

# RYAN W. HENNING

## Apex Clean Energy

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### PROFESSIONAL EXPERIENCE

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Ryan Henning is a Sr. Permitting Manager with established technical expertise for the resolution of environmental conflicts through permitting, plant and wildlife studies, and strategic agency interaction of the development, construction, and operations of utility scale wind and solar, transmission lines, and energy projects. Ryan became proficient in Bird and Bat Conservation Planning and Eagle Conservation Plan development along with implementing projects that were compatible with the Land-based Wind Energy Guidelines, Eagle Conservation Plan Guidance and APLIC Guidelines while working on solar and wind projects at RES Americas. His demonstrated success with NEPA, CEQA, ISA, ESA, BGEPA, MBTA CWA, NHPA, NPDES, and other local, state, and federal regulations is substantial, as is his experience directing field studies, impact analysis and mitigation solutions on special status wildlife. Mr. Henning has prepared and managed numerous environmental reports, permit applications, feasibility studies, permitting and mitigation strategies, and environmental compliance monitoring programs for a variety energy projects in South Dakota, Nevada, Texas, Arizona, California, Wisconsin, Washington, Colorado, North Dakota, Wyoming, Oregon, Alaska, Ohio, and Canada.

**Apex Clean Energy, Highlands Ranch, CO**

***Sr. Permitting Manager 2017 - Present***

Sr. Permitting Manager for a 12,000 megawatt (MW) pipeline of wind and solar energy projects located throughout the United States. Utilize vast experience with environmental permitting and regulations affecting energy infrastructure and development projects to translate applicable regulatory requirements into strategic and cost-effective compliance approaches and solutions.

**Newalta Environmental Services, Inc., Denver, CO**

***Sr. Project Manager – 2013 - 2017***

Sr. Project Manager for a leading environmental waste service provider that serves markets in both Canada and the United States. Provided permitting, project and construction management support to all fixed, modular, and onsite capital projects and operations in the U.S. Heavy Oil and Oilfield Business Units. Key responsibilities included execution of the entire project lifecycle and fully accountable to Newalta Executive Management for project activities and results, including assigned project budgets, subcontractor administration, company safety standards, construction and project management procedures, and regulatory compliance.

**Renewable Energy Systems Americas Inc., Broomfield, CO**

***Sr. Permitting Specialist – 2010 - 2013***

Sr. Permitting Specialist for a leading international renewable energy company. Primarily responsible for providing regulatory permitting strategy, solutions, mitigation, implementation, and compliance on a 12,500 MW pipeline of solar and wind energy facilities and 800 MW's of operational facilities. Other responsibilities included managing communications and negotiations with government officials, special interest groups and the general public; managing environmental studies; and routing, siting and permitting new transmission line and energy facilities throughout the Western U.S. and Eastern Canada.

**CH2M HILL Inc., Englewood, CO**

***Sr. Project Manager/Client Service Manager – 2006 - 2010***

Sr. Project Manager and Client Service Manager for industrial clients associated with a \$5+ billion international engineering consulting company. Key responsibilities included providing environmental permitting expertise and client service development for renewable energy projects within Site Planning & Permitting business practice.



**ARCADIS**, Denver, CO & Sacramento, CA

***Certified Project Manager/Senior Biologist – 1995 - 2006***

Certified Project Manager for industrial and government clients associated with a \$1+ billion international engineering consulting company. Provided impact assessment and permitting support on over 50 major projects to both private sector and various local, state, and federal agencies including the Bureau of Land Management, U.S. Fish and Wildlife Service, U.S. Forest Service, Federal Energy Regulatory Commission, Office of Surface Mining, U.S. Army Corps of Engineers.

**North American Coal Corp – Indian Head Mine**, Beulah, ND

***Environmental Scientist I, II, & III – 1988 - 1994***

Environmental Scientist for a leading North American lignite coal mining company. Responsible for mine permitting and revisions, environmental compliance, and reclamation plan implementation at a 4,750-acre surface lignite coal mine. Additional responsibilities included assisting in daily operational mine management activities and supervision of reclamation workforce of eight full-time employees.

