



# bri Wildlife and Hydroelectric Energy



## Wildlife and Renewable Energy Development

BRI biologists have a breadth of expertise researching and monitoring wildlife in relation to energy development. We work at a range of geographic scales, from monitoring energy development sites to addressing complicated regional-scale research questions. We collect data on all aspects of the ecosystem, from environmental covariates to invertebrates to apex predators. We manage ecological data, conduct geospatial analysis, and create ecological models. Below are examples of work we have conducted within the hydroelectric sector.

## Hydroelectric Licensing and Compliance Studies

BRI staff has extensive history working with hydro companies, private consultants, and state and federal resource agencies to develop and execute wildlife and fisheries studies related to FERC hydroelectric licensing and compliance. Our expertise ranges from study planning and management to field work, data analysis and reporting. We have participated in studies for the successful relicensing of numerous hydro projects in Maine, and have performed ongoing compliance work on several projects for more than two decades.

### *Our staff's experience includes:*

- Field Capabilities
  - We maintain state and federal permits for handling a wide variety of species
  - Boat captains are National Association of State Boating Law (NASBLA) certified
  - Threatened and Endangered species surveys
  - Aerial, boat, and snowmobile telemetry tracking of tagged fish and wildlife
- Fisheries Studies
  - Fish telemetry studies (radio-tagging, tracking)
  - Spawning surveys
  - Fish sampling (electrofishing, seining, trap netting, fish weirs, etc.)
  - Tributary access surveys
  - Mussel surveys
  - Drawdown/fish stranding surveys
- Avian Studies and Management
  - Common Loon population monitoring and management
  - Waterfowl and wading bird surveys
  - Shorebird and Black Tern surveys
- Mammals and Other Wildlife
  - Bat inventory surveys
  - Furbearer tracking studies
  - Wood turtle tracking studies
- Mercury Assessments and Compliance Monitoring
  - Capture and sampling of Bald Eagles, Common Loons and other avian piscivores as bioindicators of mercury
  - Fish sampling for mercury, using agency-certified field and lab techniques

### PROJECT CONTACT

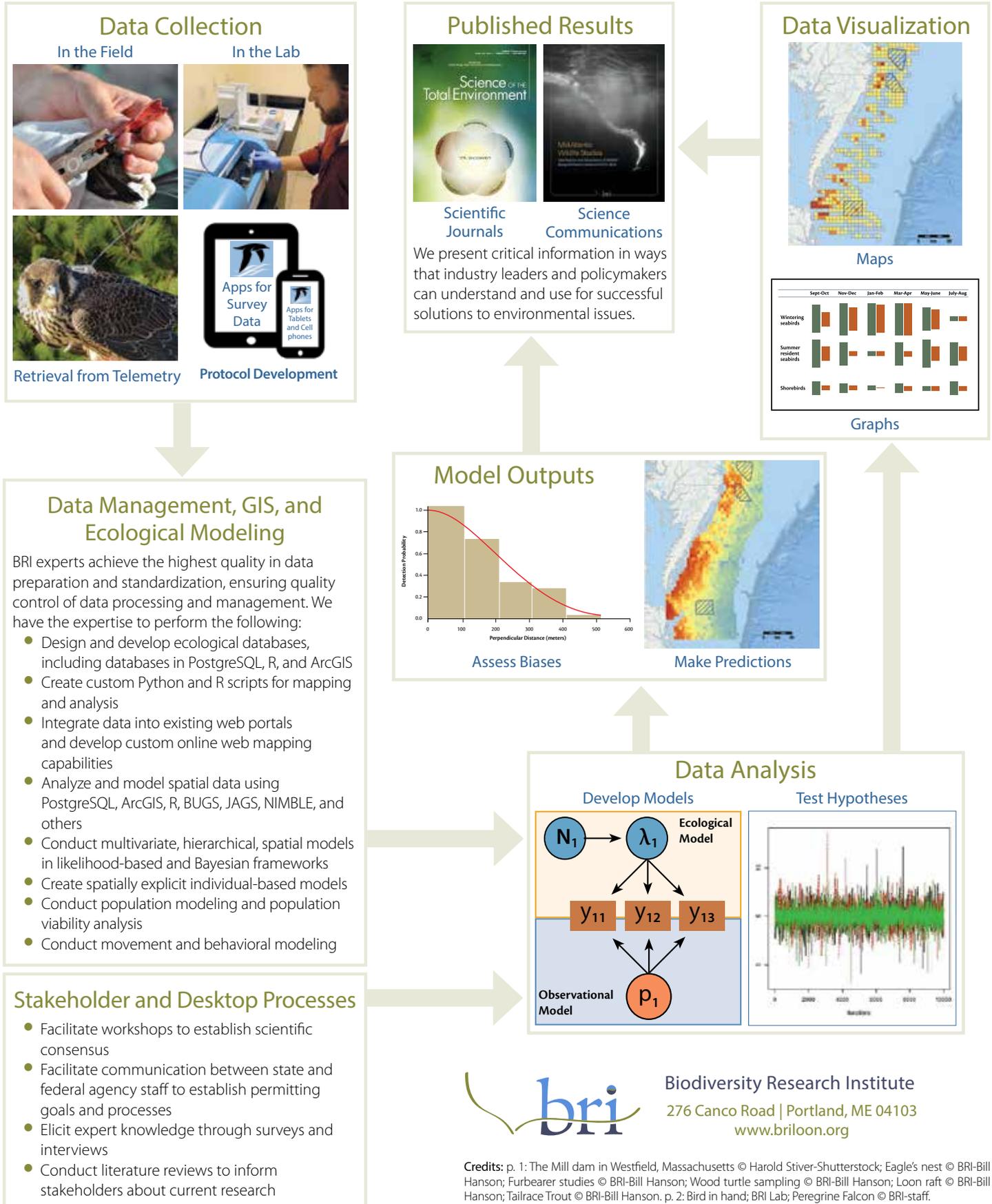
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### CONTRIBUTING STAFF

Bill Hanson—*FERC Wildlife Specialist*  
Shearon Murphy—*FERC Compliance Specialist*  
Tim Welch—*Fisheries Specialist*

# Data Science and Communication

BRI's reputation and integrity are founded on the quality of our work. Throughout every stage of the scientific process—from data collection, to analysis, interpretation, and dissemination—we follow strict protocols and adhere to best practices to provide decision makers with the most accurate information.



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**Credits:** p. 1: The Mill dam in Westfield, Massachusetts © Harold Stiver-Shutterstock; Eagle's nest © BRI-Bill Hanson; Furbearer studies © BRI-Bill Hanson; Wood turtle sampling © BRI-Bill Hanson; Loon raft © BRI-Bill Hanson; Tailrace Trout © BRI-Bill Hanson. p. 2: Bird in hand; BRI Lab; Peregrine Falcon © BRI-staff.