pile-driving during ferry terminal and bridge construction, conductor



pipe driving, offshore oil and gas drilling, offshore seismic data acquisition survey, barging and drill rig towing, offshore fiber optic cable-lay operations, sheet-pile driving during construction of an offshore wind farm, and pipeline construction with offshore ports.

Owl Ridge PSOs also have conducted systematic surveys for sea otters and Steller's eiders in Cook Inlet, monitor for marine mammals and marbled murrelets in Puget Sound, and serve as polar bear guards/monitors during Alaska winter operations.

WILDLIFE EXPERTISE AND REGULATORY COMPLIANCE

Endangered Species Act Compliance

Owl Ridge biologists have prepared over 60 BAs and consulted with federal agencies as required under the ESA for a wide variety of clients and activities. Evaluations have included subsea cable and pipelines, barge traffic, road improvements, marina dredging, dock improvements, bike trail construction, wastewater treatment plants, bridge, storm damage, ferry terminal improvement, park development, airport expansion, industrial site cleanup, housing development, National



Pollutant Discharge and Elimination System permitting, wetland restoration,

wind farms, solar power, and reservoir dredging. Owl Ridge biologists have addressed every listed species in the western U.S. from San Diego, California to Barrow, Alaska. Our biologists also conducted surveys and monitoring for both terrestrial and marine listed species.



Wildlife Survey and Assessment

Owl Ridge wildlife biologists have extensive backgrounds conducting terrestrial and marine wildlife surveys, assessments, and research. Terrestrial services include ground-, aerial-, and photographic surveys for rare and important wildlife species; habitat evaluations; baseline contaminant studies;



conservation and mitigation plans; and expert witness testimony. The team has worked extensively in Arctic tundra, boreal, alpine, temperate forest, rainforest, shrub-steppe, and desert environments on a wide variety of industrial, military, and government projects. Owl Ridge also has extensive experience working with the policies and authorizations under the management and direction of the USFWS. This experience includes management of ESA requirements, wildlife interaction and mitigation plans, and development and management of observer programs if required by operational stipulations.

REGULATORY PLANNING AND PROCESS

FERC Permitting and Relicensing

Owl Ridge staff have extensive experience dating back more than 30 years with federal and state licensing processes for small to large hydroelectric projects, including a thorough understanding of the FERC licensing process. Our staff have conducted wildlife, fisheries, and vegetative studies; written FERC resource reports; conducted Habitat Evaluation Procedure and NEPA analyses; and prepared Section



7 BAs for licensing

and relicensing hydropower projects in Alaska and the Pacific Northwest. We have a clear understanding of the effects fluctuating water levels and other hydropower dynamics have on local fisheries, wildlife, and riparian vegetation. This experience also includes addressing impacts of electrical transmission line systems associated with the hydroelectric dams, such as bird electrocution, collision, and predator avoidance issues.



Permitting and Strategic Planning

Federal, state, and local regulations are in constant flux and, as a result, they can conflict with one



another. Ensuring effective permitting of projects requires a complete evaluation of permitting processes that may have the greatest risk for conflict, delays, or even cancellation.

Owl Ridge environmental scientists' extensive familiarity with natural resource permitting requirements, processes, and timing provides clients with a clear roadmap for effective project permitting and risk mitigation.

RCRA, CERCLA, AND DUE DILIGENCE

Waste management impacts the costs of projects and operations on a daily basis. Owl Ridge provides expertise in the management and regulation of RCRA and non-RCRA waste streams that can significantly reduce costs and risks of violations in a complex compliance regime. Our principal regulatory analyst is



an expert in the Bevill Amendment and determination wastes that apply from beneficiation.

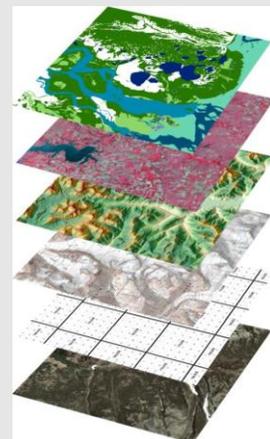
Our expertise in understanding the regulations and ability to effectively communicate with technical experts, managers, and regulators results in positive solutions for all stakeholders.

Our principal regulatory analyst has extensive expertise in permitting requirements, cleanup obligations, and enforcement actions for complex former mining operations including magnesium production from Great Salt Lake and uranium waste cleanup

for the Navajo Nation (Uranium Mill Tailings Radiation Control Act and Comprehensive Environmental Response, Compensation, and Liability Act [CERCLA]). Other Owl Ridge staff have many years of remedial investigation planning, in-field operations, analyses, and feasibility studies in Alaska and the Pacific Northwest.

GIS AND DATABASE MANAGEMENT

The Owl Ridge GIS capabilities support the work of many different teams and scientific disciplines during the course of a project. Our staff build and maintain excellent communication and understanding between GIS teams and project management, and thus increase the efficiency and help the project teams meet their diverse objectives. We maximize the values of a GIS database with solid understanding of project team needs and goals that is imperative so that proper GIS procedures are identified and used to drive the overall design of a GIS database. Our GIS staff communicate the project-specific capabilities of the GIS in a way that project team leaders readily understand and thus apply the benefits of GIS. As an example, the Owl Ridge GIS Manager developed and managed a database for all engineering and environmental baseline data collected for a proposed 315-mile long gas pipeline to support the Donlin Gold project. The database was designed to allow for easy transfer of engineering and scientific discipline-specific data among pipeline contractors.