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**EDUCATION**

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California State University, Sacramento, Sacramento, CA

**M.S., Biological Conservation**, 2007

University of North Dakota, Grand Forks, ND

**B.S., Biological Science**, 1994

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**PROJECT EXPERIENCE**

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**Wind**

**Silver Mountain Wind Energy Project, Huerfano County, Colorado.** Team member on the development of the proposed 60 MW wind energy project in Huerfano County. Oversaw the avian, bat, and archaeological surveys, consultation with USFWS and CDOW, along with preparation of the Huerfano County 1041 permit application.

**Rock Creek Wind Energy Project, Gilliam County, Oregon.** Team member on the development and submittal of the Oregon EFSC permit for the proposed 393 MW Rock Creek Wind Power Facility in Gilliam County, Oregon.

**Greenwich Wind Energy Project, Northern Ontario.** Based on higher than predicted bat fatalities across numerous wind energy projects in Ontario and Saskatchewan, the Minister of Natural Resources required additional monitoring and mitigation measures for operating wind energy facilities. Responsible to initiate consultation with high-level regulatory officials, elected public officials, and local residents which resulted in an amended Bird and Bat Monitoring and Operational Plan for the Greenwich Wind Energy project.

**Cedar Point Wind Energy Project, Limon, Colorado.** After construction activities were initiated, RES Americas engaged a consultant to conduct a spring avian survey of the Cedar Point site. The survey identified a number of new raptor nests and identified the existence of a mating golden eagle pair in a formerly inactive large stick nest. Responsible for initiating consultation with USFWS and CDOW to develop a voluntary avian impact and monitoring mitigation measure plan.

**Keechi Wind Energy Project, Jack County, Texas.** Responsible for the agency consultation and initiation of avian and bat surveys and species-specific whooping crane, black-capped vireo, and golden cheeked warbler habitat and risk assessments. Based on survey results, agencies required the development of an Avian and Bat Protection Plan with specific focus on whooping cranes.

**Granite Mountain Wind Energy Project, San Bernardino County, California.** Team member on the development of the Draft and Final EIS/EIR for the 84MW Granite Mountain Wind Energy Project. The proposed project required development of an Avian Bat and Protection Plan along with an Eagle Conservation Plan and Incidental Take Permit Application.

**Long Draw Wind Energy Project, Holbrook, Arizona.** Team member on the development of the 200MW wind energy project near Holbrook, AZ. Oversaw the avian, bat, and archaeological surveys, USFWS and AGFD consultations, along with preparation of CUP application and testimony at the Board of County Supervisors Hearing.

**Black Mountain Wind Energy Project, Imperial County, California.** Obtained five meteorological anemometer mast tower permits for the proposed Black Mountain Wind project located in Imperial County in southeastern California near the Arizona border. Oversaw the avian, bat, and archaeological surveys required for the anemometer permit applications.

**Cedar Point Wind Expansion Project, Limon, Colorado.** Obtained five meteorological anemometer mast tower permits for the proposed 250MW Cedar Point Expansion project. Oversaw the avian, bat, and archaeological surveys and USFWS and CDOW consultations.

**White Mountain Wind Energy Project, Sweetwater County, Wyoming.** Completed due diligence review of the proposed acquisition of the White Mountain Wind Energy Project in Sweetwater County, Wyoming. The proposed 400MW project encompassed 8,527 acres of private fee lands, 240 acres owned by the State of Wyoming, and 4,398 acres of public lands managed by the BLM.

**Dunlap Wind Energy Power Project, Carbon County, Wyoming.** Managed the successful ISA permit prepared for the Dunlap 300-MW wind farm project. The ISA application focused on the findings of the project's socioeconomic impact analysis on the influx of temporary construction workers and impacts to local housing stock. Developed a detailed pronghorn telemetry research program to study the effects of wind energy construction and operation on the species. Also, successfully obtained the Carbon County Conditional

Use Permit. Provided expert testimony at the Industrial Siting Council and Public Service Commission public hearings.

