Available Datasets

A Multi-State Collaborative to Develop & Implement a Conservation Program for Three Anadromous Finfish Species of Concern in the Gulf of Maine

Award #NA06NMF4720249 August 1, 2006 – October 28, 2012

Project: Regional Spring Fyke Net Survey to Monitor Spawning Rainbow Smelt

• Rainbow smelt catch, length, and sex ratio data

Locations: All index sites: Westport River (MA), Weweantic River (MA), Jones River (MA), Fore River (MA), Saugus River (MA), North River (MA), Crane River (MA), Parker River (MA), Squamscott River (NH), Oyster River (NH), Winnicut River (NH), Long Creek (ME), Mast Landing (ME), Deer Meadow Brook (ME), Tannery Brook (ME), Schoppee Brook (ME), East Bay Brook (ME)

Time period: Spring 2008-2012 (most sites)

• Non-target species catch and length data

Locations: All index sites

Time period: Spring 2008-2012 (most sites)

• Rainbow smelt length at age data

Locations: Fore River (MA), Oyster River (NH), Squamscott River (NH), Long Creek (ME), Mast Landing (ME), Kennebec River (ME), Deer Meadow Brook (ME), Tannery Brook (ME), Pleasant River (ME), Schoppee Brook (ME), East Bay Brook (ME)

Time Period: Spring 2008-2012 (most sites)

• Within-season repeat spawning rate raw data

Locations: Fore River (MA), Mast Landing (ME)

Time Period: Fore River – 2010-2012; Mast Landing – 2009-2011

• Telemetry Data

Locations: Great Bay and Piscatagua embayment (NH)

Time period: Spring – Fall 2011 and 2012

Project: Regional Rainbow Smelt Spawning Habitat Monitoring

• Water quality weekly "grab sample" data (point measurements of water temperature, dissolved oxygen, specific conductivity, pH, turbidity)

Locations: All index sites

Time period: Spring 2008-2012 (most sites)

• Continuous water quality data (temperature, dissolved oxygen, specific conductivity, pH, turbidity) *Locations:* Jones River (MA), Fore River (ME), Winnicut River (NH), and Squamscott River

(2008-2009 only)

Time period: Spring 2008-2012

• Spawning habitat water velocity and discharge measurements

Locations: All index sites

Time period: Spring 2008-2009 (MA and NH), 2009-2012 (ME)

• Nutrient concentration: total nitrogen and total phosphorus weekly water samples

Locations: All index sites Time period: Spring 2008-2009

• Periphyton daily growth (ash free dry weight in grams per day)

Locations: All index sites Time period: Spring 2008-2009 • Continuous light and temperature data taken at the periphyton tile station

Locations: All index sites Time period: Spring 2008-2009

• Dissolved heavy metals concentrations, total hardness, and alkalinity water grab samples

Locations: All index sites Time period: Spring 2010-2011

• Macroinvertebrate community composition

Locations: All index sites

Time period: Spring, 2010 – Collection and data analysis; 2011 – Collection, but no analysis, samples are held at the ME DMR W. Boothbay Harbor lab

Project: Fish Health Monitoring

• Fish health and pathology analysis

Locations: Jones River (MA), Fore River (MA), Crane River (MA), Parker River (MA), Oyster River (NH), Squamscott River (NH), Winnicut River (NH), Long Creek (ME), Mast Landing (ME), Deer Meadow Brook (ME), Tannery Brook (ME), Pleasant River (ME), Schoppee Brook (ME), East Bay Brook (ME)

Time period: Spring 2009-2010

• Toxic contaminant analysis, accumulated concentrations in smelt tissues

Locations: Jones River (MA), Fore River (MA), North River (MA), Parker River (MA), Squamscott River (NH), Winnicut River (NH), Long Creek (ME), Mast Landing (ME), Kennebec River (ME), Deer Meadow Brook (ME), Tannery Brook (ME), Pleasant River (ME), Chandler River (ME), Schoppee Brook (ME), East Bay Brook (ME)

Time period: Winter 2008 (Kennebec River only), Spring 2009 (all other sites)

Project: Rainbow Smelt Creel Survey

• Rainbow smelt catch, length, sex ratio, and fishing effort data

Locations: All commercial smelt camps on the Kennebec River and Merrymeeting Bay waters, Pleasant, Mill, Narraguagus, and Chandler rivers, ME. Available but not collected as part of this grant: Lamprey, Oyster/Bellamy and Squamscott rivers, and Great Bay, NH

Time period: Winter 2009-2012 – Kennebec River and Merrymeeting Bay; Winter 2010-2011 – Pleasant, Mill, Narraguagus, and Chandler rivers, ME; 1978-2012 – Lamprey, Oyster/Bellamy and Squamscott rivers, and Great Bay, NH

• Rainbow smelt age at length data

Locations: All commercial smelt camps on the Kennebec River and Merrymeeting Bay waters, Pleasant, Mill, Narraguagus, and Chandler rivers, ME. Available but not collected as part of this grant: Lamprey, Oyster/Bellamy and Squamscott rivers, and Great Bay, NH

Time period: Winter 2009-2012 – Kennebec River and Merrymeeting Bay; Winter 2010-2011 – Pleasant, Mill, Narraguagus, and Chandler rivers, ME; 1978-2012 – Lamprey, Oyster/Bellamy and Squamscott rivers, and Great Bay, NH

Project: Confirming Current Status of Rainbow Smelt Spawning Locations

• Geo-referenced database of current and potential rainbow smelt spawning sites

Locations: Massachusetts (current spawning sites only), New Hampshire (current spawning sites only), and Maine (current and historical/potential spawning sites, with information about size of current run)

Time period: 2005-2009

Project: Assessing the Relationship between Watershed Characteristics and Rainbow Smelt Spawning

• GIS datasets – watershed size, number of downstream and upstream road crossings, population density, land cover type, and impervious surface cover

Locations: Massachusetts (all index sites), New Hampshire (all index sites), and Maine (all current and historical/potential spawning sites, and all index sites)

Time period: 2009

Project: Atlantic Sturgeon Gill Net Monitoring and Telemetry Studies

• Atlantic sturgeon catch and length data

Locations: Kennebec River and Merrymeeting Bay estuary complex *Time period:* Spring – Fall 2009-2012

• Telemetry Data

Locations: Kennebec River and Merrymeeting Bay estuary complex *Time period:* Spring – Fall 2009-2012

• Ichthyoplankton monitoring

Locations: Kennebec River and Merrymeeting Bay estuary complex

Time period: Summer 2011

Datasets relating to rainbow smelt and Atlantic sturgeon in the study areas that are not collected as part of this project:

• Atlantic sturgeon catch and length data

Locations: Kennebec River and Merrymeeting Bay estuary complex

Time period: Spring – Fall 1978-2001

• Juvenile Abundance Monitoring

Locations: Kennebec River and Merrymeeting Bay estuary complex (ME), Great Bay, Piscataqua River, and Little Harbor (NH)

Time period: Spring – Fall 1979-2012 (ME), and 1997-2012 (NH)

• Near Shore Trawl Survey

Locations: Massachusetts, New Hampshire, and Maine waters within 3 miles of shore *Time period:* Spring and Fall 1978-2012 (MA), and 2000-2012 (NH and ME)

• Rainbow smelt egg deposition monitoring

Locations: New Hampshire spawning sites

Time period: Spring 1978-2007