St. Clair River Remedial Action Plan (RAP) Implementation Committee (CRIC) Meeting Minutes Final

Tuesday, June 14, 2016 Rural Lambton Stewardship Network 6890 Base Line East, Wallaceburg, Ontario

Participants:

Jake LozonAndrew McIntyreDarrell RandellDonna StrangTed BriggsChristine RogersSharilyn JohnstonTrevor RobakPaul Buttery

Naomi Williams

Regrets:

Cindy Scholten Dean Edwardson Dave Richards

Jenn Richards Brian McDougall Kris Lee

Guests:

Claude Lafrance – Avanti Insight Consulting Shane de Solla – Environment and Climate Change Canada

ITEMS:

Welcome and Introductions:

April White chaired the meeting and welcomed committee members.

Review and Acceptance of the Agenda and Minutes:

The draft agenda and minutes from the March 21, 2016 meeting were accepted as prepared.

Actions from the Meeting of March 21, 2016:

Action items from the previous meeting were discussed:

1. **Action:** April White will prepare a chart that records investments made by local municipalities to improve infrastructure (e.g. sewer separation, water pollution control plant upgrades, etc.) and provide to Donna Strang

In Progress – April advised that she has started a chart that records investments made by municipalities to reduce point source pollution.

2. **Action:** Donna Strang will circulate the revised draft of the "Restrictions on Drinking Water Consumption or Taste and Odour Problems" discussion paper to CRIC members once received. CRIC members will review and provide any additional feedback.

Completed

3. **Action:** Donna Strang will revise the draft [Beach Closings BUI] report based on CRIC feedback (e.g., incorporate 2014 and 2015 results) and re-circulate to the committee.

Deferred

4. **Action:** Donna Strang will circulate the letter received by the Regional Director General approving the "Degradation of Aesthetics" re-designation to CRIC members.

Completed

5. **Action:** Donna Strang will circulate the member list for each of the CRIC subcommittees.

Completed

ACTION – Donna Strang will re-circulate the member list for each of the subcommittees to CRIC members.

6. **Action:** Chairs will discuss next steps and additional actions with subcommittee members [RE: Workplan].

Deferred

"Bird or Animal Deformities or Reproductive Problems" BUI – April White:

Shane de Solla, an ecotoxicologist at Environment and Climate Change Canada (ECCC) presented the "Bird and Animal Deformities or Reproductive Problems" Beneficial Use Impairment (BUI) status assessment on behalf of April White. The status assessment examined contaminant levels, reproductive success and deformity rates in Northern Leopard Frogs (*Rana pipiens*) and Common Snapping Turtles (*Chelydra serpentina*) in the St. Clair River Area of Concern (AOC). These species were chosen as sentinel species to assess this BUI for numerous reasons including their sensitivity to poor water quality, wide geographic distribution and their semi-aquatic characteristics.

Between 2006 and 2014, 18 surveys were conducted to assess reproduction (hatching success) and deformities (growth) in northern leopard frogs. Hatching success of frog embryos exposed to St. Clair River AOC water and sediment was 98%. In addition, frog deformity rates were lower than the average 5% rate in the wild. Contaminants measured in leopard frogs were low and exhibited no evidence of contaminant levels impeding reproduction or causing deformities.

Results from the common snapping turtle studies also yielded positive results. In 2011, turtle eggs were collected from multiple sites within the Walpole Island First Nation (WIFN) delta to assess hatching success, hatching deformities and contaminant levels in eggs. Hatching success was above 90% and hatching deformity rate was approximately 7%, lower than the deformity rate observed at the reference site on Lake Huron. Contaminant levels in turtles for organochlorines (including PCBs) were low overall and below concentrations associated with reduced survivability. Mercury levels varied wildly but even the highest concentrations measured were below those that would influence hatching success.

As a result of these studies, the status assessment recommends re-designating the "Bird and Animal Deformities or Reproductive Problems" BUI from "Requires Further Assessment" to "Not Impaired".

Decision – CRIC members did not oppose the recommendation to re-designate the "Bird and Animal Deformities or Reproductive Problems" BUI from "Requires Further Assessment" to "Not Impaired. The committee approved the recommendation.

ACTION – CRIC members will review the status assessment for the "Bird or Animal Deformities or Reproductive Problems" BUI and provide any additional feedback and comments to April White by July 15th.

St. Clair River AOC Science Symposium - March 23, 2016 - April White:

April White provided CRIC members with an overview of a science symposium hosted by Walpole Island and Aamjiwnaang First Nation on March 23, 2016 in Wallaceburg, Ontario. The purpose of the symposium was to share results with community members on collaborative projects relating to a number of fish and wildlife BUIs. Scientists from ECCC, the University of Windsor, the Ontario Ministry of the Environment and Climate Change (OMOECC) and the Department of Fisheries and Oceans presented research results and answered questions.

