

SCIENCE | RIVERS | ENGINEERING LIDAR | WETLANDS

CAPABILITY STATEMENT

Our team provides civil & hydraulic engineering design, fisheries engineering, 2D hydraulic analysis, drone services (including LiDAR), GIS, and construction specializing in river and waterway projects. We provide science-based design for rivers, wetlands, water resources, fish & wildlife habitat, channel reconfigurations, waterway structures, barrier removal, hydraulic modeling, fluvial geomorphology, and natural process design. Our survey capabilities include LiDAR, topo and aerial drone (UAV) surveys, single-beam sonar bathymetric, and RTK geodetic surveys. Services include wetland delineations, fisheries science, fish barrier removal, bridge hydraulics, GIS analysis and land mapping, site/civil grading, sediment transport analysis, aerial drone captures, and drafting.

CORE COMPETENCIES

- Surveying (LiDAR, bathymetry, topography, remote sensing)
- Terrain Mapping (LiDAR drone, photogrammetry, orthoimagery, GIS)
- Civil and Hydraulic Engineering
 - 2D hydraulic modeling, hydrologic analysis, floodplain inundation
 - Stream restoration, watershed and habitat assessments, floodplain enhancement, fisheries structures, fish ladders/fishways
 - Fish barrier, culvert removals/replacements, fish screens & diversions
 - Spring system development, groundwater monitoring
- Science-based Ecology and Geomorphology
 - Riparian plantings and cottonwood expertise
 - Stream evolution geomorphology and Stage 0
 - River form design based on natural processes, wetland design/delineations
- Floodplain Management
 - CLOMRs/LOMRs, LOMAs, floodplain development permitting, FEMA compliance, No-Rise certifications
- Site Design / Erosion Control
 - Site planning and design, SWPPPs
- Stormwater Management, drainage, dredging, detention/retention
- Construction techniques, Construction Management
 - In-stream dewatering, construction management, turbidity monitoring, field inspections

WHY US?

- Extensive expertise (our Senior staff have a minimum of 2 decades of science-based engineering design, ecological studies, aquatic expertise, and construction management).
- FAA pilot licenses for 3D photogrammetry and LiDAR (both fixed wing and drone-based photography)
- Engineering based on applied science with proven, published results.
- Certified Floodplain Manager
- Technical and readable site grading plans and surface modeling.
- Established teaming relationships with General Contractors, structural engineers, and larger consulting firms.

PAST PERFORMANCE

Bonneville Power Administration/NOAA-Fisheries, Chinook salmon and steelhead habitat recovery goals, Multiple projects in the Columbia River basin, ranging from \$30K - \$2million.

Idaho Power Co., Avista Corp., Multiple ongoing contracts regarding bull trout recovery, irrigation diversions, fish screens, and water resources.

State of Idaho, Fish and Game, 4-yr ongoing services contract for fish/wildlife habitat design & construction oversight, design up to \$1million/year.

Tribal Nations, Columbia basin ESA recovery goals.



ENGINEERING SOLUTIONS
CONSTRUCTION MANAGEMENT

COMPANY DATA

CAGE: 98F82

DUNS: 117380862

UEI: HKBKEGERC733

NAICS Codes: 541330, 541370, 541990,
115310, 237990, 712190

8(a) Certification

Economically Disadvantaged

Woman-Owned Small Business

Disadvantaged Business Enterprise (ID)



U.S. Small Business
Administration



U.S. Small Business
Administration



U.S. Small Business
Administration

8(a) CERTIFIED

WOSB CERTIFIED

EDWOSB
CERTIFIED

LICENSES

- Engineering licenses held in Idaho, Oregon, Montana, Washington, Wyoming
- FAA Unmanned Aircraft Certified Drone Pilots
- Private pilot license and aircraft ownership
- Certified Erosion and Sediment Control Lead (CESCL)