PUBLIC INVOLVEMENT AND STAKEHOLDER RELATIONS

Public involvement is a vital and sensitive element for successful permitting and project development. Most of Owl Ridge's projects have involved public outreach and participation and many of our projects



have involved complex, highly visible proposed actions requiring coordination among many stakeholders while meeting aggressive schedules. We have extensive experience with public and stakeholder involvement and understand what it takes to effectively involve stakeholders and the public.

Owl Ridge regularly develops project-specific Public

Involvement Plans that focus on clarifying and driving thoughtful, sustained, and meaningful participation and interaction; building trust among parties that have a role or stake in the project; and mitigating opposition. These plans also identify or suggest the most effective tools and timing needed to successfully (and proactively) manage public input, tribal consultation, technical interactions/review, public/media relations, and other forms of interaction to facilitate alignment on communications. Our efforts to involve the public and stakeholders (e.g., Native tribes and groups) commonly include the use of public meetings, project-specific websites, periodic newsletters, public notices, general project mailings, surveys, and direct communications.



Owl Ridge has supported oil and gas companies operating in the offshore to successfully obtain Conflict Avoidance Agreements with the Alaska Eskimo Whaling Commission that minimize cost and restrictive mitigations. In addition, for the Quintillion subsea cable-lay program, Owl Ridge led public information efforts in the local cable-landing communities, including hosting local gatherings and vessel tours to inform interested parties, including the Governor of Alaska.

Owl Ridge staff also have supported large, visible, and controversial NEPA EIS projects, such as the



Powder River Basin Oil and Natural Gas Project EIS and Permanent Stationing of the 2/25th Stryker Brigade Combat Team EIS. As part of the NEPA process, we have planned and organized many public meetings to address scoping as well as public review and comment periods. We have developed materials to inform agencies and the public. Our work has included all requirements of NEPA to facilitate and incorporate public involvement. Owl Ridge senior staff have experience with NEPA projects that required preparing for and conducting

15 scoping meetings over three weeks in five states, and where stakeholders and the public had submitted as many as 80,000 comments.

OWL RIDGE KEY STAFF

Owl Ridge has highly skilled, experienced professionals capable of supporting all regulatory planning, permitting, and compliance requirements for natural resource development, recreational development, and land use planning.

Although Owl Ridge is a young company, each member of our senior staff has at least 20 years of experience in his or her field of expertise. In addition, they have practical experience in project management, business management, and client relations. Owl Ridge clients benefit from all of this diverse expertise.



Glenn Ruckhaus ♦ President *NEPA Analysis, Permitting, and Regulatory Compliance*

BA, GEOLOGY, UNIVERSITY OF COLORADO
CERTIFIED PROFESSIONAL GEOLOGIST

Glenn Ruckhaus has 35 years of experience in managing and evaluating natural resource and infrastructure projects throughout the western US and Alaska. His expertise focuses on whole project analysis and management to identify and resolve complex issues of environmental impacts, endangered species, critical habitat, public controversy, aboriginal affairs, and operational logistics. His work has contributed to successful regulatory approvals of projects in marine settings, national wildlife refuges, state game refuges, and other areas with identified critical habitat and endangered species issues. Glenn has extensive experience in conducting detailed planning and regulatory risk analyses that has expedited regulatory approvals, lowered controversy, and created greater operational flexibility.

Lawrence (Larry) Moulton, PhD ♦ Aquatic Practice Leader *Fish Population and Habitat Investigation, Subsistence Fisheries Investigation*

PHD, FISHERIES BIOLOGY, UNIVERSITY OF WASHINGTON
MS, FISHERIES BIOLOGY, UNIVERSITY OF WASHINGTON
BS, FISHERIES BIOLOGY, UNIVERSITY OF WASHINGTON

Larry Moulton has 40 years of experience in fisheries investigations and research in the Pacific Northwest and throughout Alaska. He has managed a wide variety of studies on freshwater, anadromous, and marine fisheries and the effects of harvest or habitat alteration on aquatic populations. These studies have ranged from large, multidiscipline field and analytical studies to development of specialized mitigation and risk analyses. Major projects have included water flood and causeway evaluation on Alaska's North Slope, lake surveys to support oilfield exploration and development, hydroelectric projects in the Cook Inlet region, pre-development studies for gold and coal mines, and pipeline construction and maintenance. He has been an expert witness in arbitration and litigation cases and was the aquatic expert for the National Science Foundation analysis of cumulative effects for Arctic oil and gas development. Larry is frequently an invited speaker at professional symposiums and is a Fellow with the American Institute of Fishery Research Biologists.