The research projects presented support a number of BUIs on the Canadian side of the St. Clair River AOC including:

- Degradation of Benthos
- Fish Tumour and Other Deformities
- Restrictions on Fish and Wildlife Consumption
- Bird or Animal Deformities or Reproductive Problems, and
- Loss of Fish and Wildlife Habitat.

The event was very successful with approximately 85 people attending.

Drinking Water Discussion Paper Open Houses - Donna Strang, April White and Ted Briggs:

Claude Lafrance attended the CRIC meeting and provided a brief overview of a presentation being delivered at local open houses on the "Restrictions on Drinking Water Consumption or Taste and Odour Problems" BUI draft discussion paper. At the time of the CRIC meeting, two open houses had been held (Aamjiwnaang First Nation and Sarnia) with one scheduled in Wallaceburg on June 22, 2016. An open house will also be organized at Walpole Island First Nation.

The presentation provided an overview of:

- 1) AOCs, the Great Lakes Water Quality Agreement (GLWQA) and BUIs;
- 2) The listing and delisting criteria for the "Restrictions on Drinking Water Consumption or Taste and Odour Problems" BUI;
- 3) Local water intakes;
- 4) Improvements in spill frequency and municipal and industrial discharges;
- 5) Local water intake closures and,
- 6) Legislation and spill notification systems.

The presentation ends with questions to stimulate discussion on the BUI and provide an opportunity for local communities to provide feedback.

Comments and feedback on the presentation from CRIC members included:

- The introduction of regulations and legislation should be better highlighted on the industrial spill graph and the municipal and industrial discharge graphs.
- Between 1994 and 1996, municipal loadings seem to increase and remain steady before decreasing again. Is there a reason for this?

<u>Status of Work Plan Deliverables and Future Work Plan Activities/Next Steps – April White, Ted Briggs</u> and Donna Strang:

April White, Ted Briggs and Donna Strang provided updates on the status of work plan deliverables. Highlights included:

Restrictions on Fish and Wildlife Consumption

- Results from the analysis of Brown Bullhead fillet indicate that most contaminant concentrations were below detection limits. Mercury concentrations (along with PCBs, DDT, metabolites and pp-DDE) were detected above detection limits/at trace levels resulting in minor restrictions on consumption. Mercury continues to show a dramatic decline in local sport fish.
- Using Ontario's fish consumption advisory benchmarks, contaminant levels in muskrat, waterfowl livers and snapping turtle eggs result in minor restrictions in consumption.
 PCB levels in snapping turtle eggs were elevated, resulting in limiting consumption to ½ pound ever two weeks.

Restrictions on Dredging Activities

 The draft status assessment was presented to the Binational Public Advisory Council (BPAC). BPAC suggested clarifications and additional information to include on the sediment quality of Sarnia Harbour. CRIC is currently in discussions with the City of Sarnia to acquire information and update the report accordingly for the next BPAC meeting in July, with the hope of a potential re-designation in the fall.

Loss of Fish and Wildlife Habitat

- The County of Lambton has completed a draft Natural Heritage study and have updated their Official Plan (OP).
- Additional funding/opportunities for buffers have surfaced via Alternative Land Use Services (ALUS). Two property owners have followed up with the Rural Lambton Stewardship Network (RLSN) on buffers from outreach efforts and more may come forward pending compensation/funds for buffer implementation.
- A draft Fish and Wildlife Habitat Management Plan has been completed and is currently being reviewed by the Fish and Wildlife Habitat and Populations Subcommittee.

Public Outreach and Education

- Recent outreach events that RAP related material was presented at include:
 - o Aamjiwnaang First Nation Earth Day Celebration April 16, 2016
 - Blue Water Anglers Kids Training Day May 28, 2016
 - Sarnia ArtWalk June 4-5, 2016
- As part of the "Restrictions on Drinking Water Consumption or Taste and Odour Problems" BUI discussion paper, a survey is being drafted to send to local industries.
 The purpose of the survey is to solicit information on actions supporting RAP objectives.
- Paper and online advertisements were submitted to the Sarnia Observer, Sarnia This Week and the Wallaceburg Courier Press.

Ted Briggs provided an update on the contaminated sediment project, indicating that meetings are ongoing with OMOECC, ECCC and Dow Chemical to review the science completed on the project to date and to come to a consensus between the parties on management actions required for the three identified priority areas. It is hoped that this exercise will be completed by September.

ACTION – Ted Briggs will provide a written update to CRIC members on the recent work for the contaminated sediment project.

