

## Shediac Bay Watershed Management Plan Proposed Actions

[Please send your comments and any suggestions not listed herein to wmpfeedback/pgbvcommentaires@GNB.ca.](mailto:wmpfeedback/pgbvcommentaires@GNB.ca)

Actions	Potential Lead Organization and Partners	Timeframe (Short: 2 yr., Medium: 5 yr., Long-Term: 10 yr.)	Potential Funding Opportunities
<b>Goal #1: Protect and Improve Water Quality in the Shediac Bay Watershed</b>			
<p><b>1. Complete stream surveys to identify issues</b> (i.e. walk the streams and rivers (with landowner permission), in order of priority and identify potential point and non-point sources etc.). The sources should be mapped, (GPS points) and photographed. This information can be stored or added to a GIS map for further analysis.</p>	<p><b>Lead:</b> I.e. Who should lead the planning and implementation of this action?</p> <p><b>Partners:</b> I.e. Are there any partners who could help plan and/or implement this action?</p>	Long-term	Please provide your suggested funding opportunities in this column.
<p><b>2. Collect information on the aquatic habitat of the watershed</b></p> <ul style="list-style-type: none"> <li>○ Characterize the streams and rivers of the watershed (e.g.: canopy, algae, substrate composition, flow, bank measurements etc.).</li> </ul>	<p><b>Lead:</b></p> <p><b>Partners:</b></p>	Long-term	

Actions	Potential Lead Organization and Partners	Timeframe	Potential Funding Opportunities
<p><b>3. Reduce nutrients in the watershed.</b></p> <ul style="list-style-type: none"> <li>○ Develop feasible nutrient reduction goals for the watershed.</li> </ul>	<p><b>Lead:</b></p> <p><b>Partners:</b></p>	<p>Medium/long-term</p>	
<p><b>4. Reduce bacteria levels in the watershed.</b></p> <ul style="list-style-type: none"> <li>○ Develop feasible bacteria reduction goals for the watershed.</li> </ul>	<p><b>Lead:</b></p> <p><b>Partners:</b></p>	<p>Medium/long-term</p>	
<p><b>5. Develop a recognition program to encourage landowners to implement beneficial management practices to help reduce nutrients and bacteria throughout the watershed.</b></p>	<p><b>Lead:</b></p> <p><b>Partners:</b></p>	<p>Medium-term</p>	
<p><b>6. Continue the long-term water quality monitoring program to monitor changes in the watershed over time.</b></p> <ul style="list-style-type: none"> <li>○ More detailed monitoring is recommended when the cause of elevated parameters is unclear.</li> <li>○ Various bio indicators can be used for water quality monitoring (i.e. water sampling, benthic macroinvertebrates, physical parameters etc.).</li> </ul>	<p><b>Lead:</b></p> <p><b>Partners:</b></p>	<p>Long-term</p>	

Actions	Potential Lead Organization and Partners	Timeframe	Potential Funding Opportunities
<p><b>7. Understand water quality in the watershed.</b></p> <ul style="list-style-type: none"> <li>o Water quality data is reviewed and assessed on a regular basis.</li> <li>o Water quality results and assessments are made publicly available.</li> <li>o Expert advice is obtained when needed (Ex.: is total phosphorous naturally occurring in the watershed?).</li> </ul>	<p><b>Lead:</b></p> <p><b>Partners:</b></p>	<p>Long-term</p>	
<p><b>8. Build relationships and partnerships with farmers and other commercial partners.</b></p> <ul style="list-style-type: none"> <li>o Form a small committee tasked with the following actions: <ul style="list-style-type: none"> <li>▪ Develop a questionnaire for local famers to increase our knowledge of the various agricultural practices in the watershed (type of farms, types and timing of fertilizer application etc.).</li> </ul> </li> </ul>	<p><b>Lead:</b></p> <p><b>Partners:</b></p>	<p>Long-term</p>	

