

Habitat Conservation Plan

for the Town of St. George's, Newfoundland and Labrador



June 2021





Town of St. George's
P.O Box 250
St. George's, NL
A0N 1Z0



NL Eastern Habitat Joint Venture
Department of Fisheries, Forestry and Agriculture - Wildlife Division
192 Wheeler's Road
P.O Box 2006
Corner Brook, NL, Canada, A2H 7S1



Stewardship Association of Municipalities (SAM)
P.O Box 20024 Mill Brook Mall
Corner Brook, NL A2H 7J5
samnl.org

Preface

In the province of Newfoundland and Labrador (NL) some of the wildlife and wildlife habitats that are in greatest danger of being negatively impacted are those found within municipalities. In this province, the primary focus of the Eastern Habitat Joint Venture (EHJV) is to conserve such valuable wildlife habitat through Stewardship Agreements. The Town of St. George's was identified as having ecologically valuable and unique habitat located within and adjacent to its Municipal Planning Area.

The Agreement (attached as Appendix A) and this Habitat Conservation Plan indicates the Town's support for the long-term conservation of wildlife habitat and provides guidance in relation to managing activities which could impact the designated Conservation Areas.

Acknowledgements

We would like to thank the following partners for their support in the continued implementation and activities of the Habitat Stewardship Program: Environment Canada, The United States Fish and Wildlife Service, the Atlantic Salmon Conservation Foundation and Wildlife Habitat Canada.

Plan Objectives

- (1) To present an assessment of the habitats and wildlife species designated for conservation.
- (2) To recommend protection and enhancement strategies which will maintain and/or increase wildlife use in designated Conservation Areas.
- (3) To describe potential engagement initiatives designed to increase Council and public awareness of the value of 'their' habitat for conserving wildlife.
- (4) To empower Council and municipal residents to conserve these habitats through informed development decision-making with the support of residents.

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Section 1: Habitat Conservation in Newfoundland and Labrador

Introduction

Human development has resulted in the destruction or alteration of many types of habitat all over the world. The number and diversity of North America's wildlife species has been declining over the latter half of the twentieth century. Natural habitats are regularly lost to urban, industrial, and agricultural expansion.

Recognizing the importance of habitat conservation to waterfowl populations, in 1986 Canada and the United States (later followed by Mexico) signed the North American Waterfowl Management Plan (NAWMP). This committed these countries to a long-term partnership to protect wetland habitats. Twenty-four 'joint ventures' have been subsequently established across North America to achieve the objectives of NAWMP. The province of Newfoundland and Labrador (NL) formally committed to its participation in the **Eastern Habitat Joint Venture (EHJV)** in 1989.

The **EHJV (ehjv.ca)** conserves, enhances, and restores wildlife habitat for birds found across the six eastern Canadian provinces of Ontario, Quebec, New Brunswick, Nova Scotia, PEI, and NL. Each province implements the partnership slightly differently, with each provincial program coordinated by a separate program manager and involving the cooperation of international partners, including government agencies and non-governmental conservation groups. In NL, the program is administered by the provincial Department of Fisheries, Forestry and Agriculture (Wildlife Division). Other NL partners include the Stewardship Association of Municipalities, Ducks Unlimited Canada, Canadian Wildlife Service (a branch of Environment and Climate Change Canada), Intervale Associates Inc and the Nature Conservancy of Canada.

As its primary contribution to the EHJV in NL, the provincial Department of Fisheries, Forestry and Agriculture created a "municipal habitat stewardship program" to help municipalities conserve important wildlife habitat found within planning boundaries. The program signs formal agreements with municipalities so that when future land use decisions are made, the value of that wildlife habitat will not be forgotten and that future activities will not have negative impacts on the lands ability to sustain wildlife.

The process of signing an agreement is generally as follows: subsequent to initial discussions, site visits, and geospatial analysis a formal proposal is sent to a municipality for consideration by Council. Should Council accept the proposal (this document), the department and municipality agree to sign a stewardship agreement, where the department becomes a partner in supporting the municipality in the ongoing management of these conservation lands and stewardship areas.

Since 1993, over forty municipalities have signed Municipal Habitat Stewardship Agreements in NL becoming important links in a chain of conservation areas in NL and indeed, across North America.



Map of Habitat Stewardship Agreements signed in NL.

