



April 2, 2015

To the Trustees:

Please find attached the report of our progress on the Sudbury River Schools Project, funded by the NYANZA Restoration Plan beginning in June of 2013. We are so excited about the comprehensive program that these funds have allowed us to build for schools along the Sudbury River. As we look back on the first 18 months of implementation, the program has gone from an idea to a reality, involving over 800 students and 30 teachers directly in the study of watershed ecology, and many additional families in community events. As part of this project, a core group of teachers is engaged in creating a community of study around this project, sharing best practices and data both online and in person. Highlights of this first year include:

- Wetland study programs in five schools, including multiple visits and both classroom and field studies, for over 800 students.
- Canoe trips for over 100 middle school students, including water quality testing and river ecology on the Sudbury River.
- Family programming at three community events focused on Sudbury River wildlife.
- Presentation at the Massachusetts Environmental Education Society for others interested in joining this growing community of educators.
- Three network meetings of teachers and science coordinators involved in Riverschools education.
- Active interest from other Mass Audubon sanctuaries in replicating this type of programming across the state.
- Purchase of water testing and collection equipment for school programming.

As we look forward to the next phase of the project, we are looking to expand programming to five communities (up from three), including Wayland, Sudbury, Framingham, Ashland and Weston; document the curricula we have been developing for use by other environmental educators; work with additional Mass Audubon sanctuaries to adopt similar programming with communities in their areas; create protocols for data collection that can be used across the network of schools; and make data

208 South Great Road ▲ Lincoln, Massachusetts 01773 ▲ tel 781.259.9500 ▲ fax 781.259.8899 ▲ www.massaudubon.org



available in downloadable form for use by classroom teachers. Our proposal for Phase 2 will follow in early May.

Again, thank you for the opportunity to provide watershed ecology programming to so many students along the Sudbury River. We look forward to continuing and building upon this work, and we invite you to join us at RiverFest in June, or at any one of our field or classroom study days, being scheduled now for this spring.

Warm regards -

Kris Scopinich, Robin Stuart and Jennifer Feller



Sudbury River Investigations – Field Studies



Sudbury Riverschools Progress Report

June 2013- December 2014

Communities: Framingham, Sudbury, Wayland

Total students served: 824

Community Festivals attended:

- 6/22/13 SuAsCo Riverfest at Great Meadows Wildlife Refuge in Sudbury: 60 families
 - As part of the NWR's Fishing Festival we offered family based programming focused on the wildlife found both in and around the Sudbury River. (including ducks, turtles and macroinvertebrates)
 - 2.0 hr program
- Stapleton School Earth Day Event, Framingham: 150 families
 - As part of the Stapleton Earth Day Festival we offered family based programming focused on the wildlife found both in and around the Sudbury River on their Sudbury River Nature trail behind the school.
 - 4.0hr program
- 6/21/14 SuAsCo Riverfest at Great Meadows Wildlife Refuge in Sudbury:
 - As part of the NWR's Fishing Festival we offered family based programming focused on the wildlife found both in and around the Sudbury River. (including ducks, turtles and macroinvertebrates)
 - 2.0 hr program
- 6/22/14 SuAsCo Riverfest at Wayside Inn Grist Mill Historical Landmark in Sudbury: 75 families
 - As part of the Grist Mills' Rubber Duck Derby Fishing Festival we offered family based programming focused on the wildlife found both in and around the Sudbury River. (including ducks, turtles and macroinvertebrates)
 - 2.0hr program

School Based Program Details (MAS' Drumlin Farm Wildlife Sanctuary):

- Happy Hollow, Wayland: 4th grade, 100 students
 - May 2014: 1.0 hr in classroom programs x 4 classrooms
 - Focus: Wetland habitats and food webs
 - June 2014: 2.0hr Field Study program at Great meadows Wildlife Refuge/Sudbury x 4 classrooms



- River study focusing on water quality testing, macroinvertebrate inventories, upland and wetland explorations and data collection, using i-pads to collect data and document field experience.
 - Transportation to Great Meadows Wildlife Refuge/Sudbury
- Curtis Middle School, Sudbury: 7th grade, 110 students
 - June 2014: 1.0 hour in classroom programs x 4 classrooms
 - Focus: Turtle classification
- Cameron Middle School, Framingham: 7th grade, 117 students
 - Support for Broadmoor Program: River Ecology Canoe: 2.0 hr canoe trips for each class conducted over 3 days. 1 staff, 8 hours each day.
- Loring School, Sudbury: 1st grade, 80 students (will be working with same students as they progress through 2nd and 3rd grade: cumulative/comprehensive programming)
 - June 2014: 1.0 hr in classroom programs x 4 classrooms
 - Focus: Wetland habitats and food webs
 - June 2014: 2.0hr Field Study program at Great meadows Wildlife Refuge/Sudbury x 4 classrooms
 - River study focusing on water quality testing, macroinvertebrate inventories, upland and wetland explorations and data collection.
 - Transportation to Great Meadows Wildlife Refuge/Sudbury
- Supplies Purchased:
 - Water testing chemicals, insect magnifying viewers , collection nets , 1 mini I-pad, iTunes gift card for apps
- Dunning School, Framingham
 - October 2014: 2.0hr Field Study program at Danforth Street River Access/Framingham x 2 classrooms
 - River study focusing on water quality testing, macroinvertebrate inventories, upland and wetland explorations and data collection, using i-pads to collect data and document field experience.
 - Transportation to Danforth Street River Access/Framingham

School Based Program Details (MAS' Broadmoor Wildlife Sanctuary):

- May 2014: Stapleton Elementary School, Framingham, grades 1-5, 300 students
 - Using Sudbury River Trail behind the school, students studied upland and wetland habitats, collected data on flora and fauna found there, did water quality testing and observed seasonal changes (specific activities depended on grade level)



- June 2014: Cameron Middle School, Framingham: 7th grade, 117 students
 - River Ecology Canoe: 2.0 hr canoe trips for each class conducted over 3 days
 - Combined staff from Broadmoor and Drumlin Farm facilitated explorations of the Sudbury river and the oxbow behind the school. We looked at turbidity, water quality (biotic index and pH), plants and animals encountered, and human impacts (litter /pollution), in context of watershed
- Purchased supplies: secchi disk

Teacher and Administrator Deliverables

- Three cross-district workshops for Riverschools teachers and science coordinators
- Development and administration of the RiverSchools Blog
<https://en.forums.wordpress.com/profile/riverschoolnetwork>
- Curriculum development and documentation, including protocols for data collection
- Program planning and oversight, logistical planning and transportation

Monies Expended

- Grant monies expended in FY2014: \$21,405 (through June 30, 2014)
- Grant monies expected to be spent in FY2015: \$32,000 (through June 30, 2015)

