

Survey on Status of New York Area of Concern Remedial Action Plan Activities

AOC Management Meeting

April 18, 2013

Area of Concern: St. Lawrence River at Massena AOC

Date of Completed Stage 2 RAP Document and Addendums: Spring 2012

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- 1) List the current beneficial use impairments in your RAP and summarize the activities underway and planned to restore each beneficial use and make progress towards AOC delisting. (This is a big picture or 10,000 ft view of the major actions needed to delist the AOC) In addition please attach the short write ups of the priority projects we talked about having done by the April meeting.

Restrictions on fish and wildlife consumption – Removal of this BUI is contingent upon the cleanup of contaminated sediments in the Grasse River, and on an updated assessment of contaminant levels in fish. EPA’s decision on the clean-up plan for the Grasse River was selected in April, 2013. The strategy will be a combination of sediment removal and capping. Work planning may take a couple years and cleanup will take several more years with measureable improvement in PCB fish contamination seen after that. Unless there can be substantial improvement in the levels of contaminants in edible fish from within the AOC, this BUI may have to be designated “in recovery” to be able to desist the AOC.

With GLRI funding, DEC is conducting a study of Xenobiotics in Fish from New York's Great Lakes Waters to update the consumption advisory information. The St. Regis Mohawk Tribe will be assisting DEC staff with the fish collections from the AOC during the summer of 2013. The last time a comprehensive fish collection of edible fillets from around the whole AOC was over 20 years ago. The anticipated completion date for this project is 9/30/2014, and the BUI can be reassessed at this time.

In addition, the SRMT is investigating the status of several BUIs under a separate GLRI grant and this will include analysis of the levels of contaminants in the tissues of bird eggs, turtles, furbearers, and mussels. The anticipated completion date is 9/30/2013.

Even with the xenobiotics studies ongoing this year, there may not be enough collections from all parts of the AOC to determine what the trends are in contaminants within fish and additional locations should be selected to provide a full picture. There was an extremely long time interval between collections and more collections on a regular basis will assist at demonstrating a positive trend at reduced contaminants in edible flesh of game fish. Exception to this is where Alcoa has been conducting annual edible fish fillet sampling in the Grasse River and power canal.

Degradation of fish and wildlife populations – Additional surveys are needed to assess fish populations where gaps exist. Information on fish and wildlife populations has been gathered with some studies ongoing and there is no body of evidence indicating current impairments due to conditions within the AOC.

The 2011 Tetra Tech report identified areas within the AOC where fish population information was deficient. There needs to be a study designed which would collect fish using the same methodology as previous collections. There could then be direct comparisons in fish populations from all parts of the AOC, inside and out and on all 4 rivers. That information pulled together into an Index of Biological Integrity (IBI) would satisfy the BUI delisting, if the information supports that conclusion.

A study of fish populations is staff intensive endeavor with 75% of the costs being in salaries, the remainder being transportation, gasoline for the boat, upkeep and replacement of equipment. The assumption being that existing staff with the needed equipment could be utilized for the collections. The current survey of the St Lawrence River upstream of the Power Dam takes 4 days and utilizes 6 to 7 staff for a total expense of about \$8,000. A survey of fish populations looking for a catch per unit effort index for comparison with the existing survey would need similar surveys in the St Lawrence downstream of the Power Dam, and in the Grasse, Raquette and St Regis rivers. Including collections upstream of the AOC on each of the Grasse, Raquette and St Regis rivers the full one time survey would cost \$56,000.

Fish tumors or other deformities – Ongoing studies will be completed in the next couple years and results analyzed. This work is being done by the St Regis Mohawk Tribe, Environment Division under a GLRI grant.

Bird or animal deformities or reproduction problems – Ongoing studies will be completed in the next couple years and results analyzed. This work is being done by the St Regis Mohawk Tribe, Environment Division under a GLRI grant.

Degradation of benthos – Investigation by USGS in 2012 is being evaluated currently will generate a report to be out later in 2013. This information and other benthos related studies will then be used to build a BUI delisting document, if appropriate.

Degradation of phytoplankton and zooplankton populations - Investigation by USGS in 2011 provided information in a paper published in October 2012 is being used to write a BUI delisting document.

Loss of fish and wildlife habitat – There needs to be full listings of all the habitat improvement work that is being done, including what exists for the pre and post monitoring of these projects. For any new habitat improvement projects which are being proposed, there needs to be fish and wildlife monitoring built in right through the preconstruction planning. With the recent announcement of the NRDC settlement and the long list of habitat improvement projects which will be required, it’s important to see where BUIs will be benefitted and insure that the AOCs interests are inserted where appropriate into these projects.