**Seven Mile Hill Wind Energy Project, Carbon County, Medicine Bow, Wyoming.** Managed the successful ISA permit prepared for the Seven Mile Hill 118.5-MW wind farm near Medicine Bow. The application focused on the findings of the project's socioeconomic impact analysis, including temporary and permanent workforce impacts to housing stocks and transportation. Also prepared and developed an avian monitoring protocol with the Wyoming Game and Fish and Department. The ISA application analyses compared the socioeconomic and environmental baseline conditions of the area to the area primarily affected and prepared impact analyses of the influx of temporary construction workers. Provided expert testimony at the ISC public hearing conducted in Saratoga. Also, successfully obtained the Carbon County Conditional Use Permit from the Planning and Zoning Commission.

**Glenrock - Rolling Hills Wind Energy Project, Converse County, Wyoming.** Managed the successful ISA permit prepared for the Glenrock-Rolling Hills 237-MW wind farm project. The ISA application focused on the findings of the project's socioeconomic impact analysis on the influx of temporary construction workers and impacts to local housing stock. Obtained a Special Use Permit from the USFWS Migratory Bird Office for the removal of golden eagle nest platforms located on the reclaimed mine site. Provided expert testimony at the ISC public hearing conducted in Glenrock.

**High Plains – McFadden Ridge Wind Energy Facility, McFadden, Wyoming.** Managed the successful ISA permit prepared for the High Plains – McFadden Ridge 187.5-MW wind farm project near McFadden. The ISA application focused on the findings of the project's visual and noise impacts. In addition, extensive socioeconomic analyses including IMPLAN modeling detailed socioeconomic findings in Albany and Carbon counties. Provided expert testimony at the ISC public hearing conducted in Glenrock. Also, successfully obtained the Carbon County Conditional Use Permit from the Planning and Zoning Commission.

**Reno Junction Wind Energy Project, Campbell County, Wyoming.** Managed the successful ISA permit obtained for the 150MW wind farm near Savageton, WY. The application focused on the findings of the project's socioeconomic impact analysis, along with potential impacts to both eligible and unevaluated NHRP cultural resources. The ISA application analyses compared the socioeconomic and environmental baseline conditions of the area to the area primarily affected and prepared impact analyses of the influx of temporary construction workers in a remote region of Campbell County. Provided expert testimony at the ISC public hearing conducted in Wright.

**Simpson Ridge Wind Energy Project, Carbon County, Wyoming.** Managed the ISA permit preparation for the planned 300-MW Simpson Ridge wind energy project west of Medicine Bow. The application focused on avian, raptor, bat, and greater sage-grouse impacts within designated Core Area Habitat along with detailed cumulative analyses related to multiple industrial projects within Carbon County. Also, successfully obtained the Carbon County Conditional Use Permit from the Planning and Zoning Commission.

## **Solar**

**Moapa Solar Energy Center Project, Moapa River Indian Reservation, Moapa, Nevada.** Team member for the DEIS and FEIS of the 200MW PV solar project on 850 acres of land entirely located on the Moapa River Indian Reservation and the corridors for the transmission interconnection and access road located on the Reservation and on Federal lands managed by the BLM. The EIS provided a framework for the BIA and the BLM to make determinations and take respective Federal actions. The Federal action for the BIA was to approve or deny a lease and any associated ROW for the proposed solar project and associated facilities on tribal lands and for the BLM to grant, grant with modifications or deny the ROW application for proposed transmission lines and access road on Federal lands managed by the BLM and within a utility corridor on the Reservation. The EPA reviewed and commented on environmental impacts of the project and the Moapa Band to make decisions under their Tribal Environmental Policy Ordinance. The U.S. Fish and Wildlife Service completed Section 7 ESA consultation along with review for compliance with the MBTA. Lastly, the National Park Service reviewed the Project for potential impacts to nearby national historic trails.