OWL RIDGE KEY STAFF

Gregory Green ♦ Ecological Practice Leader

Wildlife Ecology, Endangered Species Act / Marine Mammal Protection Act Compliance

MS, WILDLIFE ECOLOGY, OREGON STATE UNIVERSITY

BS, BIOLOGY, EASTERN OREGON UNIVERSITY

Gregory Green has 35 years of experience planning and conducting both marine and terrestrial wildlife population and habitat projects in the Pacific Northwest and Alaska, with particular emphasis on threatened and endangered species, marine mammal and seabird surveys, forest and shrub-steppe ecology, natural resource management and mitigation plans, NEPA, and FERC relicensing of hydroelectric power facilities. He has managed more than 70 BAs/BEs and over 20 IHA applications. Greg has addressed environmental impacts from a variety of activities including: port and ferry terminal expansion, mine development through closure, offshore oil and gas exploration and development, gas pipeline siting and construction, onshore and offshore wind energy development, military base operations, hazardous waste cleanup, parks and marinas, hydroelectric projects, transmission lines, and commercial fishing. In addition, Greg teaches courses on ESA and MMPA compliance, marine mammal identification and ecology, and marine mammal monitoring. He has been an associate editor for three different scientific journals.

David Cameron ♦ NEPA Practice Leader

Environmental Impact Analysis and Environmental Assessment

MS, ANIMAL ECOLOGY, UNIVERSITY OF DENVER

BS, BIOLOGY, UNIVERSITY OF NORTH DAKOTA

David Cameron has 38 years of experience leading large multidiscipline teams to conduct EIAs and prepare EISs and EAs in compliance with federal regulations, especially NEPA, as well as various state regulations. In addition, he has conducted and managed BAs for threatened or endangered species and BEs for Forest Service sensitive species, supporting various permit applications. Dave has managed and provided technical expertise for projects in the western US, Alaska, and Hawaii. Federal agencies he has worked with include Forest Service, BLM, U.S. Army Corps of Engineers, U.S. Army, U.S. Air Force, USFWS, Tennessee Valley Authority, BIA, EPA, NPS, FERC, Bureau of Reclamation, and Federal Highway Administration. Projects include oil and gas exploration and development, pipelines, coal and hard rock mines, reservoirs, resort development, incidental take permits for threatened or endangered species, vegetation management, transmission lines, telecommunication facilities, highways, and national defense systems.

OWL RIDGE KEY STAFF

William (Bill) Morris ♦ **Senior Aquatics Scientist**

Fisheries Biology and Aquatic Ecology

MS, BIOLOGICAL SCIENCES, UNIVERSITY OF ALASKA FAIRBANKS

BS, WILDLIFE BIOLOGY, UNIVERSITY OF ALASKA FAIRBANKS

BS, BIOLOGICAL SCIENCES, UNIVERSITY OF ALASKA FAIRBANKS

Bill Morris is a fisheries biologist and aquatic ecologist with 25 years of experience working in the Arctic and Interior Alaska. He has extensive experience in the design, implementation, analysis, and reporting of aquatic baseline and biomonitoring data collection programs, including collecting and analyzing fish heavy metals loading data. Bill previously worked for the Alaska Department of Fish and Game (ADF&G), Division of Habitat in Fairbanks for 19 years, implementing, enforcing, and conducting compliance inspections associated with permits issued under the Fishway and Anadromous Fish Acts. He has extensive experience with State of Alaska Special Area permitting and compliance, as well as coordinating environmental evaluation of industrial projects in northern Alaska. His experience includes three years as Regional Supervisor for the ADF&G Northern Region, Division of Habitat. Bill has authored and/or coauthored more than 30 ADF&G publications and he has been a technical reviewer for multiple agency and professional journals.

Megan Blees ♦ **Senior Scientist**

Marine Biology and Protected Species Observer Program Manager

MS, MARINE MAMMAL SCIENCE, UNIVERSITY OF ST. ANDREWS, SCOTLAND

BS, BIOLOGY, UNIVERSITY OF NEVADA, RENO

Megan Blees has 14 years of professional experience in marine and terrestrial projects in Alaska, California, Nevada, and Antarctica, including small mammal telemetry and photographic identification, and vessel and aerial line-transect surveys. Her experience in Alaska has largely focused on providing marine mammal expertise and regulatory compliance support for onshore and offshore oil and gas exploration and development and subsea fiber optic cable-lay operations. Megan has written successful applications for IHAs and LOAs, managed compliance with these applications and developed supporting documents for project planning including BAs, Wildlife Interaction Plans, Plans of Cooperation, and Marine Mammal Monitoring and Mitigation Plans. Megan managed the Owl Ridge PSO Program for the two-year Quintillion subsea cable-lay program during the Arctic open water seasons. Megan led PSO screening, hiring and training; logistics coordination; development of onboard data collection methods; and effectively communicated with and supported the PSO crews throughout the extended period to maintain consistent observations and data reporting. She was responsible for data analysis and developing the agency-required 90-day reports.

