



LUKAS KOVANDA

STAFF BIOLOGIST

2309 NORIEGA STREET, #61, SAN FRANCISCO, CA 94122 | 612-999-3410 | LUKAS@SUNSETECOLOGICAL.COM

SUMMARY OF QUALIFICATIONS

Applied Biologist and Environmental Scientist with over three years of experience spanning federal fisheries research, applied ecology, and large-scale environmental monitoring across the US. Specialized in fisheries telemetry and movement ecology to evaluate environmental risk and species responses in regulated river systems. Previous experience in leading field-based research operations for ESA-listed and managed species. Adept at translating complex ecological datasets into actionable insights for federal, tribal, and regional partners in support of science-driven water and fisheries management.

TECHNICAL EXPERIENCE AND EXPERTISE

Fisheries Biology/Aquatic Ecology

- Fisheries ecology
- Acoustic telemetry
- ESA-listed species monitoring and ecological risk assessment
- Advanced fish handling procedures under IACUC protocols

Population Dynamics Modeling

- Stock-recruitment and life-cycle modeling
- Survival analysis and mark-recapture modeling

Geospatial Analysis / GIS

- ArcGIS Pro spatial analysis and cartographic production
- Telemetry-based spatial ecology

Hydrology / Environmental Data Analysis

- Hydrologic and thermal regime analysis (flow, temperature, TDG, turbidity, water quality)
- Climate-driven ecological modeling and environmental impact assessment
- Environmental datasets analyses
- Regulatory environmental risk assessment for dam operations and river management

Field Biology / Fisheries Operations

- Acoustic and PIT telemetry array deployment
- Fish capture, tagging, and handling
- Electrofishing, seining, and juvenile fish sampling operations
- Boat-based field operations
- Environmental monitoring of physicochemical parameters (temperature, flow, turbidity, dissolved oxygen)

PROFESSIONAL EXPERIENCE

Sunset Ecological Solutions, LLC, San Francisco, CA

6/2026 – Present

- Prepared Biological and Fisheries Reports for permitting efforts
- Applied for regulatory permits on the behalf of the applicant for various projects in wetlands, on creeks, in the Pacific Ocean, and in San Francisco Bay
- Conducted biological and construction monitoring to support regulatory permits.
- Conducted vegetation and stream bank monitoring in compliance with federal, state, and local permits.
- Completed GIS data collection and mapping to aid permitting and biological reports

Fish Biologist, U.S. Geological Survey, Western Fisheries Research Center, Cook, WA 1/2025 – 4/2026

- Conduct large-scale fisheries and environmental data analysis integrating hydrologic, thermal, water quality, and biological datasets to evaluate ecological risk and species responses in regulated river systems.
- Develop and apply survival, life-cycle, fish survival, and population models.
- GIS-based spatial analysis and mapping products.
- Deploy, maintain, and troubleshoot acoustic and PIT telemetry systems in ESA-listed fishes.

- Collaborate with tribal, federal, and regional partners to translate ecological modeling results into applied water management and regulatory decision-making.
- Conducted field sampling, tissue processing, and laboratory coordination

Wildlife Biologist, Environmental Litigation and Operations Services (ELOS), Hammond, LA 7/2024 – 8/2024

- Prepared technical documentation and biological reports supporting Clean Water Act permitting and environmental compliance efforts.
- Conducted wetland delineations, biological assessments, and field evaluations in accordance with federal and state regulatory standards.
- Performed construction and environmental monitoring to ensure compliance with USACE permit conditions and protection of sensitive habitats.
- Produced GIS maps, spatial data products, and field documentation to support regulatory submissions and project reporting.
- Coordinated with contractors and field crews to implement avoidance and minimization measures during active construction activities.

EDUCATION AND CERTIFICATIONS

- | | |
|---|--|
| • M.S. in Ecology and Evolutionary Biology, Tulane University, New Orleans, LA (May 2024) | • DOI/USGS Defensive Driving |
| • B.S. in Environmental Biology, Minor in Marine Science, Tulane University, New Orleans, LA (May 2023) | • UTV/Off-Road Safety Training |
| • ESRI ArcGIS as a Geospatial AI Platform Course | • Cold Stress & Tool Safety Awareness |
| • HAZWOPER Training | • Working With Zebrafish (Danio rerio) in Research Settings |
| • USGS Electrofishing & In/Over Water Safety | • Institutional Animal Care and Use Committee (IACUC) Protocols Training |
| | • Eagle Scout, Edina, MN (2014–2018) — Conservation Award |

REPRESENTATIVE PROJECTS

Valero Benicia Refinery Maintenance Project, Alameda County, CA

Oversaw authorship of an Incidental Take Permit for ongoing maintenance dredging at the Valero Benicia Marine Terminal within Carquinez Strait. Provided biological analysis and technical writing support for permit documentation evaluating potential effects on federally and state listed aquatic species. Assessed species occurrence and habitat use within the San Francisco Estuary, including Delta Smelt, Longfin Smelt, Chinook Salmon, Central Valley Steelhead, and Green Sturgeon. Identified potential impacts associated with dredging activities and contributed to the development of avoidance and minimization measures, including seasonal work windows and operational restrictions, to reduce effects on sensitive estuarine habitats and listed species.

Gas Bubble Trauma (GBT) and Additional Studies

Lukas led comprehensive TDG exposure and fish health assessments. Developed detailed GIS maps to document long-term study sites and analyzed multi-year catch datasets. At CSGS Led the preparation of a full report for the Bonneville Power Authority, overseeing multi-year data analysis, creating all visual figures in R and ArcGIS Pro, and authoring the complete written report. Additionally, served as a technical peer reviewer for Lewis River and Upper Columbia GBT reports and for a laboratory manuscript on GBT dissipation in Sculpin.