AWARDS

- 2024 Idaho Business Person of the Year (US Small Business Administration)
- 2024 Best Project Team Award (American Fisheries Society, Idaho Chapter)
- 2022 Distinguished Service Award
- 2020 Best Project Award for Aquatic Habitat (American Fisheries Society, Idaho Chapter)
- 2019 Best Project Award for Aquatic Habitat (AFS, Idaho Chapter), restoring critical steelhead habitat
- National River Restoration Science Synthesis Team

CONTACT US:

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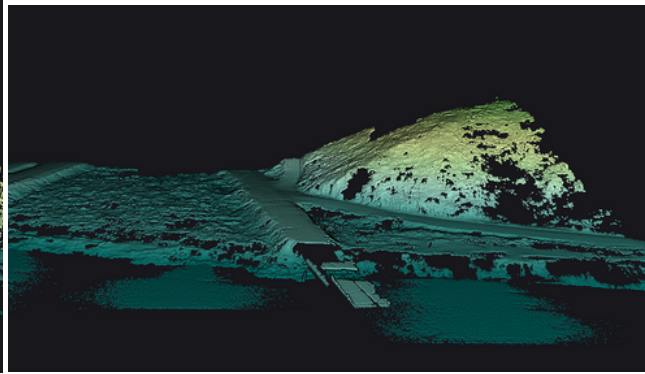
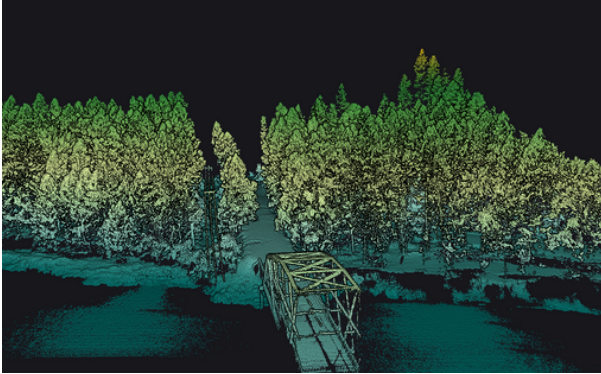
Suite 300

Eagle, ID 83616

CAPABILITIES

LiDAR, Bathymetry, Survey, and Terrain Mapping

RIVHAB owns and operates drone-based LiDAR technology for clear and accurate terrain mapping through thick vegetation. We also own bathymetric survey equipment, including sonar, that provides terrain definition in real-time linked to our RTK base station. This state-of-the-art mapping data capture allows improved terrain for more accurate hydraulic modeling of streams and rivers.



LiDAR capture showing vegetation and bare earth processed terrain model.

Remote Sensing

Unmanned remote sensing technology can be useful to inform project design, provide watershed and habitat assessments, and create accurate terrain models. We have experience in thermal imagery (including water temperature sensing), high-resolution aerial images and video capture, 3D terrain mapping, vegetation classification, hydraulic modeling, and development of monitoring plans for continued success of project work.



RIVHAB Summary of Services

- Site assessments, habitat assessments, and watershed assessments, preliminary site evaluations
- LiDAR terrain mapping
- Topographic and bathymetric survey
- GIS Analysis, relative elevation models, floodplain evaluation
- Conceptual planning and design
- Feasibility studies and alternative analysis
- Stormwater management and drainage basin calcs, irrigation designs
- Permitting, technical analysis, and design reports
- Engineering design and analysis
 - fishways and fish ladders
 - 2D scour analysis
 - barrier removal
 - fisheries and hydraulic engineering
 - force/balance log jam structural stability
 - site/civil grading
- Hydraulic modeling
- Geomorphic assessment and sediment transport evaluation
- Fish passage, road crossings, bridges
- Channel reconfiguration
- Floodplain science and calculated inundation
- Monitoring plans
- Project fund-raising
- Cost estimates for design and construction
- Project management
- Construction bidding, technical specs, including Public Works expertise and construction management
- Aerial drone photogrammetry and orthoimagery
- Ecosystem design for benefit of species