OWL RIDGE KEY STAFF

Enric Fernandez ♦ Senior Project Manager

Alaska Operations Lead

BA, ENVIRONMENTAL SCIENCE, ALASKA PACIFIC UNIVERSITY

Enric Fernandez is an environmental professional with 20 years of natural resource development experience in the environmental consulting and industry sectors. Since 2005, he has focused on environmental regulatory permitting and compliance; project management for environmental baseline studies; and community relations. Enric has proven skills in developing creative and proportionate solutions to challenging problems, taking advantage of readily available technology and professional resources. His experience includes all project phases from exploration to operations for both the oil and gas and mining industry. Prior to joining Owl Ridge in 2017, Enric managed significant portions of project planning and permit applications for the Donlin Gold Project including the environmental baseline data collection program and geotechnical studies. He was the lead preparer and coordinator for the Department of the Army application pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899, Endangered Species Act consultation, Essential Fish Habitat consultation, Section 106 of the National Historic Preservation Act of 1966 consultation, Fish Habitat permit applications, Easement and Lease Applications, and Material Sales applications.

Jason McFarland ♦ Staff Scientist

Fisheries Biology and Aquatic Ecology

MS, BIOLOGY AND WILDLIFE, UNIVERSITY OF ALASKA FAIRBANKS

BS, ENVIRONMENTAL SCIENCE, UNIVERSITY OF SAN DIEGO

Jason McFarland is a fishery biologist with expertise in biological research, environmental science, and regulatory compliance for projects in Alaska, California, Colorado, and Oregon. He has designed fishery studies, planned complex remote field and laboratory logistics, and conducted data collection, data processing, analysis, and reporting. He is proficient in use of multiple types of sampling equipment and techniques and has captured and sampled nearly 30,000 fish, comprised of 10 species throughout Alaska and Colorado. Jason joined Owl Ridge in 2017 and supports design and execution of a wide range of biological research, monitoring, and biological inventory projects. His research currently helps guide the management of fish, aquatic, and terrestrial habitat resources for proposed and existing land use projects in the NPR-A and recreational resort development in Colorado.

OWL RIDGE KEY STAFF

Kathleen Ferry ♦ **Staff Scientist/Project Assistant**

Fisheries Biology and Aquatic Ecology

BS, POLITICAL SCIENCE, PUBLIC LAW, BOISE STATE UNIVERSITY

Kathleen Ferry has extensive experience with environmental, legal, and policy research. Her experience in Alaska has focused on regulatory permitting, compilation of research and data for stream flows, fish habitat assessments, and ecosystem reclamation plans. Prior to joining Owl Ridge in 2016, Kathleen was a research assistant for a burrowing owl monitoring program in Idaho and for a research project to evaluate impacts caused by dams on the Columbia River. She provides logistics support and planning, and has conducted field work at remote sites including fish sampling, water sampling, and wetlands evaluations. She has been involved with various research projects and proposals for Owl Ridge which required excellent written and verbal communication skills.

Don Graika ♦ **Regulatory Compliance Lead**

Health, Safety, and Environmental Compliance

BS, GEOLOGY, OREGON STATE UNIVERSITY

CERTIFIED PROFESSIONAL GEOLOGIST

For 30 years Don Graika has been involved in the exploration, field development, and production phases of four major Alaska North Slope oil fields and was instrumental in establishing and maintaining their environmental compliance programs. He has been involved from the onset of the initial North Slope development operations for the Pioneer Oooguruk, Eni Nikaitchuq, and Exxon Point Thomson Oil Fields. He was also involved with the early development and startup of the ARCO Alpine Oil Field in the Colville River Delta. Don has extensive experience in both onshore and offshore projects on Alaska's North Slope and in Cook Inlet. His expertise for Owl Ridge focuses on environmental compliance and safety company-wide.



OWL RIDGE KEY STAFF

Zane Henning ♦ **Health, Safety, and Environmental Compliance Specialist**

HSE Field Compliance

ALASKA PACIFIC UNIVERSITY, BUSINESS MANAGEMENT AND ECONOMICS

Zane Henning has 25 years of oilfield industry experience and has comprehensive knowledge of safety and environmental protection requirements, guidelines, and compliance. As a project operations manager for major oil industry development, he has been responsible for operations and maintenance of a processing plant, U.S. Department of Transportation-regulated pipelines, Federal Aviation Administration-approved runway, and other remote camp facilities. His experience includes environmental and safety compliance for construction related to oilfield development and exploration projects. Zane has managed and trained spill response personnel to ensure readiness and provided compliance training related to air, land, process safety management, water, waste handling and disposal, and wildlife issues.

Paul Cartier ♦ **Project Manager**

GIS Specialist, Database Management, Project Management

MS, ENVIRONMENTAL SCIENCE, ALASKA PACIFIC UNIVERSITY

BS, BIOLOGY, UNIVERSITY OF WISCONSIN – STEVENS POINT

Paul Cartier has 12 years of experience in development and management of GIS databases intended to display spatial information that combine data from a wide range of environmental disciplines to aid in project decision making. Paul has coordinated data acquisition, designed and managed databases, and analyzed data for a variety of both linear and non-linear projects. His work has supported large- and small-scale onshore/offshore oil and gas projects, transportation and communication infrastructure, transmission lines, and other land development projects. Paul effectively incorporates GIS to display spatial information that combines data from the key project disciplines to aid and expedite project decision making. His environmental background allows him to understand the context of important key project issues and employ the GIS system to aid in effective planning and decision making.