**Quail Run Solar PV Project, Florence, Arizona.** Obtained a Conditional Use Permit and other local government permits for a 6MW photovoltaic solar farm near Florence, Arizona. The project was fast-tracked by the planning department and the CUP was obtained in 47 days. RES Americas developed the project and subsequently sold the project to another solar development company.

**RES Solar Chino Valley PV Project, Chino Valley, Arizona.** Obtained a Conditional Use Permit for a 20 MW photovoltaic solar farm in Chino Valley, AZ. RES Americas developed the project and subsequently sold the project to another solar development company.

**Golden Sands Solar PV Project, Gila Bend, Arizona.** Completed a Comprehensive Plan Amendment for the project site to allow solar development on a 960-acre parcel of Arizona State Lands. Initiated and completed all of the environmental studies necessary to complete the Arizona State auction process.

**Areva Solar, Asset Divestiture Due Diligence, Arizona and California.** Part of the due diligence team that evaluated the direct purchase of seven solar projects in Arizona and California. After the due diligence process was completed, RES Americas purchased two of the seven projects.

### **Conventional Generation**

**WyGen II Power Project, Gillette, Wyoming.** Managed the successfully obtained ISA Section 107 Waiver of Permit Application for the 100-MW base-load coal-fired power plant located east of Gillette. The application focused on the findings of the project's socioeconomic impact analysis on an influx of temporary construction workers and impacts to local housing stock. The analysis found housing to be extremely tight in the six-county area surrounding Gillette in Northeast Wyoming. Provided expert testimony at the Industrial Siting Council (ISC) public hearing conducted in Gillette.

**WyGen III Power Plant, Gillette, Wyoming.** Managed the successful ISA permit obtained for the 100-MW pulverized coal thermal power plant east of Gillette. The application focused on the findings of the project's socioeconomic impact analysis on an influx of temporary construction workers and impacts to local housing stock. The socioeconomic and environmental analyses focused on the impacts of the project appurtenant facilities on the 200-acre project site. Provided expert testimony at the ISC public hearing conducted in Gillette.

**Griffith Energy Project EIS, Arizona.** Lead Biological Resource Task Manager and Assistant Project Manager for the Griffith Energy Project EIS, a 600-MW natural gas-fired, combined-cycle technology merchant power project near Kingman, Arizona. Project issues involved construction of a 5-mile natural gas pipeline and 32 miles of transmission line through BLM Category I and III desert tortoise habitat. Additional responsibilities included development of the first of its kind Reclamation Operation Maintenance Plan - Cactus Transplant and Salvage Plan for both the 3.8-mile natural gas pipeline and 32-mile transmission line.

**Goldendale Power LLC, Washington.** Lead Biological Resource Task Manager for the Goldendale Power Project, a 180-megawatt (MW) gas-fired, combined-cycle, combustion-turbine power generation project adjacent to the Columbia River. Completed the Washington State Environmental Policy Act (SEPA) Environmental Checklist analysis for biological resources. In addition, prepared the wetland delineation for project impacts to wetlands and waters of the U.S., Section 404 permitting, and preparation of the BA for Section 7 ESA compliance. Project biological issues included anadromous fish entrainment and falcon nest avoidance and seasonal mitigation measure development. Additional responsibilities included performing a raptor survey of appurtenant linear facilities and development of a site restoration plan.

**Adelanto Energy Project, California.** Lead Biological Resource Task Manager and Assistant Project Manager for a mitigated Negative Declaration for the Adelanto Energy Project - a proposed 45-MW natural gas fired simple-cycle power facility. Project Components included a 115-kilovolt (kV) transmission line and natural gas pipeline. Project issues involved construction of the line through BLM Category III desert tortoise habitat. In addition, prepared BA for Section 7 ESA compliance, and the draft 2081 CESA consistency determination for the California Department of Fish and Game.

