

THE WAY FORWARD

A MODERN COMMON SENSE WATERSHED PLAN

FOR MIDDLE RIVER, BADDECK RIVER, NORTH RIVER, THE
MARGAREE RIVER & NYANZA BAY

(The Coverage Area)

Highland Rivers Watershed Society Business Plan

2026/27 to 2031/32

May 2026

Website: www.highlandriverswatershedsociety.com

Executive Summary

The Highland Rivers Watershed Society (HRWS) is a recently re-named Society that evolved from the Middle River Watershed Society which originally formed in 1984. HRWS expands the coverage area to include additional rivers and water bodies geographically from Middle River alone to Margaree, Baddeck and North Rivers as well as Nyanza Bay. The board of directors will include representation from the distinct communities of Wagmatcook/Nyanza Bay, Margaree, Middle River, Baddeck River/Nyanza Bay and North River. The Society is a registered *Public Foundation* bearing Canada Revenue Agency charity number 89700 6490 RR0001. The fiscal year end of the charity is March 31. Inclusion of each area is subject to community approval.

HRWS has been expanded to address the dire erosion conditions and related consequences currently occurring in all locations. These events have dramatically escalated due to climate change combined with an existing government policy regime that is ineffective leading to widespread erosion issues and plummeting fish stocks in the freshwater rivers. HRWS was established to solicit funds from the federal and provincial government as well as private and corporate sponsorship for a pure environmental play directed at the coverage area. The Society is seeking to achieve a **stable stream initiative through a federal government approved pilot project** that returns control and decision making of the affected waterways to the communities. Though HRWS will act as the agency to lobby for pilot project status and solicit government/private sector funding, the directors of the various jurisdictions will maintain strict responsibility for attending to erosion issues in their respective waterways. For purposes of accountability, future plans call for community board of director's to be elected by the residents of the respective areas the rivers are in on the municipal elections' rotation. These elections occur on a four-year cycle.

Vision

Two competing ideologies currently exist around the coverage area. On one hand, there is the "purest" ideology that currently exists and prefers a hands-off approach from human intervention and letting nature take its course. This ideology is firmly entrenched in the Federal Department of Fisheries and Oceans and the Provincial Department of Environment and Climate Change (see Cape Breton River's Cassandra Report – February 2023 for historical context). The opposing view is the "realist" ideology that takes into account the big picture and the destructive consequences experienced by the user groups from years of strict government oversight under the "purest" approach.

By the end of fiscal 2026/27, we will have achieved pilot project status and returned the management of the Nyanza Bay, Margaree River, Middle River, Baddeck River & North River to the communities and implemented restoration and erosion strategies. This will occur following the election of a board of directors subject to community meetings in the various watersheds of the aforementioned rivers. In conjunction with this directive, we will secure a five-year financial commitment from the federal and provincial governments as well as solicit private donations and corporate sponsorship to fulfil ongoing, mandated corporate *Environmental, Social & Governance* (ESG) initiatives within contributing organizations.

Mission Statement

The Society wishes to embark on a **stable stream policy** that will provide benefits to all user groups of the river systems. We support stable, healthy rivers and thriving fish stocks in our community waterways and the intrinsic future benefits such initiatives will achieve.

User Groups

Future community inspired watershed policy for the coverage area under a “realist” approach can only be derived if all affected participants are considered in crafting a new paradigm. To this end, the integrity of federal and provincial tax expenditures must be brought into the conversation and improved upon to the benefit of society at large. This will improve on the current situation which is characterized by an overabundance of bureaucratic red tape where millions of taxpayer funded dollars are spent on operating expenditures as opposed to capital investment. After a thorough assessment, the following user groups have been identified:

Community roadways

Each citizen in the coverage area, as well as visitors to the affected communities, use our existing road systems. Roads are the responsibility of the Nova Scotia Department Public Works with strict environmental control from the Nova Scotia Department of Environment and Climate Change staff and Federal Department of Fisheries & Oceans. Unbeknownst to many, the current “purest” regime has caused significant costs to roadways in the coverage area. As an example, the November 2021 flood event resulted in north of ten million dollars of damage when the Goldbrook bridge, located on the world-famous Cabot Trail on the Middle River, collapsed. Loss of life was averted thanks to a split second of fortunate timing. Hundreds of thousands of dollars of damage to vehicles and sideroad infrastructure followed the bridge collapse as the detour route physically could not handle the traffic flow resulting in abysmal road conditions before remedial work commenced in the spring/summer of 2022. This was entirely the result of the Middle River breaching a breakwater established in 1991 upstream from the Goldbrook bridge. The breach altered the streambed as a new channel was created through the woods with a trajectory that took out the piers of the bridge. The taxpayers of Canada paid for the 2022 remedial work under emergency funding from the federal government.