OWL RIDGE KEY STAFF

Dana Stotsky ♦ Senior Analyst

Regulatory Analysis, RCRA/CERCLA, EPA Process, Clean Water Act

*JD, ENVIRONMENTAL AND NATURAL RESOURCES LAW, UNIVERSITY OF OREGON
BA, BIOLOGY AND ENVIRONMENTAL STUDIES, WHITMAN COLLEGE, WASHINGTON
MEMBER OF THE BAR OF THE STATE OF COLORADO*

Dana Stotsky has 30 years of experience in environmental compliance, enforcement, and policy. He has led numerous EIA and EIS projects, and has been a NEPA technical advisor and Quality Control reviewer. He provided legal and policy analysis, and was lead trial attorney for the U.S. EPA in civil enforcement actions against air, water, toxics and hazardous waste violators. He has been extensively involved in both civil and criminal enforcement of Section 404 of the CWA. Dana has supported projects in Cook Inlet and Southeast Alaska conducting regulatory risk management and due diligence related to site selection and historical waste management practices for new oil and gas production facilities. Dana was Adjunct Professor for Navajo Technical College (New Mexico) where he taught part of the “Tribal Advocate” curriculum. He was also Adjunct Professor at University of Colorado Graduate School where he taught portions of “Field Techniques in Environmental Assessment.”

Mike Stanwood ♦ Senior Analyst

Socioeconomics and NEPA Expert

*MS, MINERAL ECONOMICS, COLORADO SCHOOL OF MINES
BA, PSYCHOLOGY, UNIVERSITY OF COLORADO*

Mike Stanwood is a senior environmental, socioeconomic, and NEPA practitioner with 25 years of experience. He has lead more than 100 NEPA projects for both the private and public sector. He has extensive experience in planning and managing complex projects involving natural resource development, environmental planning, and permitting/compliance. He has developed collaborative public involvement processes and facilitated many public meetings. His environmental experience has primarily involved resource development (energy, mining, water), transportation, and government analyses. Mike has served on numerous panels and presented workshops and training sessions involving environmental law, regulatory issues, public policy initiatives, and environmental leadership. He is also has been an adjunct professor at the University of Denver where he taught courses in environmental leadership, natural resource planning and management, policy analysis, and sustainability.



OWL RIDGE KEY STAFF

Christopher Milles ♦ Regulatory Specialist

Regulatory Compliance

BS, FOREST MANAGEMENT, OREGON STATE UNIVERSITY

Christopher Milles was a manager for 30 years with the Alaska Department of Natural Resources (ADNR) in regulatory compliance. He was responsible for ensuring that ADNR's procedures were followed and authorizations were issued consistent with Alaska statutes and regulations. Christopher provides permitting and compliance support for authorizations ranging from land use permits, easements, leases, and material sales, specializing in natural resource development in Interior Alaska, Northwest Alaska, and the North Slope. He is knowledgeable about leasing requirements and procedures and has the technical knowledge necessary to effectively drive regulatory projects while protecting the clients' interests.

Craig Moulton ♦ Environmental Technician

Data Management and Analysis, Field Research Support

Craig Moulton is an experienced environmental technician with extensive knowledge in environmental research data gathering and study techniques. Craig conducts field sampling and data gathering, recording, and archiving field data. He has been an active field team member for lake fish sampling and bathymetric studies on Alaska's North Slope since the mid-1990s. He also provides GIS data management support for field crews.

Myra Fernandez ♦ Business Analyst

Myra Fernandez is Human Resources and Administrative Manager for Owl Ridge. She assists in contract administration, staff integration, and invoicing. Myra has more than 35 years of experience in various accounting and administrative fields, working for the federal government and private sector, in the U.S. and abroad. She is detail-oriented and her expertise in the consulting field focuses on project coordination and contract administration, including the management of consulting and non-disclosure agreements, and insurance compliance/certification for both clients and vendors.

OWL RIDGE KEY STAFF

Jonah Leavitt ♦ Field Technician and Protected Species Observer

Jonah Leavitt is a lifelong Alaskan with 25 years of experience in offshore protected species monitoring on Alaska's North Slope. A respected member in the North Slope village of Utqiagvik (Barrow), he is renowned for his in-field marine mammal identification skills, traditional knowledge, and reliability. He has conducted and managed implementation of many 4MPs required with IHAs and voluntary programs. His PSO responsibilities have included both as a leader and a participant for programs with Shell, ConocoPhillips, FEX L.P., BP Alaska Exploration, and Pioneer Natural Resources. Additionally, Jonah was a PSO for the 2016/2017 Owl Ridge PSO program supporting the Quintillion subsea cable-lay program in the Bering, Chukchi, and Beaufort Seas. He is trained in USFWS polar bear avoidance and deterrence. Jonah also has extensive experience leading and supervising field surveys for nesting waterfowl and waterbirds in Prudhoe Bay. Jonah is also a trained and experienced polar bear watch for projects on the Alaska North Slope.



