Summary of Public Dialogues on the Current State of the Memramcook River Causeway and Future for the Memramcook River & Watershed

JUILLET 2020









PUBLIC DIALOGUES:

AN IMPORTANT FIRST STEP IN COMMUNITY MOBILIZATION FOR THE REVITALIZATION OF THE MEMRAMCOOK RIVER & WATERSHED

In the winter 2020, Petitcodiac Riverkeeper held public dialogues/community meetings to talk about the current state of the Memramcook River causeway as well as a preliminary assessment of options to repair, modify or remove this aging infrastructure.

The organization has been calling attention to the deterioration of the Memramcook causeway and the causeway's impact on the Memramcook River & Watershed for many years and is committed to working with government, community members and other key stakeholders to prevent further damage.

"The Memramcook River causeway and associated gates and supporting structures were built in 1973 and have been deteriorating from weather conditions and saltwater ever since," Petitcodiac Riverkeeper stated in its report, *Preliminary Assessment of Options for the Long-Term Viability of the Memramcook River Causeway* (available at www.petitcodiac.org). "Over the years, this has altered the natural ecosystem in the 400 km² watershed and contributed to the elimination of several kilometres of upstream estuary, affecting the tidal range fish migrations and nutrient exchange in the river system."

The organization has worked with community partners to bring historic wins for the Petitcodiac River—its natural flow is returning, as are fish and habitat. The Memramcook River now faces a similar opportunity to be brought back to life, which will also have a significant impact on the quality of life and economy of its urban and rural communities.

Over 40 people were in attendance at a February 25, 2020, event in Dorchester and 50 at a March 5, 2020, event in Memramcook which were intended to bring people from these communities together to hear their feedback regarding three possible options for the Memramcook River causeway:

- Option 1: Status Quo The Memramcook River causeway is repaired to maintain its
 function and role on the river. It will require major renovations and continual maintenance
 through the opening and closing of the gates to allow for control of tide and fish passage.
 With the status quo option, the impacts to the river and surrounding community remain.
 The causeway has altered the flow of water, which has had significant negative effects on the
 surrounding ecosystem.
- Option 2: Partial reconstruction of the causeway The Memramcook River causeway is kept and the gates on the causeway are opened permanently. In this option, the causeway remains but the gates are no longer used to control the flow of water. The free passage of water reduces the large fluctuations in sediment creating a more stable environment for species. With the gates no longer closed, fish are no longer blocked and have free access along the river. The river narrows at the point of the causeway which will continue to affect the flow of water.
- Option 3: Removal of the causeway and replacement with a bridge The Memramcook River causeway is removed entirely and a bridge is built in its place to maintain access to communities on both sides of the river. The river is allowed to return to its most natural state and with that, habitat recovery begins. This option is most likely to result in the largest benefits to the river and its surrounding ecosystem.

All community members who attended the public dialogue sessions were strongly in favour of advocating for the third option, removal of the causeway and replacement with a bridge. Community members also stressed the importance of repairing and reinforcing dykes, levees and aboiteaux along the river to prevent further flooding.

Stakeholders from both Memramcook and Dorchester communities have expressed interest in working with Petitcodiac Riverkeeper, government and partners to push forward on this request and to create a plan to maximize the environmental, heritage/cultural, recreational, and economic benefits the revitalization of the Memramcook River and Watershed can bring to the region.

A summary of the discussions—as well as next steps for this project identified by Petitcodiac Riverkeeper— are outlined in the subsequent pages of this summary.





Public Dialogue: Concerns Expressed About the Current State of the Memramcook Causeway and Its Impact on the Memramcook River and Watershed

Participants at the public dialogues expressed deep concerns about the current state of the Memramcook River causeway structure and its impact on the Memramcook River and Watershed, even calling it an **ecological disaster**. Concerns expressed include the following:

- The Memramcook River has shrunk considerably in width over the years since the causeway's construction. There is a lot of silt accumulation because river narrows at the point of the causeway, and this, along with the causeway gates, restricts the river's natural flow, which has now even affected the streams in the watershed that connect to the Memramcook River they are also starting to fill with silt and mud.
- People in the community recall being able to fish in the region prior to the construction of
 the causeway. Fishing is nearly impossible in the Memramcook River today. Petitcodiac
 Riverkeeper's report—Preliminary Assessment of Options for the Long-Term Viability of the
 Memramcook River Causeway—further confirms this by stating that the opening and closing
 of the causeway gates creates large fluctuations in sediments and bacteria which are stressful
 to aquatic organisms and has led to the elimination of many species once present in the river,
 including many species of fish that were historic to the region.
- The causeway has gates that are operated electronically by the Province of New Brunswick to control the passage of water. The gates are closed when tides are high and are opened when tides are low. The gate schedule is in place to help reduce the impacts of high tide to surrounding agricultural land and to aid in the passage of fish. However, since the causeway structure was built following regulations that were in place in 1973, residents in the community question if the structure is currently in violation of newer, more recent legislation concerning fish passages, as was the case for the Petitcodiac River causeway. According to Petitcodiac Riverkeeper's report—Preliminary Assessment of Options for the Long-Term Viability of the Memramcook River Causeway—fish species which remain in the river today are periodically blocked passage to over 85% of the Memramcook River by the closed gates.
- Consultations with Fort Folly First Nation should be done to shed light on how the changed river system has affected this community, for example, the traditional use of the land including the use of the river for canoes and access to fishing, as well as the use of plants and herbs for food and medicine, etc.
- Residents in the region feel the Memramcook River is no longer beautiful, and this affects the
 overall landscape of the surrounding valley which is renowned for its beauty. If the river were
 to come back to life, there would be ecotourism opportunities since people would be more
 drawn to the area.

