RIVHAB

ENGINEERING SOLUTIONS
CONSTRUCTION MANAGEMENT

ENGINEERING, SCIENCE, LIDAR, WATER RESOURCES, CONSTRUCTION

COMPANY DATA

CAGE: 98F82
DUNS: 117380862
UEI: HKBKEGERC733
NAICS Codes: **541330**, 541690, 541990, 115310, 238910
8(a) Certification
Economically Disadvantaged
Woman-Owned Small Business

SBA 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)
- 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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CAPABILITY STATEMENT

Our team provides survey, LiDAR, design, civil & hydraulic engineering, environmental compliance/permitting, GIS analysis, and construction specializing in river and waterway projects. We provide science-based design for rivers, wetlands, water resources, fish 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, water quality sampling, aerial drone captures, and drafting.

CORE COMPETENCIES

- Surveying (LiDAR, bathymetry, topography, remote sensing)
- Terrain Mapping (LiDAR drone, photogrammetry, orthoimagery, GIS)
- Civil and Hydraulic Engineering
  - Stream restoration
  - Fish barrier, culvert removals/replacements
  - Fish ladders, fishways, fish passage, and habitat designs
  - Site/Civil grading plans and site layout
  - 2D Hydraulic modeling, floodplain inundation
  - Watershed and habitat assessments
  - Fisheries and waterway structures
  - Spring system development, groundwater monitoring
  - Floodplain inundation and design
- Science-based Ecology and Geomorphology
  - Riparian plantings and cottonwood expertise
  - Stream evolution geomorphology and Stage 0
  - River form design based on natural processes
- Permitting, Construction techniques, Construction Management
  - Wetland science and delineations, water resources, fisheries science
  - No-rise floodplain studies and permitting
  - In-stream dewatering and construction management
  - Stormwater Pollution Prevention Plans and state permitting

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.
- Technical and readable site grading plans and surface modeling.
- Established teaming relationships with General Contractors, structural engineers, and larger consulting firms.

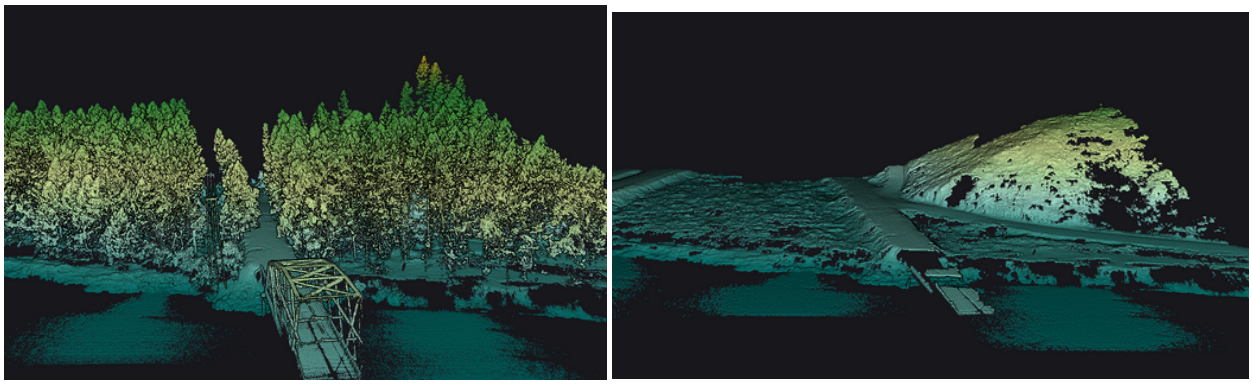
PAST PERFORMANCE

Bonneville Power Administration and Pacific Coastal Salmon Recovery Fund projects for Chinook salmon and steelhead habitat, Multiple waterway, fish passage, and floodplain restoration projects starting in May 2010 - Present. Designed, led, and oversaw the construction of nearly 100 habitat enhancement projects funded by federal monies in the Columbia River basin, ranging from $30K - $2million. Projects permitted through Idaho Programmatic or Bonneville Power Programmatic (HIP), or prior to HIP, with Biological Assessments. NOAA-F and BPA provided technical engineering review.

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
- Wetland impacts, delineations, and environmental compliance
- Permitting, technical analysis, and design reports
- Engineering design and analysis
  - fishways and fish ladders
  - barrier removal
  - fisheries 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