PROJECT HIGHLIGHTS

Doyon, Limited – Seismic Surveys, Exploration Drilling, and Operations

Owl Ridge staff have been involved with Doyon oil and gas projects for more than 10 years by providing regulatory compliance, land use planning, and permitting strategy, and application support. To date, Owl Ridge has prepared permit applications and compliance guidance for two seismic surveys and drilling two exploration wells in the Nenana Basin, west of Nenana, Alaska (2014 and 2016). Owl Ridge is also supporting permit applications and project planning for a proposed 2018 drilling program north of Nenana. Project complexities include stream bank modifications and dredging in an anadromous stream, wetlands evaluation, overland routing studies and trail development, winter water crossing, on-water mobilization, that required close coordination with Doyon logistics and engineering, U.S. Army

Corps of Engineers, Alaska Department of Fish and Game, and Alaska Department of Natural Resources. Owl Ridge provided compliance reporting for the seismic surveys and drilling programs.



Mobilization for the 2014 and 2016 drilling programs required use of an ice-grounded bridge structure across the Nenana River, mobilization of the drill rig and equipment during open water via barge on the Nenana River. The 2018 program is planned to be mobilized via barge and support vessels on the Tanana River, approximately 20 miles downriver from the city of Nenana. Land ownership considerations for the seismic surveys and drilling programs included Native Allotment, Native Village, and Regional Native Corporation, City of Nenana, State Game Refuge, Mental Health Trust lands, and State of Alaska lands.



Owl Ridge support for Doyon has included:

- Permitting Strategy
- Permit Application and Agency Coordination
- Permit Compliance and Reporting
- Land use planning
- Archaeological investigations
- Material Site Evaluations
- Development of project-specific Oil Discharge Prevention and Contingency Plan (ODPCP) Evaluation of material sites
- Environmental studies
- Wetland surveys
- Bird surveys
- Lake fish surveys

PROJECT HIGHLIGHTS

Quintillion Subsea Operations, LLC

Subsea Cable-Lay Operations – Bering, Chukchi, and Beaufort Seas, Alaska

In 2016 and 2017, Quintillion Subsea Operations, LLC installed a subsea fiber optic cable network along the northern and western coasts of Alaska to provide high-speed internet connectivity to six rural Alaska communities. Offshore cable-lay operations were conducted in the Bering, Chukchi, and Beaufort Seas. Owl Ridge managed the PSO Program during both open water seasons of the project.

Owl Ridge support during planning, execution, maintenance, and compliance included:

- Permitting Strategy
- Permit Application and Agency Coordination
- Permit Compliance and Reporting
- Stakeholder and Native Outreach
- Plan of Cooperation
- Application for IHA – NMFS and USFWS
- Marine Mammal Monitoring & Mitigation Plan
- Biological Assessment
- Section 7 Consultation
- PSO Program Management and Training
- PSO Procedures and Logistics Handbook
- Health, Safety, and Environment Plan

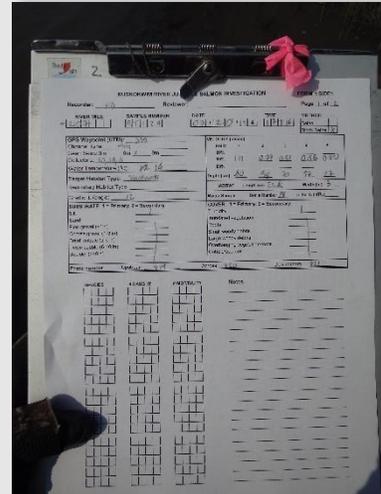


PROJECT HIGHLIGHTS

Donlin Gold Project NEPA Analysis and EIS Support

The proposed Donlin Gold project includes development of an open pit, hardrock gold mine in remote southwestern Alaska. Supporting features and facilities include camps, roads, barge port on the Kuskokwim River, and a 315-mile buried natural gas pipeline. Owl Ridge staff have supported project planning and permit application for 20 years including technical expertise and/or technical review for:

- ESA Section 7 BAs addressing 16 species under NMFS jurisdiction and 6 species under USFWS jurisdiction with regard to four barging routes – offshore oceanic, inshore oceanic, river route, and across Cook Inlet
- Biological Resource Evaluation of alternative compressor station locations
- Biological Resource Evaluation for pipeline alternatives across the Susitna Flats State Game Refuge
- Essential Fish Habitat Assessment
- Title 16 Fish Habitat Permit Applications
- Cultural Resource Planning
- Public Easement Planning
- Waterfowl Surveys and Evaluation of Seasonal Use Patterns
- Kuskokwim River Juvenile Salmon Investigation
- Kuskokwim River Rainbow Smelt Migration Surveys
- Raptor Surveys
- Methods to Avoid or Mitigate Effects to the Iditarod National Historic Trail
- Responses to Agency RFAs on Draft EIS
- GIS and database management



PROJECT HIGHLIGHTS

Royale Energy, Inc. – Aki Exploration and Evaluation Program

Owl Ridge provided whole-project management for Royale’s Aki Exploration and Evaluation Project, which was Royale’s first exploration drilling project in Alaska. This North Slope project was adjacent to the Colville River. Under Owl Ridge



management, Royale conducted a 3D seismic survey and prepared for a drilling program. Royale does not have local staff and Owl Ridge provided high-level project management, logistics, civil engineering, drilling management, and procurement for a two-well winter drilling program.