Indigenous fishers

For many generations, the Mi'kmaq people relied on waterways in the coverage area for sustenance from the bountiful stocks of fish and eels. As aquatic stocks have declined precipitously since the 1970's, the ability to carry on traditional food fishing practices have been dramatically curtailed. The right to fish for food, social and ceremonial (FSC) purposes is protected under section 35 of the Constitution. It is a collective right, not an individual one. Designated Indigenous harvesters can catch what is needed for themselves and/or their community for FSC purposes. To this end, the new paradigm envisaged in this plan will return sufficient stocks to the coverage area to allow indigenous fishers to practice their Constitutional rights.

Recreational users

Our waterways are currently under extreme duress witnessed by multiple migration points from the original streambeds on the main rivers and tributaries. Due to instability, substantial amounts of gravel and trees are passing through the system filling in pools where trout and salmon previously found refuge. The migration of the watercourses has taken a substantial number of wooded areas and farm acreage originally cleared by the area settlers. For the Baddeck and Middle Rivers, this has resulted in significant infilling of the Nyanza Bay. Affected users include swimmers, kayakers, canoeists, tubers in the rivers as well as boaters in Nyanza Bay. Existing walking trails adjacent to original river streambeds have also been affected. This has created a significant impediment to recreational user experiences in the Baddeck and Middle Rivers. The same problem exists in the Margaree & North River systems.

Sports fishers

Despite the current purist regime's main goal of enhancing recreational fishing stocks, the report card post 1976 has been dismal despite the coverage area having some of the best potential habitat in Canada for the Atlantic Salmon. Were it not for the provincially funded fish hatchery in Margaree, who collect spawn and hatch out trout and salmon eggs, all rivers in the coverage area would be below minimum conservation standards for Atlantic Salmon stocks. Middle River is currently in this status.

It is generally understood and accepted that local Atlantic Salmon start their life cycle in the coverage area rivers and head for waters off Greenland before returning four years later to spawn in the coverage area rivers. This has proven to be a "tough sandbox" to survive in, but currently approximately 2-4% of salmon ultimately return making it a numbers game. Under a stable stream policy with enhanced stocking measures, the Atlantic Salmon recreational fishery will be enhanced by minimizing coverage area mortality due to changing river channels. The upside will be accompanied by increased economic activity associated with more visiting recreational fishers once stocks rebound.

Agriculture landowners on the flood plain

One of the most severely affected user groups is landowners of farmland and wooded areas adjacent the coverage area. As the result of less farming activity in the coverage area and an abundance of readily available food in grocery stores, little credence has been given to the loss of these lands. Due to increased stream migration out of original channels and through the greenbelts buffering the streams, some fields have been completely destroyed and many more acres are currently at-risk. It was certainly not always this way as many of these fields were cleared within the last 200 years to provide food for families living on the farms fortunate enough to have meadow lands adjacent to the streams. Before the 1976 Federal Fisheries amendments, farmers looked after the stream and caught potential future erosion issues when they were small problems, often using a high wheel cart and a horse to place field stone in affected areas of the stream. Today's bureaucratic blanket and fees have basically raised the bar so high that few choose to do anything for fear of criminal charges and/or the high costs associated with bureaucratically approved measures. The federal and provincial regulators of the waterways provide zero funding under the existing regime leaving landowners to find their own financing which in most cases leads to nothing being done. Furthermore, a pervasive attitude exists amongst regulators at the federal and provincial levels where it is safer to say no to any instream initiatives than take a chance on being called out for approvals that lead to criticism. Sadly, this affects the most vulnerable landowners.

