

St. Clair River Canadian Remedial Action Plan (RAP) Implementation Committee (CRIC)
Meeting Minutes - DRAFT

Thursday, November 22, 2018
Maawn Doosh Gumig Community Centre
1972 Virgil Avenue, Aamjiwnaang First Nation

Participants:

Darrell Randell	Trevor Robak	Courtney Jackson
Kris Lee	Donna Blue	Sharilyn Johnston
April White	Kelly Johnson	Ted Briggs
Naomi Williams	Annette Verhagen	Vince Gagner

Regrets:

Theresa Warren	Jake Lozon	Dave Richards
Jenn Richards	Stephen Marklevitz	

ITEMS:

Welcome and Introduction:

April White chaired the meeting and welcomed committee members. During introductions Darrell Randell informed the group that this would be his last CRIC meeting. Darrell did not run for another term on St. Clair Township Council and will therefore no longer serve as the St. Clair Township municipal representative. CRIC members were also informed that Donna Blue will now represent St. Clair Region Conservation Authority on the committee rather than Brian McDougall.

Review and Acceptance of the Agenda and Previous Minutes:

The draft agenda and minutes from the February 13, 2018 meeting were accepted with the following change: Naomi Williams was present rather than Naomi Jackson.

Introduction of New Member – Vince Gagner

The CRIC was informed that Dean Edwardson retired as of November 1, 2018 and Vince Gagner has filled his position at the Sarnia-Lambton Environmental Association (SLEA), as well as on the CRIC. Vince attended the CRIC meeting and was asked to provide a brief introduction of himself and his position with SLEA. Vince is from Wallaceburg and grew up on the St. Clair River. He has a background in toxicology and has held many interesting positions over the years. Along with being the General Manager of the Industrial Education Co-Op, and General Manager of CAER (Community Awareness Emergency Response), he will also be taking on the role of General Manager for SLEA.

Actions from the Meeting of February 13, 2018:

Action items from the previous meeting were discussed:

1. **Action:** The Habitat delisting criteria wording will be finalized and brought back to the CRIC for endorsement.

Completed

- There are 7 delisting criteria for the Loss of Fish and Wildlife Habitat BUI.
- Minor changes have been proposed to 3 of those criteria.

- Criteria #3 will read: “Habitat connectivity between the St. Clair River and Sydenham River and between Walpole Island First Nation, Bickford Oak Woods and the Aamjiwnaang First Nation has been improved.”
- Criteria # 4 will read: “50% of the major tributary lengths in Area 1A are buffered by a minimum width of 5m of natural vegetation or buffered to the extent possible.”
- Criteria #6 will read: “Wetland habitat components (i.e. water quality, submerged aquatic vegetation, aquatic invertebrates, fish and birds) achieve a quality ranking of “Good” or better based on Water Quality Index (WQI) and Indices of Biological Integrity (IBI) scores for a 3-year period, or when mean WQI/IBI scores within the AOC are shown to be statistically comparable to those outside the AOC for a 3-year period.”
- April White informed the CRIC that the subcommittee supports these changes.
- Next steps:
 - An article has already been printed in a local paper at Walpole Island First Nation informing community members of these changes.
 - The BPAC will be advised of the edits, as well as the Four Agency Management Committee.

St. Clair River Contaminated Sediment Project – Update – Ted Briggs

Ted Briggs informed the CRIC that it is anticipated the engineering design phase of the St. Clair River Contaminated Sediment Project will begin soon, with St. Clair Region Conservation Authority acting as the Project Manager. The design phase will include Requests for Proposal for the implementation phase of the project. This two-year project has already received \$250,000 in funding support from Environment and Climate Change Canada through the Great Lakes Protection Initiative.

Current BUI Status and Re-Designation Celebration – Ted Briggs

The CRIC recently received notification that three Beneficial Use Impairments (BUIs) – “*Restrictions on Dredging*”, “*Beach Closings*”, and “*Bird or Animal Deformities or Reproduction Problems*” – have been granted a Not Impaired Status in the St. Clair River Area of Concern. As a result of this re-designation, two BUIs are now designated as Requires Further Assessment (*Degraded Fish and Wildlife Populations* and *Fish Tumours or Other Deformities*) and four are deemed Impaired (*Restrictions on Fish and Wildlife Consumption, Degradation of Benthos, Restrictions on Drinking Water Consumption or Taste and Odour Problems, and Loss of Fish and Wildlife Habitat*).

ACTION: Kelly Johnson will distribute an up-to-date BUI status chart to CRIC members. Kelly will be exploring options for a re-designation celebration in early 2019.

Fish Tumours or Other Deformities BUI – April White

- Studies linked the development of cancerous liver tumours among sediment dwelling fish to high concentrations of polynuclear aromatic hydrocarbons (PAHs).
- Recognizing that tumours and deformity rates could be influenced by sediment contamination, this became one of 14 BUIs for Areas of Concern.
- For the St. Clair River AOC, early studies resulted in conflicting findings. Further studies were recommended and the BUI received a “Requires Further Assessment” (RFA) designation. Due to the RFA status the BUI has no official delisting criteria.