BlueCrest Alaska Operations – Cosmopolitan Marine Mammal Support

Owl Ridge provided marine mammal support services for Buccaneer Alaska Operations, LLC (Buccaneer) for drilling operations at the Cosmopolitan lease site in Cook Inlet, Alaska, to ensure compliance with



National Marine Fisheries Service (NMFS) and the USFWS regulations and permit conditions.

Owl Ridge prepared two IHA applications addressing marine mammals and a biological assessment addressing Steller’s eiders. Owl Ridge provided two crews of observers to perform full-time marine mammal monitoring. Observations were conducted from the platform of the Endeavour drill rig.

Owl Ridge coordinated the sound source verification studies relative to noise emanating from the drill rig and prepared a 90-day report detailing all drilling activities, marine mammal observations, sound source verifications, and mitigation measures conducted at the well site. To gather baseline data for future NEPA efforts, Owl Ridge conducted boat-based surveys for sea otters and Steller’s eider at the Cosmopolitan well site.

PROJECT HIGHLIGHTS

NordAq Energy, Inc. – Tulimaniq

Owl Ridge conducted the permitting and regulatory support for a complex exploration project, 120 miles from infrastructure on Alaska’s North Slope. The project required construction of 120 miles of ice road, ice island, and 5,000-ft ice airstrip in Smith Bay, and complex logistics for the movement and storage of equipment and fuel. The project required numerous permits, authorizations, and supporting documents from federal, state, and local agencies as well as coordination with tribal entities and private landowners. Examples of the complex permitting regime included IHAs, Subsistence Plan of Cooperation, and Letter of Authorization for operating in habitat used by endangered species.



Buccaneer Alaska Operations – Cosmopolitan Oil and Gas Development Project

Owl Ridge conducted a desktop regulatory risk analysis for Buccaneer’s Cosmopolitan oil and gas development project in Cook Inlet, Alaska. The objective was to identify potential permitting and environmental issues that could result in a schedule or regulatory approval risk to the project. The project consisted of two components: offshore oil and gas leases and production wells and onshore natural gas processing facilities to deliver sales quality gas into the Kenai Kachemak Natural Gas Pipeline.



PROJECT HIGHLIGHTS

SAExploration, Inc. – Cook Inlet Seismic Operations



Owl Ridge prepared IHA applications for SAExploration Inc.'s proposed 2014 seismic operations in Cook Inlet, Alaska, addressing NMFS jurisdiction of marine mammals and USFWS jurisdiction of sea otters. Owl Ridge also prepared a BA addressing Steller's eiders.

Shadara Environmental Impact Statement – Kenai National Wildlife Refuge



A team lead by Owl Ridge staff prepared and managed an EIS for a proposed natural gas exploration project in the Kenai National Wildlife Refuge. The EIS was completed and a Record of Decision was issued in 15 months. The effort included design and integration of key mitigation measures to address issues raised in the scoping process, allowing the process to move forward quickly. The EIS and Record of Decision were formed in a manner that allowed movement of pads without separate NEPA actions.

Cook Inlet LNG

Owl Ridge provided regulatory risk analysis and strategic planning for a proposed LNG project using Cook Inlet gas with a facility located at Port MacKenzie in the Matanuska-Susitna Borough. The project involved managing information needs and negotiations with the Port and MSB planning department as well as addressing preliminary engineering requirements for project risk analysis.



PROJECT HIGHLIGHTS

Biological Assessments for Development Projects in the Intermountain West



Owl Ridge staff have extensive experience preparing Section 7 BAs for threatened and endangered species under the auspices of the USFWS and BEs addressing Forest Service sensitive species. Owl Ridge has addressed impacts to local wildlife from ski resort expansion, hydroelectric power projects, highway improvements, transmission lines, and forest practices relevant to montane species such as Canada lynx, gray

wolves, grizzly bears, wolverines, marten, fisher, Rocky Mountain red foxes, Townsend’s big-eared bats, northern goshawks, and spotted owls. Many of the BAs were prepared in association with NEPA EAs and EISs.



Trilogy Metals, Inc., Resource Development Projects, Alaska

Owl Ridge serves Trilogy Metals, Inc. in various roles for their economic mineral development projects in Alaska. Owl Ridge provides project planning; permit strategy; and scientific investigation for fisheries, water quality, and hydrology. Owl Ridge supports Trilogy in coordination with Alaska Industrial Development and Export Authority (AIDEA) during preparation of the NEPA Environmental Impact Analysis of the Ambler Mining District Industrial Access Project. Owl Ridge staff have worked with the managers of the Trilogy Metals for nearly 20 years and have a long-standing client relationship.



