To:	Board of Management
From:	Dr. William A. Rapley Executive Director Conservation, Education & Wildlife
Subject:	2015 GREAT LAKES PROGRAM REPORT
Date:	2016-03-29

Summary:

Highlights of a novel year for the 20+ year initiative entitled Great Lakes Program follows. Classroom statistics totaled over 15,500 participants in 12 school boards. The development of new initiatives for the Great Lakes was the key focus for 2015 and into 2016. New initiatives include two additional grades, creation of a bilateral podcast, adding a satellite educator for Southwestern Ontario, and new elementary student resources.

Recommendations:

It is recommended that the 2015 Great Lakes Program Report be received for information.

Financial Impact:

The Great lakes Program is grant funded. All staff delivering this program are non-permanent, some working over eight years with this conservation program. Expenses reflect the level of funding and deliverable objectives with these grants. Over a five year period, the annual budget has ranged from approximately \$250K to \$500K.

Background:

Cynthia Lee is the Curator of Fishes & Marine Invertebrates and oversees the Great Lakes program. The Great Lakes Program has been offered since 2002, arising from the success of a local species at risk called the redside dace - a project established in the mid 1990's. The Great Lakes Program has evolved to be a multi-program initiative focusing on the conservation of this unique and important freshwater resource. A core initiative is providing bilingual classroom outreach and multilingual public messaging from Chatham to Ottawa. However, equal effort focuses on the rear & release of Atlantic salmon, habitat rehabilitation, field studies, freshwater mussels conservation, and linking with citizens of the Great Lakes of Africa.

The Program has over a dozen partnerships and takes the Toronto Zoo, with water and aquatic species at risk conservation, from Southwestern Ontario to the Ottawa region. Increasingly, the aquatic conservation community is turning to this Program for its expertise, skills and professional interpretive materials.

2015 Great Lakes Program 2016-03-29 Page 2 of 2

This Program is administered by the Curator of Fishes & Marine Invertebrates, and is delivered by two grant funded coordinators and four to six part time staff and interns—as funds are awarded.

1.0 New Great Lakes Outreach Initiatives

Significant program development occurred in 2015 to provide innovative new technology, a change in messaging, and to strategically expand the reach of the Great Lakes Program. Classroom visits were reduced to provide staff time to develop these new initiatives.

1.1 Bi-lateral Partnership Creating Podcasts:

Two podcast videos were produced by program coordinators for the 2014 Great Lakes Teaching Resource, entitled "Introducing Your Great Lakes" AND "Stewardship and You", in partnership with Great Lakes Discovery World in Milwaukee, Wisconsin.

- Bilateral Great Lakes Network partner initiative
- New partnership with Discovery World, Milwaukee
- Partner provided production studio, technical staff
- Great Lakes Program provided content, staff and funding
- Target audience grade 8 classes province wide

1.2 Created a Satellite Educator

Purpose to hire and place staff to reach priority regions identified by funding agencies.

- Target region: <u>Sarnia-London, ON</u>
- Hired & trained a new outreach educator ultimately based in Sarnia
- Three month period with extension into 2016
- Reaching approximately 2,830 educators and students

1.3 Zoo Freshwater Mussels Workshop. Pilot.

Purpose to attract schools to the Zoo site October & November.

- Multiple, day long workshops for mussels conservation
- Seven high schools & 350 students

1.4 Program Enhancement:

Purpose to meet educator feedback, develop new initiatives for program depth, and attract funding.

• Added two additional grades:

Grade 4 – Habitats and community, science & technology curriculum Grade 6 – Biodiversity

• Developed new presentations (English & French)



2015 Great Lakes Program 2016-03-29 Page 2 of 2

1.5 New Great Lakes Activity Booklet

New publication designed, produced & printed.

- Targets grade 4 new program in 2015
- Increased content to include multiple species & water conservation initiatives
- Green initiative using premium recycled paper
- Produced with an Algonquin College Applied Museum Studies intern

2015 Outreach Classroom Statistics

- 15,500 program participants
- 120 schools
- 12 School boards
- Focus Grades: 1, 2, 7, 8, 11

2.0 Aqua-Links "Connecting to partners & wildlife"

Aqua Links represents the partnership development initiative for the Great Lakes Program.

2.1 Classroom Rearing & Release of Atlantic Salmon (extirpated L. Ontario species)

The Aqua-Links Program ran for its 5th year in 2015. This program places Atlantic salmon eggs in classroom aquaria, January to June, to rear and then release the fry into local streams. Partners include the Ontario Federation of Anglers & Hunters and Ontario Ministry of Natural Resources & Forestry and e-linking with East African partners working on Lake Victoria.



2.2 New Aqua-Links Partnership

In 2015, we welcomed a new funding partner—Toronto District School Board. TDSB approached the Zoo to expand their involvement with GLP arising from their involvement with our Great Lakes Teaching Resource. They directly funded an additional ten schools to join the program.

2015 Aqua-Links Salmon Statistics

- 27 schools, Mississauga to Peterborough Ontario
- Grades 2 12 participated
- 3,000 Atlantic salmon reared and released
- New funding partner- Toronto District School Board
- Continue a wait list of 40+ schools



2.3 Cultural Twist: Shoreline Cleanup & "Fine Art"

The Aqua Links Coordinator ran a shoreline clean up in Peterborough, Ontario. The event included a unique link with the <u>National Art Gallery of Canada</u>, Ottawa, to create art for display in Peterborough and in the Americas Pavilion, Toronto Zoo.

3.0 Freshwater Mussels Public Awareness:

To complement the Kawartha Lakes and GTA mussel field studies, the 2015 outreach campaign entitled "I am Important. I am Protected" included:

- TZ Mussels banner circulation in Kawartha Lakes Library system with accompanying handouts. July-August
- Distribution of laminated mussel posters to lake association bulletin boards in region.

• Distribution of materials at the Federation of Ontario Cottager Association (FOCA) AGM.



3.1 New! Freshwater Mussels - Android APP

- Completed development of an Android APP for mussel reporting.
- Target audience: families 10 years to adult.
- Hired a MARS-based startup
- Focus group tested
- Invited by DFO to partner in 2016 with app development

Conclusion:

The Great Lakes Program in addition to education outreach, includes research for aquatic species at risk, international partnerships and invasive species projects. This was a year where program development was a major focus to reflect educator feedback and to create innovative, effective conservation programming.

William A. Rapley, D.V.M., M.Sc. Executive Director Conservation, Education & Wildlife