Actions	Potential Lead Organization and Partners	Timeframe	Potential Funding Opportunities
<p><b>8.(continued)</b></p> <ul style="list-style-type: none"> <li>▪ Meet with local farmers to develop relationships and partnerships.</li> <li>▪ Identify funding programs and work in collaboration with farmers to help them apply Beneficial Management Practices on their farms such as: <ul style="list-style-type: none"> <li>➤ Installing cattle fencing to keep cattle out of watercourses.</li> <li>➤ Installing watercourse crossings for cattle if needed.</li> <li>➤ Revegetate buffer zones where needed.</li> <li>➤ Provide alternative water supplies for cattle when access to a watercourse is removed.</li> </ul> </li> </ul>	<p><b>Lead:</b></p> <p><b>Partners:</b></p>	<p>Long-term</p>	

Actions	Potential Lead Organization and Partners	Timeframe	Potential Funding Opportunities
<p><b>9. Buffer zones are maintained and improved in riparian areas.</b></p> <ul style="list-style-type: none"> <li>○ Complete a riparian zone study (i.e. walk up the streams to identify priority sites for restoration).</li> <li>○ Work in collaboration with landowners to educate and improve buffer zones.</li> <li>○ Promote the growth of vegetation along the coast.</li> </ul>	<p><b>Lead:</b></p> <p><b>Partners:</b></p>	<p>Long-term</p>	
<p><b>10. Continue and expand an annual volunteer-based garbage clean-up program throughout the watershed.</b></p>	<p><b>Lead:</b></p> <p><b>Partners:</b></p>	<p>Long-term</p>	
<p><b>Goal #2: Improve Stormwater Management in the Shediac Bay Watershed</b></p>			
<p><b>11. Create a committee tasked with educating, developing and implementing actions that will help mitigate the impacts of stormwater in the watershed. For example:</b></p> <ul style="list-style-type: none"> <li>○ Rain gardens, rain barrels, reducing permeable surfaces, stormwater treatment measures etc.).</li> </ul>	<p><b>Lead:</b></p> <p><b>Partners:</b></p>	<p>Long-term</p>	

Actions	Potential Lead Organization and Partners	Timeframe	Potential Funding Opportunities
<p><b>12. Work with the Town of Shediac to encourage the implementation of a Stormwater By-Law and Best Management Practices that will provide guidance for new developments.</b></p>	<p><b>Lead:</b> <b>Partners:</b></p>	<p>Short-term</p>	
<p><b>13. Potential follow-up actions related to the 8 recommendations made in the 2019 <i>Intensive Stormwater Sampling Program report</i>. For example:</b></p> <ul style="list-style-type: none"> <li>○ Expand the pet waste reduction program throughout the Town of Shediac.</li> <li>○ Conduct a bird behaviour study in the Town of Shediac to identify patterns of congregation and large population roosting behaviours. Bird control measures could be explored in areas where large congregations of birds have the potential to impact water quality at Parlee Beach.</li> </ul>	<p><b>Lead:</b> <b>Partners:</b></p> <p><b>Lead:</b> <b>Partners:</b></p>	<p>Short-term</p> <p>Medium-term</p>	
<p><b>14. Sources of sedimentation in the watershed are identified and mitigated.</b></p> <ul style="list-style-type: none"> <li>○ Identify actions to reduce sedimentation in the watershed.</li> </ul>	<p><b>Lead:</b> <b>Partners:</b></p>	<p>Long-term</p>	