PROJECT HIGHLIGHTS

Winter Park Resort Downhill Mountain Bike Expansion and Improvement Project – Phase 2

On behalf of the Forest Service, Owl Ridge prepared a BA and a BE to address Winter Park Resort’s planned expansion and improvement to its Trestle Bike Park. The project included new trails and closing/reclaiming some existing trails and roads. The BA addressed Forest Service concerns regarding wildlife and Forest Service objectives and effects on species the USFWS has listed or proposed for listing as threatened or endangered under the ESA. The BE addressed Forest sensitive species and management indicator species.



PROJECT HIGHLIGHTS

Bureau of Land Management Powder River Basin Oil and Natural Gas Project EIS and Subsequent Regulatory Oversight and Land Services

Owl Ridge staff managed the preparation of an EIS that evaluated the proposed development of an additional 50,000 oil and gas wells on federal, state, and private lands that cover an area of 8 million acres. Following the BLM's decision on the development. Additional Owl Ridge staff provided regulatory and contractual oversight for surface use agreements applicable to coalbed methane operations in the Powder River Basin, Wyoming. Staff routinely interacted with landowners to improve client's relationship with landowners. Conducted a Surface Use (split estate) Agreements audit and developed strategy to minimize contractual risk and developed business practices for contractual and financial accountability.



- Analyzed unit gas gathering contracts to support client in meeting contractual commitments, to develop business strategy recommendations, and to build relationships with gas gatherers.
- Coordinated with landowners regarding operations affecting property, responded to land owner complaints, negotiated resolutions to problems, and interacted with local non-governmental organizations.
- Developed baseline water quality (BWQ) program for new coalbed methane well development and oversaw existing BWQ program to ensure it met contractual and regulatory requirements.
- Developed a strategy with the corporate law and environmental compliance departments to investigate, document, and respond to impaired domestic water well complaints received from the landowners.

PROJECT HIGHLIGHTS

U.S. Army

Permanent Stationing of the 2/25th Stryker Brigade Combat Team (SBCT) EIS

Owl Ridge staff managed the preparation of an EIS ordered by the U.S. Court of Appeals for the Ninth Circuit to evaluate a range of locations for the SBCT other than Hawaii. The alternatives included stationing the SBCT at Schofield Barracks, Hawaii; Fort Richardson, Alaska; Fort Lewis, Washington; Fort



Carson, Colorado; and Fort Knox, Kentucky (Fort Lewis and Fort Knox were ultimately dropped from consideration because of irreconcilable issues). The effort required an extensive public participation process, including 15 scoping meetings held in five states over 2.5 weeks. The document essentially contained three EISs because the installations evaluated in detail were located in completely different environments (tropical, arctic, and semi-desert).

Based on the analysis documented in the EIS, the Court accepted the EIS and the Army senior leadership decided to permanently station the 2/25th SBCT in Hawaii.

WesPac Midstream, LLC

Planning and Alternatives Evaluation

Owl Ridge provided regulatory risk analysis and strategic planning for a proposed liquefied natural gas project at Port MacKenzie in the Matanuska-Susitna Borough (MSB) on the west side of Cook Inlet in southcentral Alaska. The objective of this effort was to identify potential land use, permitting, and environmental issues that would be a part of each potential development scenario. The project involved managing information needs and negotiations with the Port and MSB planning department as well as addressing preliminary engineering requirements for project risk analysis.

Alaska Stand Alone Pipeline (ASAP) / Alaska Gasline Development Corporation (AGDC)

Technical Guidance and GIS Lead

Since 2015, Owl Ridge has provided the GIS lead for the ASAP, and ultimately AGDC, technical guidance and support to the State of Alaska Project Management Team on all spatial management issues and decisions for the proposed 730-mile long pipeline to move North Slope natural gas through interior and southcentral Alaska, terminating at Nikiski. To date, Owl Ridge staff have supported the project development and application to the Federal Energy Regulatory Commission (FERC) and responses to comments and requests for additional information.

PROJECT HIGHLIGHTS

Washington State Parks and Recreation Commission Saint Edward State Park – Bat Survey



Owl Ridge conducted a visual and acoustical bat survey to support Washington State Parks in natural resource planning for the Saint Edward State Park in Kenmore, WA. The purpose of this survey was to identify high-use bat feeding areas and potential day-roost sites in the 316-acre forested park to provide needed baseline data relative to future facility planning. Monitoring was conducted over two periods over a summer season at numerous facilities within the park. The latest SonoBat® acoustical technology was used to detect and identify bat species. Owl Ridge coordinated with the client and designed and executed the survey.

USDA Forest Service and Oregon Department of Fish and Wildlife Eastern Oregon Red Fox Genetics Study

Owl Ridge staff have been conducting a long-term study to determine the genetic affinity (native vs non-native) of red foxes in Eastern Oregon. The methodology involved collecting tissue, hair, and scat samples from fox populations located throughout Eastern Oregon and analyzing both mitochondrial and nuclear DNA to determine which populations are composed of native foxes reestablishing former range, and which originated from release of non-native fur farm foxes (invasive species). This information will be used to develop appropriate conservation strategies for this species





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