

**Shediac Bay Watershed Association, Inc.
Strategic Plan 2015-16**



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**Shediac Bay Watershed Association
Strategic Plan**

Introduction:

The Shediac Bay Watershed Association was incorporated in 1999 as a community-based not-for-profit organization. Incorporation was driven on the one hand by area residents concerned with the environmental wellbeing of the region, and on the other hand by the New Brunswick Provincial government's priority for supporting community based groups to classify environmental conditions of watersheds. Much has since been done to improve understanding of the watershed and develop strategic plans to sustain the environmental integrity of the watershed. These reports are available on the SBWA website (<http://www.sbwa-abvbs.net>).

In 2012, SBWA was confronted with a potential loss of revenue sources and deficit financing. Contributing factors were staff turnovers and government funding cuts. The SBWA Board of Directors made significant efforts throughout 2012 to stabilize the organization. It then convened a special meeting on January 19, 2013 to address the underlying challenges facing the organization. The record of this meeting is attached as Appendix A.

The following reflects the outcome of the January 19 meeting. Armand Robichaud provided summary reports. Jim Weldon provided the project information. Dave Dunn coordinated input with Armand and Jim through three special meetings.

SBWA Governance and Mandate:

The SBWA was granted its corporate non-profit organization charter in 1999. The SBWA is a community-based organization designed to inform and help mitigate pragmatic solutions to current environmental issues. Its oversight is through a Board of Directors. The 2012-13 Board consists of the following members:

President: David Dunn	Director: Dominique Audet
Vice President: Erick Bataller	Director: Léo-Paul Bourgeois
Treasurer: Helen Hall	Director: Gerry Dionne
Secretary: Frances Kelly	Director: Connie Doyle
1 st Past-President: Victorin Mallet	Director: Bob Ford
2 nd Past President: Bill Murray	Director: Pierre Landry
	Director: Bob Mallet
	Director: Armand Robichaud

Past planning exercises established the strategic direction for the SBWA. The January 19 meeting supported continuance of this direction:

Our Vision: *Communities working together to foster a healthy ecosystem that will sustain the quality of water for future generations.*

Our Mission: *The SBWA will accomplish its vision through education and community stewardship.*

Our Purpose: *To enable persons, associations and communities within the Shediac Bay watershed to participate in the development and implementation of a comprehensive environmental management plan for the bodies of water within the coastal area of Shediac Bay.*

SBWA Directors completed a SWOT Analysis (Strengths, Weaknesses, Opportunities, Threats) during their January 19 special meeting. Among those referenced were:

<p style="text-align: center;">Strengths</p> <ul style="list-style-type: none"> • Strong community sense of environmental sustainability • Good water quality and habitat information from past studies • Members with valuable knowledge base • Base funding as been sustained • Effective and relevant programs 	<p style="text-align: center;">Weaknesses</p> <ul style="list-style-type: none"> • Lack of stable funding • Low number of active members • Insufficient visibility • Insufficient community financial support • Project funding is highly administrative • Staff turnover • Strengthen watchdog role
<p style="text-align: center;">Opportunities</p> <ul style="list-style-type: none"> • Publicize environmental issues and threats (e.g. invasive species) • Develop membership and partnerships • Engage a full time manager 	<p style="text-align: center;">Threats</p> <ul style="list-style-type: none"> • Complacency: remaining relevant and credible to area residents • Deregulation and economic development (i.e. shifting government priorities) • Reduced core funding from NB ETF • Ongoing point sources of pollution and sedimentation (industrial, wastewater, agricultural, forestry)

SBWA performance is to a large extent based on the effectiveness of our professional staff, contractors, and students. Our team this year consists of:

- Remi Donelle, (Manager, Effective Summer 2013)
- Jolyne Hebert (Biologist)
- Jim Weldon (Consulting Program Coordinator)
- Helen Hall (Admin assistant)
- Summer students and Science Horizon intern

Community support and membership have been and continue to be a leading challenge. Membership is open to any individual, group, or corporate entity that shares our philosophy.

The SBWA operates largely with support from the New Brunswick Environmental Trust Fund. It also receives funding from several national and local bodies. These funds are wholly dedicated to operations, with rent and most other overhead costs being negligible thanks to support from community organizations. A budget estimate for 2014-15 projects is attached with project descriptions.

The central focus of the SBWA has been on the community's concern for ecological functions in our rivers and streams, our wetlands, and our coastal zone. In its brainstorming session on January 19, 2013, the SBWA Directors defined ongoing challenges in five areas:

1. Ongoing threats to environmental sustainability;
2. Securing a core funding base of \$85,000 annually;
3. Developing a broad base of committed members from across the watershed;
4. Implementing an effective public relations program; and
5. Developing a strategic operational plan.

Ongoing issues include coastal erosion and coastal flooding, wetland and greenbelt protection, deforestation, agriculture and light industry practices, secure wastewater and drinking water supplies, groundwater and surface water quality, housing development - the list goes on.

The SBWA Directors and staff have worked hard over the years to develop programs to address these issues of importance to local residents. In 2013-14, the Association has identified five key areas of endeavor. These are summarized below as specific strategies in our action plan.

