

May 2015 WQ Program Field and Lab Audit

Passamaquoddy Tribe at Indian Township

After completing the first month of water quality sampling for the 2015 season, we have compiled the following information. This information is to be used to help measure the success of the 2015 season, and to determine if any changes need to be made for the duration of this season.

Sites: Twenty-two (**22**) total Water Quality sites are being sampled in 2015, all lakes and ponds. As we did in 2011-2014, nineteen of these sites are sampled twice a month, approximately every (15) days. The lakes being sampled twice a month are as follows: **Big Lake, Long Lake, Lewey Lake, Grand Falls Flowage, Junior Lake, Scraggly Lake, Sysladobsis Lake, Pocumcus Lake, Side Pistol Lake, Upper Chain Lake, Middle Chain Lake, Killman Pond, Shaw Lake, Mill Privilege Lake, Pleasant Lake, East Musquash Lake, West Musquash Lake, West Grand Lake, and Bassett Pond.** Bassett Pond is a small fishless pond that has been sampled to some extent the last two years. When the schedule allows, we will make a trip to the Jackman area to sample the 3 ponds there, I hope to do this twice in 2015.

Field Audit 39%: (15/38) We were not able to sample the majority of lakes and ponds in May this year. Due to a long winter and late ice out date, mud season dragged on longer than usual and dirt road conditions did not allow us road access to some lakes early. However the biggest reason for a lack of sampling was the weather. Most days of the month were too windy, and if it wasn't windy it was usually raining. We purchased a new boat and motor as the old one was simply wearing down due to the many hard miles of dirt roads. The truck has new tires from last fall and was serviced in May, with new brakes. Sampling equipment: The Pro-DO that was put into service starting July 2011 continues to be a reliable piece of equipment, it gets a new DO cap every April, we also have a second unit on hand ready to go if an issue develops. The Conductivity meter was replaced in 2014 and is working well. Our pH probe and meter situation is still up in the air. We're working on it. Maine's VLMP director Scott Williams plans to be up June 23rd to certify us and our DO meter to meet their QC needs. Mark Richter is back as our field assistant.

Lab Audit 100%: (60/60) All samples have been processed and/or delivered on time this month that were collected. We process samples for 4 parameters in the lab: Total Phosphorus, Chlorophyll-a, True Color, and Alkalinity. TP is collected and mailed out to the Health and Environmental Testing Lab in Augusta (HETL) every two weeks. Chl-a is filtered and frozen here at the office by our field assistant Mark Richter and then mailed out with the TP samples to HETL. We have not yet received back any data to review from the Lab this season.

Alkalinity is titrated in the office by Joe Musante and has had no problems to report. True Color is being done in the office also by Joe Musante using our DR2700 Spectrophotometer. The DR2700 is up for a factory calibration check following the field season. We purchased a new certified traceable digital thermometer for QA/QC purposes as our other one was not digital and less precise. This new thermometer has increased our confidence in temperature calibrations.