Roles of Stewardship Agreement Signatories

Upon the signing of the Stewardship Agreement (Appendix A), each party commits to certain responsibilities:

The Province: The NL Department of Fisheries, Forestry, and Agriculture, through its Wildlife Division, would be expected to:

- Write a Habitat Conservation Plan in consultation with the Town (this plan).
- Work with the town on the review of any future developments which are proposed to take place within the designated Conservation Areas.
- Support Council and local groups in implementing the Stewardship Agreement and Habitat Conservation Plan; often with the partners of the NL Eastern Habitat Joint Venture. This can include assisting in carrying out, where appropriate, wildlife and habitat conservation education, restoration or enhancement projects.

The Town: The Town of St. George's and its Mayor and Council would be expected to:

- Ensure that the designated wildlife habitat areas ("Conservation Areas") are protected from destruction or degradation; the town is to contact the EHJV Program Manager at the Wildlife Division (contact info on Page 2) in a timely manner to allow a 30-day written review of proposed development activities.
- Incorporate the Habitat Conservation Plan concepts into the Town's next Municipal Plan draft or revision centrally through appropriate zoning and associated development regulations.
- Implement, over time as opportunities allow, the Habitat Conservation Plan in the community with the assistance of the NL EHJV partners.
- Participate, as capacity allows, in the activities of the Stewardship Association of Municipalities (SAM).

Section 2: St. George's- A Special Place

St. George's is a town of roughly 1200 people in the Bay St. George Area on the western side of the Island of Newfoundland. Nestled by the ocean, the town is found just off the Trans Canada highway, roughly 15 minutes from Stephenville.

The oldest town in the Bay St. George area, St. George's was incorporated in 1965, though its origins stretch back much further. Originally a 17th century French fishery, the area was permanently settled in the 18th century. For the next 200 years, it remained a fishing village and, through its neighboring island of Sandy Point (currently uninhabited), became a commercial center for the west coast of Newfoundland. The development of the railway in 1898 changed the dynamics of the area, shifting the majority of shipping activity away from Sandy Point towards St. George's.

As industry shifted towards the St. George's settlement in the late 1800s and early 1900s, many families relocated from the island of Sandy Point, so that the Island was left uninhabited by turn of the century. Though the island now houses no permanent settlements, it remains a point of pride and culturally important for many members of St. George's and surrounding communities.

Habitat and Wildlife in St. George's

The community of St. George's is home to significant wildlife populations, including a large number of birds, rare plants, mammals, and salmon, among others. The Stewardship Area and Conservation Areas described below were determined to capture some of the most significant wildlife habitat found within the municipal planning boundaries.

The Town of St. George's is in the St. George's Bay subregion of the Western Newfoundland Forest ecoregion. Bordered by the Atlantic Ocean to the west and large salmon rivers to the north and south, the Town of St. George's has diverse habitats within its boundaries. The vegetation throughout the region is dominated by balsam fir and black spruce forests. The rocky coastal habitat looks out over the sandy beaches of Sandy Point, while transition to large wetland complexes in the inland portion of town.

Research of existing databases and field assessments indicate that several formally designated "Species at Risk", including the Piping plover, Banded killifish, Marginal woodfern, Newfoundland marten, and several "Rare" species of plants have been documented within the planning boundaries of the Town. In addition, St. George's coastline and inland wetland are home to a number of waterfowl, shorebirds, and passerines (songbirds). The online database eBird maintains a continually updating list of bird species found in St. George's (available at ebird.org/Canada/hotspots,

enter “St. George’s, NL” in the location search.). Significant salmon rivers also run through the Town boundary, which supports a strong angling and fishing tradition in the community.

Potential Conservation Areas in St. George’s

Following discussions with members of Council, geospatial analysis, having completed field assessment, and wildlife species database review of known biodiversity in the area, the following areas are proposed for inclusion in the St. George’s Stewardship Agreement (Appendix A). These areas are described in greater detail below. Please note that the names presented below were chosen based on how the features they contain are registered in various map databases. We encourage Council to select preferred, local names, as might be considered appropriate. Also, please note that we have reviewed existing known crown land allotments in St. George’s which might be near or slightly overlap these proposed Conservation Areas. While every effort has been taken to ensure that these allotments are excluded from the proposed areas, we urge council to verify that no conflicts of interest remain by screening them against your municipal planning maps.