2015-16 Action Plan:

1. Water Quality Monitoring

Overview: Monthly water quality analysis will be undertaken at 9 sites over 5 months consistent with historical data. CAMP sampling will be undertaken at 12 sites over 3 months. Surveys will be undertaken where abnormal readings occur. Two beach sweeps will be made with schools and the public. We will implement invertebrate sampling with the CABIN program and have the Adopt-a-Stream educational program with the local high school. The list of stakeholder groups in the watershed will be updated and contacts will be made to assess potential for partnerships.

Test sampling sites along the shores of the Shediac Bay using guidelines from the CCME and search for available data concerning water quality in the Bay.

Objectives:

- Water and fish sampling and analysis to monitor state of the health of the aquatic habitat
- Monitor shorelines to identify problem areas and provide remedial actions
- Monitor parameters around the bay
- Identify and engage target stakeholder groups
- Establish community-based partnerships in delivery of SBWA projects.
- CABIN sampling (freshwater invertebrates)
- Adopt-a-Stream program

Funding Sources:

- Environmental Trust Fund \$40,000
- Loblaws Water Fund – \$24 000
- Town of Shediac – \$ 1500

Outcomes (performance measurements):

- 8 Monthly collections and analyses, and investigation into deviations from past results.
- Facilitate two beach sweeps
- Create a plan for monitoring the bay and sample test sites
- Increase awareness among stakeholders of issues pertaining to aquatic health with a monthly summary brochure (July through October).
- Updated web based information (number of web visits).
- Groups identified and engaged (number).
- Partnerships established for shared cost in project delivery (number).

Communications:

- Media releases.
- Maintaining current information on activities and results on SBWA website

- Project information will be posted at public locations and targeted sites (e.g. weekly papers, websites, camp grounds, marinas, stores), and included in new SBWA seasonal bulletins.
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2. Education

Overview: Presentations will be developed, scheduled and delivered on energy conservation, climate change, and a variety of topics. These will be at schools, the Eco-centre, and local groups as requested. If office relocates to Parlee Beach we will have displays and presentations at the centre. We will assist MFB School in the establishment of an educational biodiversity garden.

Objectives:

- Inform targeted groups (i.e. schools, permanent residents, seasonal residents, tourists)
- Information booth at community events
- Assist with biodiversity garden
- Establish partnership with Homarus Inc.

Funding Sources:

- Environmental Trust Fund: \$15,000
- Homarus Ecocentre – \$1 500

Outcomes (performance measurements):

- Offering at least 2 visits to each elementary school
- Weekly seminars per week throughout July until the last week of August
- Weekly Market in the Park until September
- Three community event booths (e.g. Celebration of the Sea, Shediac Marina open House, etc.)
- SBWA Seasonal Bulletins
- Interim and Final Project Report

Communications: Project information, notably the seminar series, will be posted at public locations and targeted sites (e.g. weekly papers, schools, community organizations, websites, campgrounds, marinas, stores)

3. Fish and Habitat Restoration

Overview:

This program will do on the ground restoration work and look at the state of the salmonid population in the watershed.

A section of the Scoudouc river that is eroding will be stabilised and vegetated next to Dionne Brook.

We will be opening of a ¾ kilometer stream that presently has 4 older dams that impede fish access to spawning habitat. Damage caused by the dam flooding will require significant streamside restoration work.

An elevated culvert at a nearby is also blocking fish passage. SBWA plans to purchase and install a fish ladder which will allow salmon to access spawning habitat available upstream.

We will use electrofishing at historical sites (2005) that had the presence of salmon to determine changes in fish populations and measure our restoration efforts in the long term. This data will be used to determine restocking possibilities.

This project will expand the engagement and education of the stakeholders who have a vested interest in the health and use of the river.

The Fish Friend program will be implemented in one school.

Objectives:

- To restore and sustain a recreational fishery
- To enhance public stewardship of the aquatic habitat
- To build partnerships with other community and government organizations
- To do on the ground restoration activities
 - Improve fish passages (removal of beaver dams, fish ladder)
 - Stream stabilisation and reforestation
- Trout and salmon inventories with electrofishing
- Create a restocking plan for trout
- Education with schools

Funding Sources:

Wildlife Trust Fund (all activities): 15 000\$

DFO – Stream Stabilisation : 11 200\$

EcoAction – Stream Stabilisation - 13 580,00 \$

DFO – Removal of fish passage - 11 350,00 \$

DFO – Fish Ladder installation 10 025,00 \$

ASCF – Fish passage and assessment of populations for restocking - 20 300,00 \$

Outcomes (performance measurements):

- On the ground restoration activities

- Stream Stabilisation
- Barrier removal
- Fish ladder installation

- Fish Friends program at MFB School
- Evaluation of salmonid population changes with electrofishing.

Communications: General information will be posted in all SBWA material. Specific information will be targeted to stakeholder and government partnerships as project results are developed.

