

# Fisheries Analyst

## ROLE OVERVIEW

**A fishery analyst is responsible for synthesizing, analysing, and interpreting large information to provide an understanding of industrial fishing operations, supply chains, regional and sector compliance issues. They provide research and data analysis to promote the sustainable use of fisheries and contribute to inform policy development.**

Fisheries analyst is knowledgeable in freshwater biology, fisheries operations and management, ecology, marine and environmental legislation. They contribute to grant applications, support negotiations, and lead the delivery of key technical projects with regards to fisheries sustainability, improving supply chain processes, and ocean conservation. They engage fish and wildlife stakeholders, marine scientists and represent the organization in strategy sessions.

They usually work in a variety of environments such as; government organizations, Non government organizations, and private sector. On occasion, some degree of travel is involved and for prolonged periods where necessary. A minimum of a diploma or certificate in fisheries or aquaculture science is often request but a university degree or masters in natural sciences is often preferred.

## STRATA LEVEL: 3B – Technical Specialist

### Also Known as:

- Fisheries and Wildlife Policy Analyst
- Marine and Fisheries Analyst
- Fisheries Development Officer
- Fisheries Specialist
- Fisheries Advisor

### Education and Experience:

- Minimum of a diploma or certificate in fisheries or aquaculture science
- Preferably a university degree or masters in in biological sciences, renewable sciences, fisheries or aquaculture sciences natural resources, public administration, or related discipline.
- Working knowledge of relevant software's (ArcGIS, QGIS, MS Office, database management, amongst others).
- At least one year's experience in fisheries management/policy or a combination of education and experience

### Associated NOC(s):

- **4161** – Natural and applied science policy researchers, consultants and program officers



## TECHNICAL



### Project Proposals

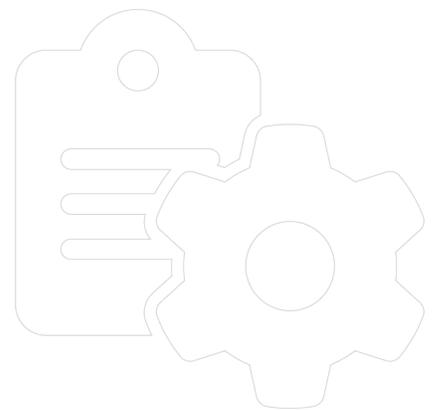
**Synthesize and draft project proposals to establish project scope, budget, impact, risks, and objectives to receive project funding.**

- Reviews internal research to support proposals and submissions on fisheries projects to government and private organization.
- Manages grant applications and proposal submissions to bid for relevant projects of interest to the organization.
- Identify the resources required to support project proposals to ensure all project activities have requisite funding.
- Gathers relevant information from vested parties to draft a well-written and structured document to provide the deliverables and scope of a project.

### Data Analysis

**Applies recognized statistical tools and techniques to interpret and analyze data for the purposes of uncovering trends, patterns, and opportunities to enable strategic decision making..**

- Applies advanced quantitative data analysis techniques and methods to determine characteristics, trends, and impacts of human activities.
- Applies advanced qualitative data analysis techniques and methods to determine characteristics, trends, and impacts of human activities.
- Compares results with expected norms for fish populations to develop insights and make recommendations to decision makers.
- Prepares technical and research reports on observations, findings, and/or impacts to communicate results to stakeholders, industry, government, or the public.



## Database Administration

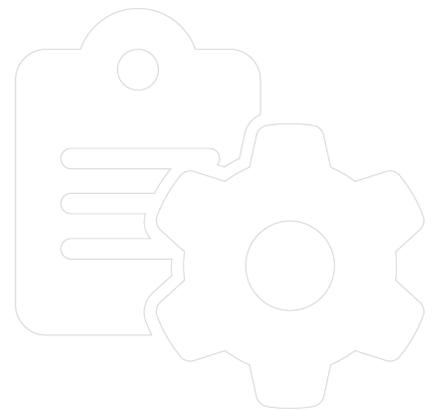
**Organize and maintain databases to ensure that information is available and accessible to the organization to facilitate analysis, research, and decision making.**

- Uses appropriate software to maintain organized and up to date information logs.
- Collates information from a range of sources to produce a single comprehensive dataset.
- Contributes to the development of scientific databases to maintain and update information.
- Contributes to developing protocols for database management to ensure regulatory compliance.
- Applies query programming knowledge to access and manage scientific data.
- Stores and archives fisheries population data to create searchable repositories to maintain transparent record keeping.