- After significant sampling of Brown Bullheads around the lower Great Lakes a tumour incidence of 2% was found and became the accepted background rate for the lower Great Lakes and the rate for AOCs to use to help determine the status of the BUI.
 - Brown Bullhead fish are ideal for assessing biological impacts of local contamination because:
 1. They reside in a specific area and do not migrate;
 2. They are benthic (bottom-dwelling) fish; exposed to contaminants in sediment;
 3. There is significant database on Brown Bullhead liver tumours from locations throughout the Great Lakes Basin to compare results to.
- In the St. Clair River AOC collection of brown bullheads was challenging as the area is beyond the range of the species.
 - The Shorthead Redhorse Sucker, an acceptable alternative sucker fish species was used where brown bullheads were scarce.
- Two specific studies were completed in the St. Clair River AOC:
 - During 2002-2006 126 Shorthead Redhorse Suckers were sampled. The average age of the fish sampled was 10 and zero neoplasms (cancerous tumours) were found.
 - The reference site was Lake Huron and of the 100 fish caught, one neoplasm was found.
 - Between 2013 and 2014 ECCC and Walpole Island First Nation partnered to conduct sampling of 59 brown bullhead. Most of the fish sampled were over 5 years old and zero neoplasms were found.
 - During fish processing in the field length, weight, exterior inspections for lesions, liver weight and lesion inspection, and sex of fish were documented.
 - Analysis of fish livers for tumours was conducted by British Columbia's Ministry of Agriculture in accordance with the *Blazer Protocol*.
 - The Histopathology Report stated: "The lack of neoplasia and the low prevalence of pre-neoplastic foci and lesions associated with toxin exposure provide evidence that chronic toxin exposure is not significantly affecting liver morphology in these fish populations. Most of the liver lesions in these bullheads are probably related to the presence of parasites, with 85% of the livers hosting at least one parasite, and three livers each hosting four different parasite species..."
- The BUI Status Assessment Approach asked two main questions and the two studies referenced above provided the following conclusions:
 1. Did the incidence rate of fish tumours in the AOC exceed the rates at the un-impacted reference site?
 - Incidence of fish tumours in the AOC was zero compared to one in the Lake Huron reference site.
 2. Did studies find neoplastic (cancerous) liver tumours in bullhead or suckers?
 - No neoplastic liver tumours were found in the bullheads or suckers sampled.
 - Based on this evidence a status designation of Not Impaired is being recommended for the St. Clair River AOC.
- Next steps for the Fish Tumours or Other Deformities BUI:
 - Finalize the draft Status Recommendation Report.

- Circulate to the CRIC for comments and plan community engagement sessions as needed.
- Review and incorporate comments/edits in to draft.
- Finalize the report and proceed with designation process.

Outreach and Education Update

Kelly Johnson provided the CRIC with a brief update on Outreach and Education Activities. Kelly was planning to host a St. Clair River Evening event in November, however the speaker's schedules did not coincide and it was decided that the event would be postponed until 2019. Kelly will now focus on planning a BUI re-designation celebration for early 2019.

Kelly also showed the CRIC the new Friends of the St. Clair River (FOSCR) website which is currently under development. This website hosts the St. Clair River AOC information. Kelly will be meeting with members of FOSCR in the coming weeks to finalize the appearance and FOSCR content of the site. Kelly, along with Ted Briggs and April White, will then review the AOC content.

Accomplishments Report & Work Plan Updates – Ted Briggs, April White, Kelly Johnson

The 2012 – 2017 Accomplishments Report was circulated to CRIC members for review prior to the meeting. During discussion it was decided that CRIC members would be listed as reviewers of the document rather than authors.

ACTION: CRIC members are to review the Accomplishments Report and submit comments to Kelly Johnson by December 15, 2018.

The 2017 – 2020 Work Plan will be updated in 2020 once the Accomplishments Report is finalized.

ACTION: Include the Work Plan as an agenda item for the next CRIC meeting.

Updates:

Friends of the St. Clair River (FOSCR) – Darrell Randell:

- The FOSCR Annual General Meeting will be held on December 6th at the Open Grill in Sarnia, ON.
- At the October 25, 2018 meeting of FOSCR the group agreed to provide funding to Rural Lambton Stewardship Network for three habitat projects, provide funding to St. Clair Region Conservation Authority for one water control project and continue funding for the St. Clair River RAP education program.

Rural Lambton Stewardship Network (RLSN) – Jake Lozon:

- Jake Lozon was unable to attend the meeting. No report was available.
- April White reported that RLSN will be receiving project money through ECCC's Great Lakes Protection Initiative.

Binational Public Advisory Council (BPAC) – Kris Lee:

- The BPAC met on October 10, 2018 in Port Huron, Michigan. At the meeting Sheri Faust of Friends of the St. Clair River US delivered a presentation focused on the group's strategic plan moving forward. Also during this meeting the finalized US Drinking Water BUI criteria was presented.
- The next BPAC meeting will be held on January 24, 2019 at Arlanxeo. A representative from the company will be speaking about their spill prevention and containment measures.