**Blythe Energy Project, Phase I, California.** Lead Biological Resource Task Manager for the preparation of the Application for Certification submitted to the California Energy Commission for the construction and operation of a Blythe Energy is the owner of the, a 520- MW natural gas fired electric-generating facility situated within the City of Blythe, California. Primary responsibilities included Section 7 Consultation and

preparation of the Biological Assessment, development of the Biological Resource Mitigation Implementation Plan, and obtaining the Section 404 and 401 permits and CDFG Streambed Alteration Agreement for the horizontal directional drill of the 32-inch natural gas pipeline under the Colorado River.

**Blythe Energy Project, Phase II, California.** Lead Biological Resource Task Manager for the preparation of the Application for Site Certificate submitted to the California Energy Commission for the construction and operation of a 360-MW single-cycle natural gas-fired merchant power plant. The power plant was proposed to be located entirely within the approved Blythe Energy Project I site boundary.

**Summit/Westward Energy Project, Oregon.** Lead Biological Resource Task Manager and primary regulatory support for the Application for Site Certificate submitted to the Oregon Office of Energy Project on the 520-MW combustion turbine project located in Columbia County, approximately 4.5 miles north of Clatskanie, Oregon. Project issues included developing noise and conceptual restoration plan to offset impacts to the endangered Columbian white-tailed deer. Additional responsibilities included comprehensive wetland delineation and mapping on 63-acre project site, Section 7 consultation and preparation of Biological Assessment, development of wetland mitigation plan and habitat mitigation plan, and final mitigation planning and implementation for wetland impacts within the 100-year floodplain of the Columbia River.

**High Desert Power Plant, California** Provided biological field surveys for BLM regulatory support on the 32-mile natural gas pipeline associated with the construction and operation of a 680- to 720-MW natural gas-fired merchant power plant near the Southern California International Airport, formerly George Air Force Base.

### **Transmission Lines**

**Trinity County Public Utility District Direct Interconnection Project, Western Area Power Administration – Sierra Nevada Region.** Prepared the biological resources impact analysis including Biological Evaluation/Biological Assessment, and a wetland and water of the United States survey for an EIS that would improve service to the Trinity Public Utilities District. Project issues involved crossing numerous jurisdictional waters of the U.S. including two crossings of the Trinity River, and northern spotted owl designated critical habitat. The project included both the development of a new transmission line and the upgrade of an existing line. The transmission line crosses federal lands managed by the Bureau of Reclamation, Bureau of Land Management and the Forest Service. The EIS satisfied the NEPA requirements of four federal agencies (Western, BOR, BLM, and FS).

**Desert Southwest Transmission Line Project EIS/EIR, Riverside and El Centro Counties, California.** Assistant Project Manager and Lead Biological Resource Task Manager for the preparation of CEQA and NEPA documentation for the construction of a proposed 118-mile transmission line from Blythe to the Imperial Irrigation District. Prepared and completed biological resource analysis for the EIR/EIS, and the BA for Section 7 Consultation compliance under the Endangered Species Act. Project issues involved construction of the line through both the federally designated Chuckwalla Critical Habitat Unit and BLM Chuckwalla Desert Wildlife Management Area for the desert tortoise and the Coachella Valley fringed-toed lizard designated critical habitat in the Coachella Valley Preserve Refuge.

**Imperial Irrigation District New 230kV "BN-BS" Transmission Line Project EIS, California.** Lead Biological Resource Task Manager and Assistant Project Manager for the preparation of a joint EIS/EIR for the Imperial Irrigation District and the BLM. The EIS/EIR addressed the environmental issues related to constructing and operating a new approximately 30-mile 230-kV transmission line, and amending the California Desert Conservation Area Plan to allow construction of a new transmission line across BLM lands. Project issues involved construction of the line through the federally designated Chuckwalla Critical Habitat Unit for the desert tortoise.