- The region experiences flooding every year, which is troublesome because residents report
 that flooding is getting worse and main roads are often blocked for several days. Many houses
 in the region experience periodic flooding. Residents say that they feel like it doesn't take a
 big tide for the river to overflow, nowadays. Climate change and increasing water levels make
 this issue even more pressing.
- Residents are deeply concerned about repairs which seem to be urgently needed for the
 causeway structure as well erosion which has taken place over the years because of this
 structure. In fact, Petitcodiac Riverkeeper's report <u>Preliminary Assessment of Options for
 the Long-Term Viability of the Memramcook River Causeway</u> states that the two large metal
 gates, their guides in the concrete and the entire superstructure are in urgent need of repairs,
 and that the erosion below and immediately downstream of the structure is estimated to be
 15 ft by 15 ft. Major repairs need to be done to ensure public safety.

Public Dialogue: Concerns Expressed About Flooding and Infrastructure Needed to Reduce Flood Risks

Participants at the public dialogues expressed that both Dorchester and Memramcook communities are strongly in favour of removing the causeway and replacing it with a bridge. However, they stressed the need to reduce flood risks.

- Residents say that many dykes, levees and aboiteaux are already in need of being repaired
 or reinforced to help reduce current flooding issues, and that a LIDAR mapping and/or
 hydrological assessment of what type of elevation needs to be done should be the next step.
- Farmers are most affected by any decision made regarding the Memramcook River causeway. The river's saltwater destroys crops. It can take 8 years or more to remove the salt out of the fields after a flood. This has happened in the past when the causeway gates would be t emporarily opened for tides and/or fish passage and one tide would come in too strong and go over the dykes. Farmers in the region say they are strongly in favour of removing the causeway and replacing it with a bridge, but are very concerned with protecting their lands. Farmers say that the agricultural land along the river is more productive and more valuable than similar agricultural land in the regions immediately next to it. If it is impossible to save certain farmlands from flooding as the Memramcook River gradually reclaims its natural flow and strength, some community members suggested that creative solutions could be applied, such as exchanges/partnerships between landowners. For example, retired farmers could offer lands no longer being used to current farmers and community partners such as the Atlantic Canadian Organic Regional Network (ACORN) could assist with such projects.

• There are concerns about the proximity of the CN Railway. Increased flooding could restrict the railway's access and cut the flow of goods in/out of the province. CN is an important stakeholder which will need to be consulted during next steps so that it can understand current and potential flood risks, collaborate on proposed solutions, and support preferred options.

Public Dialogue: Enthusiasm Towards Potential for Recreation, Ecotourism and Community Development

Participants at the public dialogues expressed their enthusiasm towards the potential for recreation, ecotourism and sustainable community development that would accompany the revitalization of the Memramcook River and Watershed.

- Canoeing, kayaking and other recreational uses of the Memramcook River could be possible, and could be organized by various community groups and tourism operators.
- A new bridge construction should connect to current walking and cycling trails already
 present along the Memramcook River and communities along the river should be encouraged
 to develop more trails, in order to bring people closer to a rejuvenated, beautiful river.
- More people coming into the region to take advantage of the recreational uses of the Memramcook River and its walking/cycling trails means more revenue for small businesses like restaurants, b&bs, corner stores, museums, shops & galleries, etc. in the region.

MOVING FORWARD - NEXT STEPS

Revitalizing the Memramcook River and Watershed is a high priority for Petitcodiac Riverkeeper and the organization will continue to take a leadership role in fostering community and stakeholder discussions on this topic.

In the fall of 2020/winter 2021, Petitcodiac Riverkeeper will thus produce a *Memramcook River Causeway Replacement Feasibility Study* which will present research on the most preferred option for the replacement of the Memramcook causeway (construction of a bridge) identified through the community public dialogues and engagement process, as well as an assessment of costs & feasibility. A draft of this report will be circulated to community members and key

stakeholders, followed by interviews and dialogue with community leaders and decision makers to refine options. A final report will then be circulated to help inform various levels of government.

Petitcodiac Riverkeeper will also collaborate with key stakeholders and partners to produce a Community Action Plan for Revitalizing the Memramcook River and Watershed. which will look at capitalizing on positive outcomes associated with the revitalization of the Memramcook River and Watershed, including identifying opportunities for recreation. ecotourism. culture/ heritage and economic development.

Petitcodiac Riverkeeper invites all interested citizens, organizations and stakeholders to stay informed on the project's developments and to contact us for comments and feedback.

STAY INFORMED!

Ways to stay informed on the Memramcook River and Watershed Revitalization Project offered by Petitcodiac Riverkeeper include the following:

Petitcodiac Riverkeeper website: www.petitcodiac.org

The organization's <u>Current Projects–Memramcook River and Causeway</u> page hosts all reports produced by the organization as well as media clippings related to the project.

Petitcodiac Riverkeeper Facebook Group - *Memramcook River Revitalization:* facebook.com/groups/215129506488483

This discussion group is the ideal place to be informed of the latest developments, voice your opinions, organize meetups and be kept in the loop.

Petitcodiac Riverkeeper email distribution list: info@petitcodiac.org

The organization keeps an email list of key stakeholder and community contacts related to the Memramcook River & Watershed Revitalization project, including all residents who participated in the public dialogues and indicated that they wished to receive periodic emails. Other interested citizens who would like to offer feedback or be kept in the loop for future community discussions and other opportunities related to this project can contact the organization at info@petitcodiac.org to be added to this list.