This BUI relies on Habitat Management Goals and these goals need to be established. A document needs to be compiled which has a listing of existing habitat protection measures, the entity in charge of ensuring compliance, how they relate to our Habitat Management Goals and benefit to the identified sentinel fish and wildlife species. From that habitat related projects can be proposed to help delist this BUI.

An outside contractor could be utilized to gather the needed information through literature search, agency and municipal interviews and working with the RAC to build a Habitat Management document appropriate for the Massena AOC. This will require a half a year of full time effort and require about \$30,000, mostly in personal service time, but incidentals of travel and document preparation would be included.

- 2) Which BUIs will be proposed by your RAC and public noticed for re-designation to “not impaired” in 2013? In 2014? In 2015 and beyond

Fill out the following table FY Target and Status (e.g. Approval of Delisting submittal to EPA, Public notice of Delisting issued, Assessment in progress, Further assessment needed, etc.)

FY Target	BENEFICIAL USE IMPAIRMENTS	Status (Actions Required)
2020+	Restrictions on fish and wildlife consumption	Progress needs to be seen
	Tainting of fish and wildlife flavor	Not impaired
2016	Degradation of fish and wildlife populations	Further assessment needed
2015	Fish tumors or other deformities	Assessment in Progress, then analysis and reporting
2015	Bird or animal deformities or reproduction problems	Assessment in Progress, then analysis and reporting
2014	Degradation of benthos	Analysis in progress and then report writing
	Restriction on dredging activities	Not impaired
	Eutrophication or undesirable algae	Not impaired

	Restrictions on drinking water consumption, or taste and odor problems	Not impaired
	Beach closings	Not impaired
	Degradation of aesthetics	Not impaired
	Added costs to agriculture or industry	Not impaired
2013	Degradation of phytoplankton and zooplankton populations	Report writing, public notice and delisting submittal
2017 +	Loss of fish and wildlife habitat	Habitat improvement projects need to be completed

- 3) Based on your current progress and planned activities, what is your best estimate of the year when your RAC would be ready to proceed with a final Stage 3 Area of Recovery designation or AOC delisting document?

Stage 3 delisting or designation as an Area of Recovery is quite a few years out, beyond 2020. Uncertainty on how cleanup of the Grasse River will proceed and what the remediation efforts will do to the habitat and fish and wildlife consumption BUIs in the short term will make efforts for BUI delisting, at least as where the Grasse River is concerned, not justifiable.

- 4) When does your current RAP capacity grant funding run out? What will be your future RAP capacity needs by year with estimated dollar amount to accomplish BUI removal and AOC delisting targets described in questions 2 and 3 above?

RAC coordination for the SLR at Massena AOC is not covered under an existing capacity grant. The “Coordination of the Niagara River and St. Lawrence River at Massena Areas of Concern” grant runs through 2014 and provides up to 20 % of the salary of the Massena RAP coordinator. In addition, there are two GLRI capacity building grants in place relating to RAC involvement. The DEC State Capacity for LAMP/Area of Concern Priorities grant wraps up 9/30/2015. The St. Regis Mohawk Tribe Participation in LaMP/RAP process grant also wraps up on 9/30/2015.

As more BUIs are ready for delisting the work and time commitment intensifies. Gathering together the study reports, coordinating with technical experts, putting together a BUI delisting package and working through the RAC are all huge undertakings. And then to see the AOC delisting through to completion will require a person whose primary responsibility is following through with the AOC delisting process. The experience of the St Lawrence River AOC at Cornwall is that this requires a full time staff person. An AOC coordinator through a capacity building grant should be a full time employee hired at the equivalent of a state grade 18 or 21. That salary including fringe benefits would be in the range of \$80,000 to \$100,000 per year. With the expectation of 2 BUIs ready for the delisting process in 2015, a full time RAP coordinator would be needed in place during 2014 and the position funded each year until the AOC is delisted, beyond 2020.

- 5) What barriers (policy, funding, technical, other?) are RAP Coordinators encountering to tracking BUI activities and progress towards removal?

Pulling together the needed documentation and writing up delisting reporting requires time and staff who are skilled at preparing these types of reports. There are several BUI related activities going on at any one time, through habitat improvement projects, related studies and cleanup activities. These are being accomplished by industry, agencies, and colleges. Collecting and coordinating the related information is a huge time commitment.