**Cranberry – Conover – Plains 138-kV Transmission Line Project, Wisconsin.** Project Manager for the preparation of an Environmental Assessment for the new, 138-kV Cranberry – Conover – Plains transmission line in northern Wisconsin. The new 138-kV line will travel a 12 to 15-mile line between Eagle River and Conover, and convert an additional 73 miles of existing transmission line from 69 kV to 138 kV. The line will cross two separate National Forests in Wisconsin and Michigan. Project issues include rerouting of the transmission line out of a large bog complex, visual resource, and recreation impacts.

**Colorado – New Mexico 230-kV Intertie Project EIS, Colorado and New Mexico.** Lead Biological Resource Task Manager for the 125-mile, 230-kV transmission line between Walsenberg, Colorado and Gladstone, New Mexico as part of the Northern New Mexico Interface Path 48. The EIS was prepared to satisfy the requirements of the Rural Utility System. Prepared the BA for Section 7 ESA compliance and developed a vegetation management and monitoring plan.

**Gardner Park – Central Wisconsin – Morgan Werner West 345-kV Transmission Line Project, Wisconsin.** Prepared Certificate of Public Convenience and Necessity for the 50-mile line 345-kV transmission line that linked to the existing Morgan Substation, southwest of Oconto Falls, to the new Werner West substation in the New London area. The Public Service Commission of Wisconsin approved the client CPCN application.

**Desert Southwest Transmission Line Project Routing Study, Riverside and Imperial Counties, California.** Prepared a Transmission Line Routing Study for a new Double Circuit 230-kV or 500-kV Transmission Line to deliver energy generated at the new Blythe Power Plant. The goal of the Routing Study was to identify and evaluate route options along with the identification and recommendation of a preferred alternative.

### **Water Related Projects**

**Program EIR for Regional Water Facilities Master Plan, San Diego, California.** Lead Biological Resource Task Manager for the preparation of a Program EIR to assess the environmental effects of implementing the San Diego County Water Authority's Regional Water Facilities Master Plan. The purpose of the Master Plan was to evaluate the ability of the SDCWA to continue to meet its goals for current plans for water supply and facility improvements and to recommend 28 new facilities or improvements to existing facilities needed to meet SDCWA water supply goals through 2030.

**Lake Hodges CEQA and NEPA Compliance, San Diego County Water Authority, San Diego, California.** Prepared various permits and provided compliance monitoring associated with the development of components of their Emergency Storage Project. The ESP includes a new dam and reservoir at Olivenhain; reoperation of Lake Hodges; and expansion of the San Vicente Reservoir. Other planned facilities include pipelines, pump stations, treatment capacity, and flow control facilities. Greystone was responsible for preparation of environmental documentation and agency coordination to satisfy FERC requirements for a 40 MW conduit exemption; CEQA compliance for the pumped storage hydroelectric project; and ensured document compliance with all required environmental mitigation measures and conditions.

**SDCWA and IID Conserved Water Transfer Program, San Diego, California.** The IID-SDCWA Transfer comprised 200,000 acre-feet of conserved agriculture water available to the San Diego region annually. The Imperial Irrigation District Water Conservation and Transfer Project Draft Environmental Impact Report/Draft Environmental Impact Statement issued 125 mitigation measures to offset all resource issue impacts. Managed the preparation of the detailed mitigation cost estimates for the 125 mitigation measures relating to the water transfer agreement between the SDCWA/Imperial Irrigation District EIS/EIR.

**Vallejo Sanitation Sewer Overflow Environmental Impact Report, Vallejo, California.** Prepared the NOP, Initial Study, and baseline biological resource study for the EIR that evaluated three alternative programs to further address non-permitted overflows from the wastewater collection, treatment, and disposal system operated by the District on behalf of the citizens in the Vallejo area.

**City of Galt Wastewater Treatment Plant Expansion Project Environmental Impact Report, Galt, California.** Prepared the biological resource impact section for the proposed wastewater expansion that included new pipeline construction and expansion of the facility. Relevant issues and duties performed include impact analysis to Skunk Creek and associated sensitive species, mitigation development, wetland and waters of the United States delineation, and a focused raptor survey.