## Project Team Management

**Oversees a team of professionals to effectively and efficiently produce the required output to ensure project[s] are completed on time and budget.**

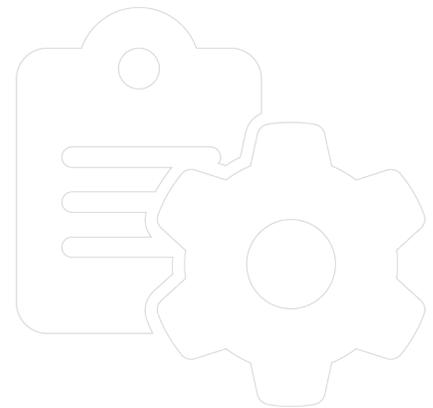
- Provides direction and supervision towards project planning, implementation, and monitoring for the technical aspects of a project.
- Monitors and controls the allocation of staff and resources to meet project deliverables.
- Provides constructive feedback for junior technical staff to support professional development.
- Manage tasks and projects according to approved scopes of work to deliver quality reports on schedule and within budget
- Contributes to the development of detailed work plans and tasks for field crews to ensure work is effectively allocated to achieve desired goals in an appropriate time frame.



## Stakeholder Relationship Management

**Develops and manages partnerships with necessary agencies, departments, and institutions to achieve organization and community sustainability targets.**

- Identify opportunities for consultation and collaboration with the local community to expand the organization's network and increase future potential relationships.
- Work with the local community to encourage an understanding and awareness of environmental, social, and economic objectives.
- Maintains working relationships, both internally and externally, to foster a network of influence and connectivity to improve prospects.
- Illicit feedback from the community on organizational projects and objectives to evaluate and respond to conflicts of interest.



## PERSONAL AND PROFESSIONAL



### Communication

**Positively directs outcomes by delivering communication that results in a better understanding of goals and objectives that captures interest and gains support for immediate action.**

- Provides briefings on species profile to management to conserve the natural diversity of fish and fish habitat leading to ecological sustainability.
- Delivers presentations on research findings to interested parties to propose project plans and management.
- Engages in public speaking events to promote conservation efforts of the organization.

### Problem Solving

**Identifies problems and uses logic, judgement, and evidence to evaluate alternative scenarios and recommend solutions to achieve a desired goal.**

- Considers the impact to the organization and environment when analyzing specific project objectives and goals.
- Analyzes operational data to evaluate operations, understand trends, and potential areas of concern to take appropriate action where required.
- Considers all pieces of information when attempting to solve problems to produce a cognizant and comprehensive solution.
- Takes an unbiased stance to interpreting new information to solve a problem in an object manner.



## LEGAL, REGULATORY, AND POLICY



### Regulatory Compliance

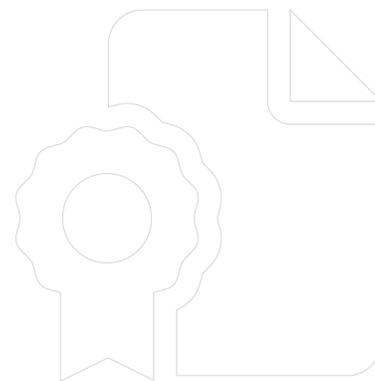
**Adheres to specific regulation and legislation within a defined jurisdiction to monitor organizations compliance and implementation of best practices.**

- Demonstrate knowledge of provincial and federal aquatic legislation and regulatory agencies
- Provide oversight on provincial and federal regulatory requirements associated with working in and around water and wildlife habitats
- Applies for licenses to collect fish for scientific purposes.
- Consults with different government agencies to secure regulatory approvals and permits.