St. Clair Region Conservation Authority (SCRCA) – Donna Blue:

- SCRCA has entered into a partnership with the County of Lambton to coordinate the Lambton County Phragmites Partnership. The first workshop for the partnership was held on October 31, 2018 in Wyoming, ON. The purpose of this workshop was to bring together Lambton County stakeholders and partners to allow for the sharing of information and new and future opportunities to fight against the rapid spread of this invasive species. Although individual organizations and interest groups have attempted to manage Phragmites within their local communities, there has been no coordinated plan for the County of Lambton. Next steps in this partnership will be forth-coming in the near future.
- On November 27th, a stakeholder meeting will be held in Warwick, Ontario in support of a Sydenham River Phosphorus Management Plan. The purpose of the meeting is to determine what information, data and data gaps exist with regards to phosphorus sources, stressors and management in the Sydenham River watershed. It is the first step towards the development of a watershed plan that will summarize water quality and nutrient status in the Sydenham River, identify data gaps and provide recommendations to address phosphorus issues within the watershed. Jessica Van Zwol, Healthy Watershed Specialist is the management plan lead and can be contacted for additional information at the SCRCA office in Strathroy.

Aamjiwnaang First Nation – Sharilyn Johnston:

- The shoreline work and fishing pier has now been completed at Aamjiwnaang. So far the feedback from the community has been positive. The Environment Committee would like to add some plantings to the project as well as a boardwalk along the river.
- St. Clair River Days continued this year with the event being held in March. Kelly Johnson attended the event with an interactive display.
- Aamjiwnaang partnered with Walpole Island First Nation and ECCC to deliver the 2018 Science Symposium held in Wallaceburg.
- With the election of new councilors there are some new members on the Environment Committee.

Walpole Island First Nation – Naomi Williams:

- A major project is being undertaken on Walpole Island First Nation focused on septic systems. This project started with the questioning of whether septic systems were impacting the St. Clair River. Over the past few years the First Nation has been doing *E. coli* testing and microbial source tracking to assess the issue. Test results showed some drainage ditches had 300-2000 Colony Forming Units (cfm)/100 mL. The Provincial Water Quality Objective is 200 cfu/100 mL. WIFN has now received money through the Clean Water Wastewater Fund to conduct a feasibility study to look at building a wastewater facility for the First Nation.
- Since the February CRIC meeting WIFN has completed a 15-acre fish pond project including the installation of a fish gate. They are also looking at restoring a property on Squirrel Island, which would be a larger project than the Swan Lake restoration.

Environment and Climate Change Canada (ECCC) – April White:

- A call has gone out for the next round of Great Lakes Protection Initiative funding. The priority for this round is projects taking place in the Areas of Concern. Applications must be submitted online by January 11, 2019.
- Eco Action is also open for applications.
- ECCC is undergoing a project review, during which staff are being asked to report on and rationalize projects.

Ontario Ministry of the Environment and Climate Change (OMOECC) – Ted Briggs:

- Provincial COA funding is currently frozen and no funding is currently forthcoming for AOC work which in the past has included AOC outreach through FOSCR and shoreline rehabilitation through the SCRCA. A funding agreement for AOC coordination for 2018-19 was put through this past March and is in place until March 2019. Ted will keep the committee updated on provincial funding as more information becomes available.

Sarnia-Lambton Environmental Association (SLEA) – Vince Gagner:

- Vince has been in his role with SLEA for approximately three weeks. In his position he is hoping to focus on connecting with people in the Sarnia area.
- Vince is hoping to organize an Emergency Preparedness conference in early 2019. He may request a presentation about the AOC for the event.

Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) – Trevor Robak:

- The Canadian Agricultural Partnership (CAP) was rolled out earlier this year. The program focusses on phosphorous reduction in the western basin of Lake Erie which would include the St. Clair River. It is a new five-year commitment by Canada's federal, provincial and territorial governments. Cost-share funding will support projects in key priority areas including economic development and environmental stewardship. The CAP program differs from the previous Growing Forward programs in that applications will be assessed based on a merit system rather than first past the post.
- A serious issue is facing local farmers this harvest season. Farmers in southern Ontario, particularly Elgin, Middlesex and Lambton are finding high levels of a mold called Vomitoxin (DON) in corn. This is leading to corn being rejected at mills and farmers having to make alternative arrangements for their product. The mold can be disruptive when fed to livestock, especially hogs.

Ontario Ministry of Natural Resources and Forestry (OMNRF) – Stephen Marklevitz:

- Stephen Marklevitz was unable to attend the meeting. No report was available.

Lambton Public Health – Theresa Warren:

- Theresa Warren was unable to attend the meeting. No report was available.

City of Sarnia – Mike Kelch:

- Mike Kelch was unable to attend the meeting. No report was available.

Next Meeting and Adjournment:

The next CRIC meeting will be at the call of the chairs.