**City of Galt Industrial Park Water Storage Reservoir and Booster Pump Station Initial Study/Mitigated Negative Declaration, Galt, California.** Prepared the biological resource and sensitive

species analysis. The Project consisted of constructing aboveground storage reservoirs, a control building and pump station, 1.1-mile water pipeline, and other associated site improvements.

**Green Valley Community Church Sewer Connection Project and Wastewater Treatment Plant Decommissioning Initial Study/Mitigated Negative Declaration, Placerville, California.** Prepared a “waters of the United States” analysis and sensitive species assessment for the decommissioning of the wastewater treatment pond and hook-up to the El Dorado Irrigation Districts’ sewer system.

**Weber Dam Seismic Retrofit Construction Project Report, Placerville, California.** Prepared an Environmental Project Report for the El Dorado Irrigation District for its proposed reconstruction project for the Weber Dam, a concrete multiple-arch structure constructed in 1924. After the Categorical Exemption was declared, Ryan performed the site-specific analyses of biological resources to verify that no exceptions to the Categorical Exemption existed for the project.

**Ketchikan Lakes FERC Relicensing Application, Ketchikan, Alaska.** Project Biologist assisting with studies of water quality, salmonid surveys, and intensive stream mapping of aquatic habitat, in Ketchikan Creek and its tributaries for the preparation of the FERC Relicensing Application.

**Denver Water Board FERC Relicensing Application, Denver, Colorado.** Project Biologist, responsible for baseline vegetation and wildlife data collection, threatened and endangered species investigations, and biological resource impact analysis.

### **Oil & Gas / Pipeline**

**Oil Recycling Waste Treatment and Salt Water Disposal Wells, North Dakota, Texas, Ohio.** Oversaw environmental permitting, construction and commissioning activities for modular oil recycling waste treatment facilities and salt water disposal wells.

- **Gonzales Waste Treatment Facility, Gonzales, Texas**
- **Gonzales Waste Treatment Facility Salt Water Disposal Well, Gonzales, Texas**
- **PPI Waste Treatment Facility, Stanley, North Dakota**
- **Statoil Waste Treatment Facility, Williston North Dakota**
- **New Town Waste Treatment Facility, New Town, North Dakota**
- **Johnson’s Corner Waste Treatment Facility, Johnson’s Corner, North Dakota**
- **Alexander Waste Treatment Facility, Alexander, North Dakota**
- **New Town Salt Water Disposal Project, New Town, North Dakota**
- **Anadarko ARF Waste Treatment Facility, Ft. Lupton, Colorado**
- **Johnson’s Corner Salt Water Disposal Well, Johnson’s Corner, North Dakota**
- **Christine Waste Treatment Facility, Christine, Texas**
- **Big Lake Waste Treatment Facility, Big Lake Texas**
- **Utica Waste Treatment Facility, Cadiz Ohio**
- **Bakken Waste Treatment Facility, Dickinson, North Dakota**

**FERC Reclamation Pipeline Inspections - 6 Western States.** Acted as a FERC Certified Pipeline Inspector to conduct and prepare 12 reclamation investigations and reports on natural gas pipeline projects spanning six western states. Investigations detailed streambed and wetland restoration and revegetation success/failures along with site prescriptions to ensure future reclamation success.



**Williston-Basin FERC Pipeline Project – Montana to North Dakota.** Lead Biological Monitor on a 32-mile natural gas pipeline spanning two western States. The project required compliance with mitigation measures resulting from FERC, USFWS, and USACOE permitting that encompassed numerous threatened and endangered species, and jurisdictional wetlands and waters of the United States.

**Frontrunner FERC Environmental Report/Environmental Assessment, Denver, Colorado.** Prepared biological resource impact analyses including wetland delineation and detailed wetland and drainage impacts, and baseline wildlife and vegetation studies for a proposed natural gas pipeline in Colorado.