### Health and Safety Procedure

**Abides by and advocates specific workplace safe operating procedures and occupational health and safety requirements within a defined jurisdiction to ensure the health and safety of others.**

- Establishes safeguards and best practices within a project team to align with organizational health and safety plan to ensure the safety of all team members.
- Leads routine safety meetings with project team members to ensure all parties are aware of potential risks and hazards.
- Participates in safe workplace training as required to ensure an up to date understanding of health and safety best practices.
- Adheres to appropriate health and safety procedures in all aspects of work to ensure zero-incidents.
- Use appropriate personal and protective equipment while sampling fish populations to maintain hygiene and biosecurity while collecting data from fish populations.
- Sterilize equipment following use to mitigate biosecurity risks.



## ENVIRONMENTAL



### Fisheries Management Planning

**Oversees the planning and implementation of a fisheries management plan to monitor and report project activity performance to ensure all project activity is compliant with relevant legislations.**

- Deploys resources under the conditions of scarcity to implement a fisheries management plan.
- Monitor fisheries activities within the project scope to ensure all project components comply with relevant legal, environmental, and organizational requirements.
- Adjusts fisheries planning to respond to unforeseen circumstances and constraints to minimize risks and ensure project deliverables are accounted for.
- Asses the impacts of new developments to existing fisheries ecosystems to ensure local ecosystem maintains biodiversity and biosecurity.

### Fisheries Management

**Provides oversight and technical expertise on the operational activities of a fishery to control and monitor activities to ensure compliance with relevant legislative, organizational, and environmental practices.**

- Records and reports on operational activities to maintain accurate and transparent records of fisheries activity.
- Monitors the collection and analysis of fisheries data and samples to manage resources and ensure accurate, evidence-based reporting.
- Oversee the capturing of fish for sampling to monitor operations and confirm the health and wellbeing of captured fish throughout the process.
- Ensures all waste and surplus materials are correctly disposed of to ensure the biosecurity and well-being of all parties.
- Prepares permit and/or regulatory approval applications to obtain project approvals from agencies.



## Fisheries Health

**Establishes health and maintenance programs for aquatic populations to identify abnormalities and maintain fish health.**

- Implement programs to control treatments and maintain fish health through the maintenance of environmental conditions and stocking densities in holding units.
- Implement prophylactic health programmes to maintain the health of fish.
- Recognise ill-health and abnormal symptoms in fish to assist with diagnosis and request veterinary advice where appropriate.
- Control the preparation of fish health treatments to administer fish health treatments to correct adverse effects.
- Monitor treated fish to evaluate their recovery to document the effectiveness of treatment.
- Maintains records of all treatments and programs to ensure data is accurate and transparent.

## Fish Habitat Assessment

- Collate existing information from maps, photographs, fish distribution, habitat use to establish a baseline for the area of study.
- Determine the quality and quantity of fish habitats by fish species and life stage to ascertain which species are at risk.
- Identify potential at risk species and stocks as targets for habitat restoration efforts.
- Measure and assess fish passage/stream crossing structures to determine fish passages.
- Identify and quantify fish habitat disturbance indicators to provide sufficient information to identify and prioritize restoration options.
- Conduct a quantitative stream pebble count to evaluate sediment processes in streams to assess erosion rates, stream characters, sediment supplies, and other parameters.
- Evaluate fish habitat conditions to determine if habitat conditions impair/limit fish production.
- Suggest preliminary fish habitat restoration strategies to take appropriate restoration or mitigative measure to improve a habitat ecological characteristic.



## Fish Mortality Incidents

**Responds to fish-kill incidents to determine the cause of mortality and take appropriate actions to reduce and prevent future fish deaths.**

- Monitor a fish-kill incident to determine the nature and likely cause of fish stress or death and to report the incident to an appropriate authority.
- Prepare, maintain, and deploy equipment to respond to fish kill incident to control and minimize the impact of the fish-kill incident.
- Prepare holding units to receive and maintain the condition of live fish captured from the fish-kill incident.
- Adheres to legal, environmental, and organizational requirements to dispose of dead fish and waste.

