



September 30, 2013

VIA E-MAIL

Mr. Colin Hoag, Policy Advisor
Ontario Waterpower Association
380 Armour Road, Suite 264
Peterborough, Ontario K9H 7L7
CANADA

Qualifications Statement for Christine Tomichuk
Species Expertise – Regulation 242/08 – Endangered Species Act

Dear Mr. Hoag:

I present this statement of qualifications to the Ontario Waterpower Association for consideration as a subject matter expert for Lake Sturgeon relevant to Ontario Regulation 242/08.

I joined Kleinschmidt Associates (Kleinschmidt) in 2003 as a Senior Fisheries Biologist. I have 35 years of experience in determining the potential impacts of hydroelectric generation on aquatic resources. Kleinschmidt is a member of the Ontario Waterpower Association.

EXPERTISE / EXPERIENCE RELEVANT TO THE LAKE STURGEON

Twenty-three years of shortnose, Atlantic and lake sturgeon experience along the US East Coast, also lake sturgeon passage experience in the upper Midwest, including:

- Biological design and evaluation of upstream and downstream lake sturgeon passage facilities on the Wisconsin and Menominee Rivers and shortnose sturgeon passage on the Connecticut River;
- Conducted Evaluation of an Angled Louver Facility for Guiding Sturgeon to a Downstream Bypass for the Electric Power Research Institute;
- Telemetry studies to determine population dynamics, abundance, and distribution; and,
- Developed a sturgeon strike probability model for assessments of strike from a marine hydrokinetic turbine.

EXPERTISE/EXPERIENCE IN DEVELOPMENT AND IMPLEMENTATION OF MITIGATION, EFFECTS MONITORING, AND EFFECTIVENESS MONITORING

Over thirty years of experience developing and conducting studies to determine the impact of hydroelectric generation on aquatic resources, designing and implementing mitigation efforts to

minimize impacts, and conducting studies to determine the effectiveness of mitigation efforts. Studies and mitigation topics include:

- Pre and post construction telemetry studies via special permit for ESA listed shortnose sturgeon to assess construction effectiveness;
- Developed habitat benefits calculations;
- Entrainment and turbine passage studies;
- Multi-year fish assemblage assessments to determine effects of minimum bypass reach flows; and,
- Assessment of project operations on fish passage.

EXPERTISE/EXPERIENCE IN HYDROELECTRIC SECTOR

Thirty-five years of experience as a fisheries biologist working in the hydroelectric industry in the Northeast and Midwest, USA. My experience and expertise is related to upstream and downstream passage of lake sturgeon, shortnose sturgeon, American shad, Atlantic salmon, American eels, and river herring in large rivers including the Connecticut, East, Merrimack, Thames, Mohawk and Housatonic Rivers in the Northeast, and the Wisconsin and Menominee Rivers in the Midwest.

Please see attached for my resume of direct relevance to the above mentioned criteria. Please contact me at 860.767.5069 or at chris.tomichek@kleinschmidtusa.com should you have any questions or require additional information.

Sincerely,

KLEINSCHMIDT ASSOCIATES



Christine A. Tomichek
Senior Fisheries Biologist

CAT:FHW

Attachment: Resume

BACKGROUND

Christine Tomichek joined Kleinschmidt Associates as a Senior Fisheries Biologist in 2003. She graduated from the University of Massachusetts, Amherst with a degree in Fisheries Biology. At Kleinschmidt, Ms. Tomichek has managed and participated in a wide variety of projects including conceptual and final fishway designs, habitat assessments and characterizations, and effectiveness testing of fish protection devices. She has 35 years of experience designing, conducting, and managing investigations on fish passage and behavior, impingement and/entrainment, and habitat issues at hydroelectric power stations. Ms. Tomichek has extensive expertise in endangered species assessment and currently holds an Endangered Species research permit for shortnose sturgeon. She joined Kleinschmidt in 2003. Prior to joining Kleinschmidt, Ms. Tomichek was employed by Northeast Utilities and was involved in anadromous fish restoration projects in the Connecticut and Merrimack Rivers. Ms. Tomichek has experience planning and implementation of anadromous fish restoration programs, design, evaluation and operation of upstream and downstream fishways, development of fish protection measures and devices, agency consultation and negotiation, and the preparation and execution of environmental impact assessments. Ms. Tomichek also specializes in studies relating to hydropower impacts and relicensing. She is familiar with federal and state environmental permitting and has been involved in developing strategies for mitigating project impacts in the northeast region.

PROJECT EXPERIENCE

Electric Power Research Institute (EPRI)

Project manager for research on field verification of guidance of American eels and endangered shortnose sturgeon along an angled louver systems. Project work included design set-up and monitoring of a radio telemetry system using both Lotek Wireless and Grant Systems Engineering technology. Thirty juvenile shortnose sturgeon and thirty American eels were surgically radio-tagged, and detection histories were established to determine migratory behavior.

School Street Project Downstream Fish Passage Effectives Study Brookfield Energy Liverpool, NY

Assess downstream fish passage for blueback herring, American eel and resident species at a large hydroelectric project in the lower Mohawk River at Cohoes Falls. Conducted site visits, agency consultation and negotiation,

designed studies for radio telemetry and hydroacoustic monitoring.

Verdant Power, LLC Pilot License Application, Roosevelt Island New York, NY.

Lead fisheries biologist for endangered species and essential fish habitat consultation, produce Biological Assessments and collaborated on a strike probability model for listed shortnose and Atlantic sturgeon for a 30-unit hydrokinetics project in the East River. This project was the first hydrokinetic project to receive a FERC license.

Approach and Route of Passage Study Radiotracking of Shortnose Sturgeon, Holyoke Gas & Electric

Project manager for research and field verification on approach and route of passage of endangered shortnose sturgeon at the Holyoke Dam from 2006 to 2009. Study consisted of collection via gill net sampling for the endangered shortnose sturgeon. Radio-tagged and detection to determine migratory behavior. Worked with National Marine Fisheries Service to develop a Biological Assessments for Biological Opinion and Incidental Take Permit.

Ramping Study Stevenson Dam First Light Services, LLC

Project manager for stranding study and oversight of team that developed 2-dimensional unsteady hydrodynamic model of the tailrace channel and to evaluated changes to velocities within the channel due to ramping operations. Data supported evaluations affects to fish habitat and stranding.

Fish Passage Conceptual Design and Agency Negotiations Alliant Energy Madison, WI

Fisheries biologist on a team working with the client to negotiate design criteria and prepare conceptual drawings for the first fish elevator to be constructed in the Midwest, on the Wisconsin River at Prairie du Sac.

Menominee River Fish Passage Feasibility Study URS Corporation Wisconsin and Michigan

Project manager for an Army Corp of Engineer funded lake sturgeon passage feasibility study at 5 sites on the Menominee River along the border of Wisconsin and Michigan. Work includes fish passage alternative analysis, design and habitat assessment analysis.