**Pathfinder FERC Environmental Report/Environmental Assessment, Wyoming & Colorado.**

Prepared biological resource impact analysis including baseline threatened and endangered species investigation, comprehensive wetland delineation, and baseline wildlife and vegetation studies for a proposed 110-mile natural gas pipeline between Glenrock, Wyoming and Rockport, Colorado. Also, prepared and implemented a comprehensive reclamation plan for the entire pipeline route.

**Construction Compliance Monitoring, Clay Center Pipeline FERC Environmental Report, Clay Center, Nebraska.** Prepared biological resource impact analysis including wetland and drainage crossings on a 15-mile pipeline. Also performed continuous environmental construction monitoring to comply with FERC certificate conditions.

**Fort St. Vrain – Meade Pipeline FERC Environmental Report, Denver, Colorado.** Prepared biological resource impact analyses including wetland delineation and detailing wetland and drainage impacts for a 7.5-mile pipeline. Also performed continuous environmental construction monitoring to comply with FERC certificate conditions.

### **Other Industrial Development**

**MHA Nation Clean Fuels Refinery EIS, New Town, North Dakota.** Assistant Project Manager and Lead Biological Resource Task Manager for the 10,000-barrel/day refinery EIS located on the Ft. Berthold Indian Reservation in Ward County, North Dakota. Project issues included filling of jurisdictional wetlands, Section 7 ESA consultation, and obtaining a Clean Water Act National Pollutant Discharge Elimination System (NPDES) permit for the process water discharges associated with operation of the proposed refinery.

**Jesse Morrow Mountain EIR, County of Fresno, California.** Oversaw the preparation of an EIR, CUP, and other agency permit requirements for a proposed Cemex, Inc., RMC hard rock aggregate mining operation along the southern side of Jesse Morrow Mountain. RMC owns approximately 2,200 acres on Jesse Morrow Mountain of which 824 acres along the southern side of the mountain is proposed for mining. The quarry operation during the first 30-year period of mining operations would occur from an elevation of approximately 1,750-feet MSL to about 1,100-feet MSL.

**Woolstenhulme Ranch Gravel Mine EIR, Fresno County, California.** Provided biological impact analysis for the proposed 635-acre Woolstenhulme Ranch sand and gravel mining project in Merced, California. Relevant issues included Swainson's hawk nesting buffer establishment and monitoring and development of an onsite wetland mitigation bank.

**AT&T Fiber Optic Project - Dunnigan to Point Arena, Northern, California.** Lead Biological Monitor on a 175-mile fiber optic construction project spanning five counties. The project required compliance with mitigation measures resulting from USFWS, CDFG, and USACOE permitting that encompassed numerous threatened and endangered species, jurisdictional wetlands and streambeds, and several critical habitats and communities.

**Spenceville Mine Closure Initial Study/Mitigated Negative Declaration, Nevada County, California.** Prepared the biological resource and sensitive species analysis for the closure of the Spenceville Mine in Nevada County. Also prepared a reclamation plan and secured all applicable permits for a nearby ephemeral stream that had been impacted by the abandoned mine.

**Live Oak Initial Study and Associated Wetland Studies, Galt, California.** Prepared a wetland delineation and mitigation plan for jurisdictional wetlands within the Galt Industrial Park Expansion Area, and completed CEQA compliance documentation for industrial development and a City-sponsored drainage improvement project. The delineation was submitted to the U.S. Army Corps of Engineers for formal verification. Prepared

assessment for potentially occurring threatened and endangered species, and completed analyses of mitigation options were completed concurrent with the delineation review process. In addition, prepared the Pre-Discharge Notification application and off-site mitigation plan to be prepared for submittal to the Army Corps of Engineers; an application for Streambed Alteration Agreement to be prepared for the Department of Fish and Game; and a Water Quality Certification permit application was prepared for submittal to the Regional Water Quality Control Board.

**Palomar Transfer Station EIR, Carlsbad, California.** As the Project Biologist, prepared an EIR for expansion of the Palomar Transfer Station, a solid waste handling facility in the City of Carlsbad. The Final EIR was approved and certified by the City of Carlsbad.