Actions	Potential Lead Organization and Partners	Timeframe	Potential Funding Opportunities
<b>Goal #3: Improve Wastewater Management in the Shediac Bay</b>			
<p><b>15. Work with the Greater Shediac Sewerage Commission to identify actions around this goal.</b></p>	<p><b>Lead:</b> <b>Partners:</b></p>	<p>Medium/long-term</p>	
<p><b>16. Maintenance of on-site septic systems.</b></p> <ul style="list-style-type: none"> <li>○ Explore opportunities to link Parcel Identifier numbers (PID) with on-site septic system information.</li> <li>○ Education program (see goal #5) for Local Service Districts and private landowners</li> <li>○ Work with the Greater Shediac Sewage Commission to explore opportunities for expanding their system.</li> </ul>	<p><b>Lead:</b> <b>Partners:</b></p> <p><b>Lead:</b> <b>Partners:</b></p> <p><b>Lead:</b> <b>Partners:</b></p>	<p>Medium-term</p>	
<p><b>17. The two marinas should continue to subsidize the sewage disposal stations.</b></p> <ul style="list-style-type: none"> <li>○ Tracking and reporting on the use of the sewage disposal services should be done annually.</li> </ul>	<p><b>Lead:</b> <b>Partners:</b></p>	<p>Long-term</p>	

Actions	Potential Lead Organization and Partners	Timeframe	Potential Funding Opportunities
<b>Goal #4: Protect the Coastal Areas of the Watershed</b>			
<p><b>18. Work with the Southeast Regional Service Commission, the Town of Shediac, First Nations and Climate Change Secretariat to develop actions around this goal.</b> Climate change plan (2<sup>nd</sup> phase) project (actions to be added later).</p> <ul style="list-style-type: none"> <li>○ Shoreline restoration demonstration project.</li> <li>○ Coastal modeling study.</li> </ul>	<p><b>Lead:</b></p> <p><b>Partners:</b></p> <p><b>Lead:</b></p> <p><b>Partners:</b></p> <p><b>Lead:</b></p> <p><b>Partners:</b></p>	<p>Medium/long-term</p>	
<b>Goal #5: Education, Awareness and Communication</b>			
<p><b>19. Create a committee tasked with developing and implementing education programs focused on target audiences and key messages.</b></p> <p>The committee will:</p> <ul style="list-style-type: none"> <li>a. Identify those responsible for each topic,</li> </ul>	<p><b>Lead:</b></p> <p><b>Partners:</b></p>	<p>Long-term</p>	



Actions	Potential Lead Organization and Partners	Timeframe	Potential Funding Opportunities
<p><b>19. (continued)</b></p> <ul style="list-style-type: none"> <li>b. Identify what and where educational programs are taking place in the watershed, and</li> <li>c. Identify educational gaps.</li> </ul> <p>Examples of education programs include:</p> <ul style="list-style-type: none"> <li>○ For farmers: Beneficial Management Practices related to chemical fertilizers and manure spreading.</li> <li>○ For landowners in riparian zones: The importance of protecting and restoring riparian zones.</li> <li>○ Everyone: The importance of wetlands in a watershed.</li> <li>○ For dog owners: How cleaning up after your dog can improve water quality in a watershed.</li> <li>○ For owners of on-site septic systems: Best Management Practices for proper maintenance.</li> <li>○ For boat owners: The importance of using sewage and garbage disposal facilities.</li> <li>○ For everyone: Information to promote the Shediac Bay Watershed Management Plan and opportunities for community participation.</li> </ul>			

Actions	Potential Lead Organization and Partners	Timeframe	Potential Funding Opportunities
<b>Goal #6: Protect Water Quality at Parlee Beach</b>			
<p>20. By implementing the actions under goals 1-5 above that will help protect and improve water quality in the Shediac Bay watershed, this will in turn help maintain excellent water quality at Parlee Beach.</p>		N/A	
<p>21. Water quality at Parlee Beach should continue to be monitored and the data should remain publicly accessible.</p>	<p>Lead:</p> <p>Partners:</p>	Long-term	
<b>Goal #7: Implement the Watershed Management Plan (WMP)</b>			
<p>22. Create a Watershed Management Plan implementation committee</p> <ul style="list-style-type: none"> <li>○ Actions are prioritized and implemented annually.</li> <li>○ Progress is shared publicly (e.g.: annual newsletter).</li> </ul>	<p>Lead:</p> <p>Partners:</p>	Short and long-term	