



June 8, 2016

RE: STARS INNOVATION CREDIT – Fish feed additive trial with MTS Environmental Holdings Inc., NSERC Engage Grant 2015-16

To Whom It May Concern:

I am writing this letter to affirm the details of the Fleming College Salmonid Hatchery and our involvement in a NSERC Engage funded research project aimed at validating an innovative food additive to increase growth of rainbow trout, as it relates to the STARS Innovation Credit.

I have been involved with the Salmonid Hatchery at the Frost Campus for the past five years as a Technologist/Hatchery Manager. At this facility we assessed the performance of a novel feed additive in domesticated rainbow trout. Trout were raised in six circular tanks that were equalized in terms of fish density (15,000 fish in total). These rearing units were divided into three different feed rations or treatments, including a non-additive control group, all were replicated. Fish growth over the study period was used to assess variability between groups.

With the aid of students, staff, and MTS Environmental - industry partner, the Fleming College Salmonid Hatchery NSERC feed trial aims to:

- Demonstrate and promote fish husbandry practices that promote growth in production rainbow trout.
- Educate students on the theory, design, and implementation of the scientific method in a research setting/facility.
- Practice sound, reliable and repeatable data collection techniques.
- Allow students to interpret and equalize water quality parameters that could impact fish growth and project data.
- Minimize the potential for confounding variables to introduce noise or errors into the study.
- Accomplish all of the above using modern and sustainable water recirculation and filtration technologies.
- Support sustainable and optimized fish protein production by way of healthy, tested, and performance driven fish feeds.

Should you require any additional information, I would be pleased to assist you.

Regards,

Ryan Hill

Technologist – Salmonid Hatchery, Aquaculture Program, Fish and Wildlife Program
Fleming College, Frost Campus



June 8, 2016

RE: STARS INNOVATION CREDIT – Lake Ontario Atlantic Salmon Restoration Program, Fleming College
Salmonid Hatchery

To Whom It May Concern:

I am writing this letter to affirm the details of the Fleming College Salmonid Hatchery and our involvement in the Lake Ontario Atlantic Salmon Restoration Program (LOASRP) as it relates to the STARS Innovation Credit.

I have been involved with the Salmonid Hatchery at the Frost Campus for the past five years as a Technologist/Hatchery Manager. At this facility we produce ~100 000 Atlantic salmon fry per year as the second largest contributor to the LOSARP. This collaborative project led by the Ontario Ministry of Natural Resources and Forestry and the Ontario Federation of Anglers and Hunters began in 2006 and is designed to reestablish a self-sustaining population of Atlantic salmon in Lake Ontario, a species extirpated since 1898.

With the aid of students, staff, provincial government, NGOs, and industry partners, the Fleming College Salmonid Hatchery aims to:

- Demonstrate and promote fish husbandry practices that enhance wild fish survival.
- Ensure the future sustainability of Atlantic salmon in Lake Ontario by maximizing family representation and genetic diversity in stocked fish.
- Minimize the potential for artificial selection within the hatchery environment.
- Engage and educate students, staff, and community on the practices of sustainable fisheries management.
- Accomplish all of the above using modern and sustainable water recirculation and filtration technologies.
- Utilize sustainable in stream stocking practices that enhance long term survival and the likelihood of adult salmon returns.
- Support a healthy and viable aquatic community in Lake Ontario by promoting native species.

Should you require any additional information, I would be pleased to assist you.

Regards,

Ryan Hill
Technologist – Salmonid Hatchery, Aquaculture Program, Fish and Wildlife Program
Fleming College, Frost Campus