Updates:

<u>Friends of the St. Clair River (FOSCR) – Darrell Randell:</u>

Darrell Randell reported on recent Friends of the St. Clair River (FOSCR) activities. FOSCR in collaboration with the SCRCA was successful in receiving a three year Trillium Grant that will support aquatic habitat restoration, monitoring and education. FOSCR members participated in the annual Kids Training Day put on by the Blue Water Anglers organization. Lastly, the next edition of the E-Newsletter will be prepared for July. Any articles should be send to Darrell or Donna Strang.

Rural Lambton Stewardship Network (RLSN) – Jake Lozon:

Rural Lambton Stewardship Network (RLSN) in partnership with Tallgrass Ontario have successfully received a Trillium Grant that will support the planting of tallgrass prairie and riparian buffers along roadsides and industrial properties. In addition, an EcoAction Grant will support the creation of local wetlands. Lastly, the ALUS program has been adopted by Lambton County and will see landowner compensation for implementing Best Management Practices (BMPs) such as riparian buffers, etc.

Great Lakes Sustainability Fund (GLSF) – April White:

Final notification letters to successful recipients of the Great Lakes Sustainability Fund (GLSF) will be provided shortly. Once deliverables are negotiated, final agreements will be put in place.

St. Clair-Detroit River Systems Initiative (SCDRSI) – Ted Briggs:

No new updates identified and this item will be removed from future CRIC agendas.

St. Clair Region Conservation Authority (SCRCA) – Brian McDougall:

Donna Strang provided a St. Clair Region Conservation Authority (SCRCA) update on behalf of Brian McDougall who was unable to attend the meeting. The SCRCA will be holding their annual bus tour on June 23, 2016. The tour will include a drive down the St. Clair Parkway and overview of the St. Clair River AOC.

<u>Aamjiwnaang First Nation – Sharilyn Johnston:</u>

Sharilyn Johnston reported that a draft design has been completed for the Aamjiwnaang First Nation (AFN) shoreline project along the St. Clair River. In addition, the annual AFN Pow Wow will be held on June 16th and 17th at the community centre. Sharilyn also advised that the community greenhouse has been completed and is currently housing native and rescue plants in collaboration with Return The Landscape.

Sharilyn also advised that the Antler River Guardians youth group that conducts work that supports numerous Annexes in the GLWQA is seeking funding for a liaison position to support the group. Sharilyn advised that letters of support from CRIC and/or other organizations would be helpful when they apply for funding.

Lastly, Sharilyn reported that Minister Glen Murray visited AFN and toured the Talfourd Creek rehabilitation project. He expressed his interest in maintaining the on-going health study at AFN.

Walpole Island First Nation (WIFN) - Naomi Williams:

Naomi Williams reported that WIFN is looking into the feasibility and need for the construction of a Waste Water Treatment Plant (WWTP) on Walpole Island. Currently, 600 homes are serviced using septic systems and community members have reported system failures. The Heritage Centre is

collecting water samples to determine if bacteria levels at local swimming areas and waterways support the need for the WWTP.

Other projects being managed at WIFN include:

- Fish Habitat Offset Project Additional sites are being considered for a habitat offset project, as the originally proposed Chematogen Channel experiences high rates of sedimentation.
- Bathymetry Survey Discussions continue regarding a proposed bathymetry survey at Walpole Island.
- Swan Marsh Ninety trees were planted at Swan Marsh as part of the on-going restoration project.
- First Nation Biomonitoring Study Funding has been secured for a follow-up study that will
 analyze the speciation of mercury and arsenic in the blood, hair and urine of community
 members. A previous study indicated that these contaminants were elevated in people on
 Walpole Island.

<u>Great Lakes Water Quality Agreement (GLWQA)/Canada-Ontario Agreement (COA) – April White and</u> Ted Briggs:

No new updates identified.

Sarnia-Lambton Environmental Association (SLEA) – Dean Edwardson:

Dean Edwardson was not able to attend the meeting. No update was available.

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

Trevor Robak reported that the local focus of the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) continues to be on the Thames River and developing domestic action plans to meet Provincial phosphorus targets.

Ontario Ministry of Natural Resources and Forestry (OMNRF) – Jenn Richards:

Jenn Richards was not able to attend the meeting. No update was available.

<u>Lambton Public Health – Paul Buttery:</u>

Paul Buttery advised CRIC members that Lambton Public Health has initiated the annual beach monitoring program for the 2016 season.

Next Meeting and Adjournment:

The next CRIC meeting will be held on either August 23rd or September 20th depending on whether a tour to Swan Lake Marsh can be organized with the Walpole Island Heritage Centre.

Tour of Connor Marsh:

Jake Lozon led the committee on a tour of the Connor Marsh and Rex 14 wetland restoration projects led by RLSN.