

**ONTARIO WATERPOWER  
ASSOCIATION – REQUEST FOR  
QUALIFICATIONS**

SPECIES EXPERTISE  
REGULATION 242/08

*Endangered Species Act*



September 30, 2013

## ONTARIO WATERPOWER ASSOCIATION – REQUEST FOR QUALIFICATIONS

### Species Expertise – Regulation 242/08 – Endangered Species Act

September 30, 2013

Michael A. Johns Tech. Dipl. Senior Fisheries Technologist / Project Manager			
Species name	Individual Name	Contact Information	Member of Waterpower Association
American Eel <i>Anguilla rostrata</i>	Mike Johns <a href="mailto:mike.johns@stantec.com">mike.johns@stantec.com</a>	Stantec Consulting Ltd 70 Southgate Drive, Suite #1 Guelph ON N1G 4P5 Phone: (519) 836-6966 Fax: (519) 836-2493	✓
Lake Sturgeon <i>Acipenser fulvescens</i>			
<b>Description of Expertise &amp; Experience for:</b>			
<p><b>Relevant Species / Grouping of Species for which they seek to be recognized as a subject matter expert (max 100 words)</b></p> <p>Lake Sturgeon (<i>Acipenser fulvescens</i>) – Mike has experience with Lake Sturgeon through the development and implementation of a large-scale baseline sampling program on the Mattagami River (Little Long Reservoir, Mattagami River). He contributed to the study design, was the field crew leader, and prepared the associated impact assessment report. Data were collected to assess the local Lake Sturgeon population, and to assess fish movement and migration patterns, fish diet and contaminant levels in muscle tissue.</p> <p>American Eel (<i>Anguilla rostrata</i>) – On behalf of the New York Power Authority, Mike participated in an American Eel mark-recapture study within a 50 km reach of the St. Lawrence River. The study was designed to distinguish between resident and migrating eels. Mike collected eels using hoop nets and boat electrofishers. He performed eel morphological analysis of external characteristics and detailed necropsies, including the collection of otoliths, blood, ovary and eel muscle tissues. Mike also conducted histological analysis of ovary tissue, focusing on oocyte developmental stage and diameters.</p>			
<p><b>Development and implementation of mitigation, effects monitoring and effectiveness monitoring plans (max 100 words)</b></p> <p>Mike has managed multi-year, multi-disciplinary projects involving the ongoing assessment of water, sediment, fish communities and benthic invertebrate communities.</p> <p>Mike co-managed a project in which he contributed to the development of mitigation, effects monitoring, and effectiveness monitoring for Lake Sturgeon, for a proposed hydroelectric dam on the Mattagami River. Mike has also developed numerous study designs and biological monitoring programs for aquatic effects monitoring for the mining and pulp and paper industries. Following approvals of his study designs by the reviewing agencies (Environment Canada), Mike implemented and managed the field programs.</p>			
<p><b>Hydroelectric Sector (max 100 words)</b></p> <p>Mike planned, coordinated and assisted with implementation of a large-scale baseline sampling program on a reach of the Mattagami River to assess the size and health of a Lake Sturgeon population. He used data gathered from the sampling program to contribute to mitigation and compensation planning for a proposed hydroelectric dam. Mike also participated in the field program and sample analysis for the collection of American Eels for a hydroelectric facility on the St. Lawrence river at Ogdensburg, New York.</p>			

Mike has 20 years of environmental consulting experience, specializing in aquatic ecosystem inventory, monitoring and assessment. He has designed sampling programs and developed aquatic mitigation and compensation measures at sites across Canada. Mike's project experience includes obtaining Fisheries and Oceans (DFO) approvals for numerous projects including new bridges, marinas and ferry terminals. He has worked for a variety of industry sectors including transportation, mining, aggregates, forestry, and pulp & paper, as well as municipal, provincial and federal governments. He is a recognized and certified Fisheries Specialist with the Ontario Ministry of Transportation. Mike has managed multi-year, multi-disciplinary projects involving the ongoing assessment of water, sediment, fish communities and benthic invertebrate communities

## EDUCATION

Terrain and Water Resources Technician  
Diploma, Sir Sanford Fleming College / Terrain  
and Water Resources, Lindsay, Ontario, 1991

Terrain and Water Resources Technologist  
Diploma, Sir Sanford Fleming School of Natural  
Resources / Terrain and Water Resources  
Technology, Lindsay, Ontario, 1992

### Training Certificates:

Royal Ontario Museum Fish Identification  
Workshop  
Ontario Stream Assessment Protocol (OMNR)  
Class 1 Electrofishing Certification (Crew Leader,  
Boat Operation)

## MEMBERSHIPS

Member, American Fisheries Society

## PROJECT EXPERIENCE

### Species at Risk Experience

Highway 21 (Bluewater) Rehabilitation  
*Mike was responsible for managing the natural sciences  
team and coordinating report production. Mike reviewed  
preliminary designs and applied the Environmental Guide  
for Fish and Fish Habitat (December, 2008) to determine  
the appropriate course of action for protecting aquatic  
Species at Risk in the area.*

St. Lawrence River American Eel Study\*,  
Ogdensburg, New York  
(see under Hydroelectric Power Projects)

### Hydroelectric Power Projects

St. Lawrence River American Eel Study\*,  
Ogdensburg, New York

*Mike was responsible for the collection of American Eels  
over a 50 km reach of the St. Lawrence River, using hoop  
nets and boat electrofishers as the primary collection  
methods. Detailed morphological features were measured  
on all eels and detailed necropsies were performed on a  
sample of the eel population*

Little Long Reservoir Lake Sturgeon Population  
Assessment\*, Kapuskasing, Ontario

*Mike contributed to the design of a study to estimate the  
population of Lake Sturgeon (*Acipenser fulvescens*) in the  
Little Long Reservoir (Mattagami River). Mike was the field  
crew leader, responsible for coordination of all field  
activities and personnel, at a remote sampling site. Data  
were also collected to assess fish movement and migration  
patterns, fish diet and contaminant levels in muscle tissue.*

Shekak River Post-Construction Monitoring

Dam 4, Trent-Severn Waterway, Trenton, Ontario

### Monitoring Programs

Aquatic Environmental Effects Monitoring  
Programs

*Over the past 15 years, Mike has designed and implemented  
numerous field programs to collect baseline data and to  
monitor aquatic effects of mining effluents (sites in  
Manitoba and throughout Ontario).*

\* denotes projects completed with other firms