



**Request for Qualifications  
Species Expertise – Regulation 242/08 - *Endangered Species Act***

SLR Consulting (Canada) Ltd. is a member in good standing of the Ontario Waterpower Association, with its fees paid in full until December 31, 2013. Megan Lloyst is an aquatic biologist employed by SLR.

Name and Qualifications:	Megan Lloyst, B.Sc, M.Sc
Species/grouping of species for which recognition is requested	American Eel <i>Anguilla rostrata</i>
Expertise and experience with Species/grouping of species	<ul style="list-style-type: none"> <li>• Involved with the development, implementation, and operation of an American Eel Stocking Effectiveness Monitoring Program in collaboration with Fisheries and Oceans Canada; 2010, 2011, &amp; 2012.</li> <li>• Authored a Master’s thesis (manuscript in review); The Distribution and Habitat Associations of Stocked American Eels in the Upper St. Lawrence River and Lake Ontario.</li> <li>• Literature search and review of information and resources for the Ontario Ministry of Natural Resources to inform the development of guidance, technical information, and resource material to support the implementation of the Endangered Species Act and associated regulations and policy pertaining to American Eel.</li> </ul>
Expertise and experience in the development and implementation of mitigation, effects monitoring and effectiveness monitoring plans	<ul style="list-style-type: none"> <li>• Assessed the passability of a variety of barriers, differing in structure size and material, in Lake Ontario tributaries               <ul style="list-style-type: none"> <li>○ Linked successful upstream migration with size-class relations</li> </ul> </li> <li>• Studied the impacts of non-passable barriers; density-dependent mortality and skewed sex ratios.</li> <li>• Determined suitable habitat types for several life-stages of American Eels used this information to assist in the development of conservation strategies and best management practices associated with stocking.</li> <li>• Presented American Eel graduate research at CCFR (2011), AFS- Ontario Chapter (2011), IAGLR (2012).</li> </ul>
Expertise and experience in the hydroelectric sector	<ul style="list-style-type: none"> <li>• Comprehensive literature review of fish ladder designs to facilitate eel passage.</li> </ul>

Curriculum vitae (max 1 page) attached.

# MEGAN LLOYST, B.Sc., M.Sc.

## Aquatic Ecologist

### Biography

Miss Lloyst specializes in the characterization and assessment of stream and lake fish communities and fish habitat. She is experienced in developing and managing aquatic surveys, assessments and monitoring programs. Miss Lloyst has experience with the development of mitigation and compensation strategies as it relates to fish and fish habitat removal or destruction.

For the past two years, Megan has worked to complete her Master's degree with Dr. Thomas Pratt and Dr. Mike Fox. Megan's research investigated the distribution and habitat associations of stocked American Eel in Lake Ontario and the Upper St. Lawrence River as part of a coordinated stocking effectiveness monitoring program with the Fisheries and Oceans Canada. As a result of her research, Megan has a great deal of knowledge as it relates to Species at Risk Act (SARA), Endangered Species Act (ESA), and the Fisheries Act.

Miss Lloyst is experienced in conducting literature reviews, applying statistical analysis, and synthesizing reports related to ecological processes in aquatic ecosystems. She can effectively develop and implement effective monitoring programs related to aquatic species abundance, dispersion, and habitat preferences

### Project Experience

#### Current Projects

- **Project Ecologist** - Literature search and review of information and resources for the Ontario Ministry of Natural Resources to inform the development of guidance, technical information, and resource material to support the implementation of the Endangered Species Act and associated regulations and policy pertaining to fish species listed as Endangered or Threatened on the Species at Risk in Ontario List.
- **Project Ecologist** - Environmental Assessment for a proposed mine site north of Wawa, Ontario. Assisting with gap analysis from previous fisheries and aquatics baseline report, field plan design and data collection and analysis, and fish and fish habitat compensation report. Implemented non-traditional methods of sampling for remote northern study locations.
- **Project Ecologist** - Preliminary design and environmental assessment for the rehabilitation and operational improvement needs of approximately 25 km of Highway 401. Lead the collection of data, field investigation and determination of impacts and mitigation on 24 watercourse crossings.
- **Project Ecologist** - Review and develop standard protocols for Ontario Waterpower Association to collect data and information to assess the effectiveness of waterpower mitigation for Lake Sturgeon.
- **Project Ecologist** - Comprehensive Fisheries Compensation Plan for Riverview Heights Landowners Group to address a Draft Plan Approval and gain agreement by a number of agencies regarding the treatment of fish habitat through the Block 40-3 area, Brampton.

#### Fish and Fish Habitat, Benthic Invertebrates

- **Research Assistant, Fisheries and Oceans Canada** - Involved with the creation, implementation and operation of an American Eel Stocking Effectiveness Monitoring Program the bullet.
- **Assistant Fisheries Biologist, Ministry of Natural Resources** - Provided assistance and support to a multi-disciplinary research team that investigated the effects of invasive species on the structure and function of aquatic food webs in Lake Ontario.



#### EDUCATION

- M.Sc.  
Environmental and Life Sciences  
Trent University, 2012
- B.Sc with Honours  
Environmental Sciences  
Guelph University, 2010

#### MAIN SPECIALTY

- Fish Ecology and Conservation Biology

#### AREAS OF EXPERTISE

- Natural Resource Management
- Water Resources

#### MEMBERSHIPS & ASSOCIATIONS

- AGLR
- OFAH
- AFS

#### HEALTH & SAFETY TRAINING

- WHMIS
- TDG
- First Aid and CPR
- Wilderness First Aid
- Swift Water Rescue
- ATV Training
- Bear Aware

#### ADDITIONAL TRAINING

- Class 1 Crew Leader
- Electrofishing License
- SVOP-small vessel operator
- MED A3- small vessel safety course
- Marine First Aid and CPR
- Restricted Operators