Forestry landowners on the flood plain

A quick look at Nyanza Bay reveals the amount of trees that have come through the river systems due to stream migration. The estuary of the Baddeck River and the Middle River are littered with thousands of trees that once represented greenbelts along streambeds. The Margaree and North River systems are in an equally abysmal state with their respective estuaries also polluted with trees washed down the river systems. A closer look at the Margaree River at Margaree Centre reveals miles of extensive beaches where stands of mature spruce and fir trees previously stood. These “deserts” are characterized by a lack of greenery around the stream leading to increased water temperatures which decrease oxygen levels in the stream. This acts as a stressor on fish populations in periods of warm temperatures as fish require more oxygen as water temperatures increase. In addition, the increase in water temperature has resulted in a significant increase in green algae clumps in the Middle River. These algae formations require oxygen which lowers stream levels to the detriment of fish and eel populations. In the Baddeck River system, the middle channel leading to Nyanza Bay was plugged when the Dutch elm disease sent dead elms downstream. This caused a spike in the water temperatures in the lower Baddeck River.

Carbon capture

One thing that every Canadian does is breathe and experience the effects of climate change. The Margaree, Middle & Baddeck rivers all have significant acreage at-risk of disappearing downstream without erosion control intervention. The result is vast gravel bars where streambeds previously existed. The science behind carbon capture indicates grasslands and forested areas retain significant quantities of carbon whereas gravel beaches (deserts) left behind due to erosion capture none. Given this fact, all Canadians are further behind if ongoing erosion is left to fill the estuaries in the coverage area and create additional “deserts”.

International & National tourism

There are very few areas in the world that are as strategically positioned to take advantage of the Atlantic Salmon fishery as the coverage area. Atlantic Salmon are recognized as one of the great sport fishery catches due to the significant fight these majestic creatures give during the landing process. Given the high base mineral contents in coverage area waterways, the detrimental effects of acid rain has largely been negated. In the view of HRWS, the re-emergence of strong and vibrant waterways under a revamped regulatory regime focused on local control, will over time significantly increase the Atlantic Salmon population in the coverage area. The eradication of many signature pools in the river systems over the past thirty years and the significant decline of Salmon stocks has left the coverage area a less sought after salmon fishing destination. Given the fact the U.S. Atlantic Salmon populations in the entire U.S. has fallen into the hundreds and the geographical proximity of the coverage area rivers to the Northeast U.S. States, a significant boost to the Nova Scotia tourism economy from U.S. as well as other areas is a strong possibility.

Harvesters on the Cape Breton Highlands

On February 8th, 2023, The Province of Nova Scotia signed a 20-year lease extension with Port Hawkesbury Paper that covered 520,000 hectares of Crown owned forestry lands in all counties on Cape Breton Island plus the counties of Guysborough and Antigonish. All coverage area rivers start in these leased lands. A long-time bone of contention has existed from when the headwaters were clearcut in the 1970's following a massive spruce budworm infestation. This activity was cited as a contributing factor to river change and was likely a correct assessment but that was then, and this is now. The forestry industry is a substantial economic force in the coverage area providing employment to employees of the pulp mill as well as pulpwood contractors and private suppliers together with the economic spinoffs. These employees and suppliers, many of whom live and raise their families in the coverage area, in turn contribute provincial and federal tax dollars on top of business corporation taxes collected provincially and federally. Given the reality of the situation, stream bank stabilization with federal and provincial support as the major funding partners performed on a comprehensive basis is best in class choice to offset the effects of headwater forestry activities.

HRWS assistance request

The Society wishes to target funds from the federal and provincial governments as well as solicit funds from private and corporate sponsors. Donors will be provided Canadian tax-deductible charitable donation receipts. Each river, through their director(s), will choose the worst erosion areas as a starting point for the remedial works. Key to these efforts will be securing an armour stone supply which currently exists in two functional rock quarries in the centrally located Middle River valley. One is government owned by the Nova Scotia Department of Transportation and Infrastructure Renewal which has been dormant since 2005 but with a small investment can be readily put back online. The second quarry is accessible and is privately owned with the landowner open to rock extraction. This quarry is shovel ready for rock extraction.