4. Tern habitat remediation

Overview:

In 2013 the Shediac Marina improvement work has changed a habitat that was used for nesting by terns, a migratory seabird. The site is no longer suitable for the tern colony. This project aims to establish a new permanent location in Shediac Bay for a tern colony.

To establish this colony we will use floating platforms according to the standards used in Ontario for this kind of project. The document "Reefrafts for Common Terns and Fish - Guidelines for Design, Construction and Operation" will be used for the construction of platforms. (See document in attachment)

To improve the chance of success we will use visual and auditory decoys for terns. These methods have been used in 2014 and hearing were very attractive effective in attracting terns.

There will be educational materials on nesting terns and the project that will be distributed to the public.

Objectives:

- Install artificial nesting habitat in the form of floating platforms
- Determine a plan for maintenance with the Canadian Wildlife Service
- Follow nesting success
- Educational activities

Funding Sources:

Env Canada EDF – 17 622\$

WTF - 11 590,00 \$

Outcomes (performance measurements):

- The successful establishment of a tern colony on the artificial habitat
 - Agreements with CWS for the long term maintenance of the platform
 - Educational activities
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5. Rare freshwater mussels project

Overview:

The Shediac Bay Watershed will be working with DFO species at risk team to determine the status of the Brook Floater in South Eastern NB.

The project will evaluate Brook floater, *Alasmidonta varicose*, habitat to identify landowners and engage them in implementing protection or restoration actions. The second year of the project will focus on putting actions on the ground. The Brook floater is a species of special concern.

The Brook floater is threatened in the Shediac Bay area by degradation of its habitat by human activities that affect the riparian zone. These include agricultural and forestry practices as well as residential development. Increased siltation from these activities as well as deforested buffer zones will be addressed by this project. We will also be addressing some of these issues with protection measures.

We will first do a habitat evaluation to prioritize zones in need of restoration and others that would benefit from protection. These evaluations will also identify landowners next to Brook floater habitat.

We will then contact the individual landowners. Information documents will be used to inform and recruit landowners in the project.

The habitat evaluations will be compiled to draft three plans, a habitat protection plan, a human impact mitigation plan and a habitat restoration plan. Actions and landowners will be prioritized to maximize the recovery of the species.

Outreach activities will mostly be targeted at landowners with Brook floater habitat on their lands. However, the project will also benefit from the Shediac Bay Association's regular outreach activities such as newsletters, information kiosk and social media. These outreach activities will help recruit landowners for the project.

This project will help prioritize actions for Brook floater recovery in the long term. We will be able to include the habitat for this species in consideration when doing restoration and protection work for other species.

Objectives:

- Identify areas with Brook Floaters
- Do a habitat assessment
- Identify regions for restoration or protection
- Contact landowners to recruit them for a protection or restoration plan
- Produce some educational materials on Brook Floater
- Work with other experts such as NB Museum to compile information
- Have a report on the status of the Brook Floater in SE NB that will provide information for the COSEWIC report

Funding Sources:

Environment Canada – HSP – 23 230

Outcomes (performance measurements):

- Confirm presence or absence of mussels in Shediac and Scoudouc rivers
- Identify landowners and distribute educational materials
- Have a restoration plan for degraded BF habitat
- Have protection agreements for pristine BF habitat
- Gather information in a report

Communications: General information will be posted in all SBWA material. Results of ongoing research will be shared with DFO and the NB Museum as well as posted to our websites and the delivered through our seminar series. Regular media updates will be provided.

6. Biodiversity with schools and town

Overview:

The project aims to increase biodiversity in schools and public places around the town of Shediac .

We will primarily use the planting of native trees and shrubs in schoolyards and green spaces in the town of Shediac. Species will be selected to increase the biodiversity of native species. The choice of species will also be linked to habitat.

Also, bird nesting boxes will be installed for different species of native birds based on habitat. The use of nest boxes will be followed each summer seasons.

Interpretation signs will be installed in the public places of the project to explain the importance of biodiversity

Objectives:

We will add at least 10 species of trees and shrubs. We will plant a variety of tree size including trees of 3-5 years and 1 year old seedlings. The project goal is to add more than 500 new trees including 50 mature trees and 500 seedlings.

For birds, we will install at least 60 nesting boxes 4 different types. The nesting boxes will be installed in order to improve their chance to use targeting species in suitable habitats. Students from MFB will participate in the construction of the nest boxes.

In schools, we will organize at least 3-4 planting activities per school with students. Students will follow for planting which ensures a better chance of survival. The activities will be organized in autumn and spring.

There will be at least 2 planting activities with the public. These activities provide the opportunity to educate on the importance of biodiversity and good tree planting techniques.

We will have interpretation signs for the public.

Funding Sources:

EcoAction - 23 550,00 \$

TD Friends of the Environement- 5000\$

Outcomes (performance measurements):

- Plant at least 550 trees and shrubs
- Build and install 60 nest boxes
- Install signs explaining the project
- Do presentations with schools and the public

Communications: General information will be posted in all SBWA material. Results will be shared with the Town of Shediac , as well as posted to our websites and the delivered through our seminar series. Regular media updates will be provide