A) Sandy Point

Sandy Point Stewardship Zone

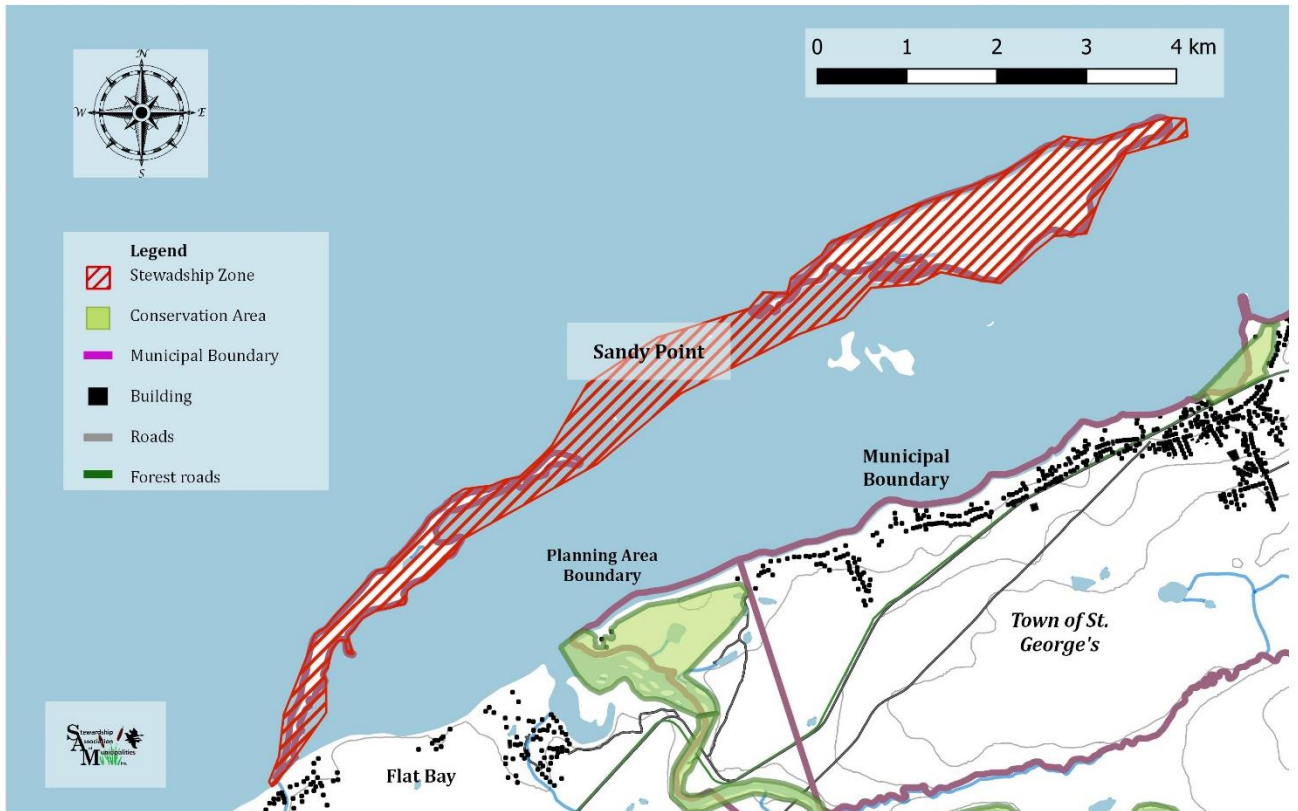




Figure 1: Beautiful sandy beaches on Sandy Point. NCC staff photo.

Sandy Point is a roughly 300 hectare island with cultural and ecological importance to the people of St George's. The entirety of the island lies within the planning area boundary of the Town of St. George's and there is a prime opportunity for Council to take a leadership role in the ongoing conservation and stewardship of the area.

Currently uninhabited, this site of a historic settlement has many remaining structures, including recently restored cemetery sites and the beautiful lighthouse. The island is remarkable for its unique geography comprised of tidal flats, salt marshes and sandy beaches which form ideal habitat for a number of bird species, including the endangered Piping Plover as well as provincially rare plants such as Sea lavender and Saltwater cordgrass.



Figure 2: Sea lavender. NCC staff photo.

The Piping plover is a small shorebird which breeds on sandy cobble beaches. There are only roughly 50 of these endangered shorebirds known to breed on some beaches in southwestern Newfoundland each summer. These birds, which have been known to breed on Sandy Point as well as the sandy beaches of Flat Bay, are easily disturbed by human activity, especially during the early breeding season each June. They lay their eggs in inconspicuous “scratches” on the sand, making them easy to overlook. Wise use of these beaches, especially during that peak breeding time, is crucial to the success of this species.



Figure 3: Piping plover. Wildlife Division Photo.

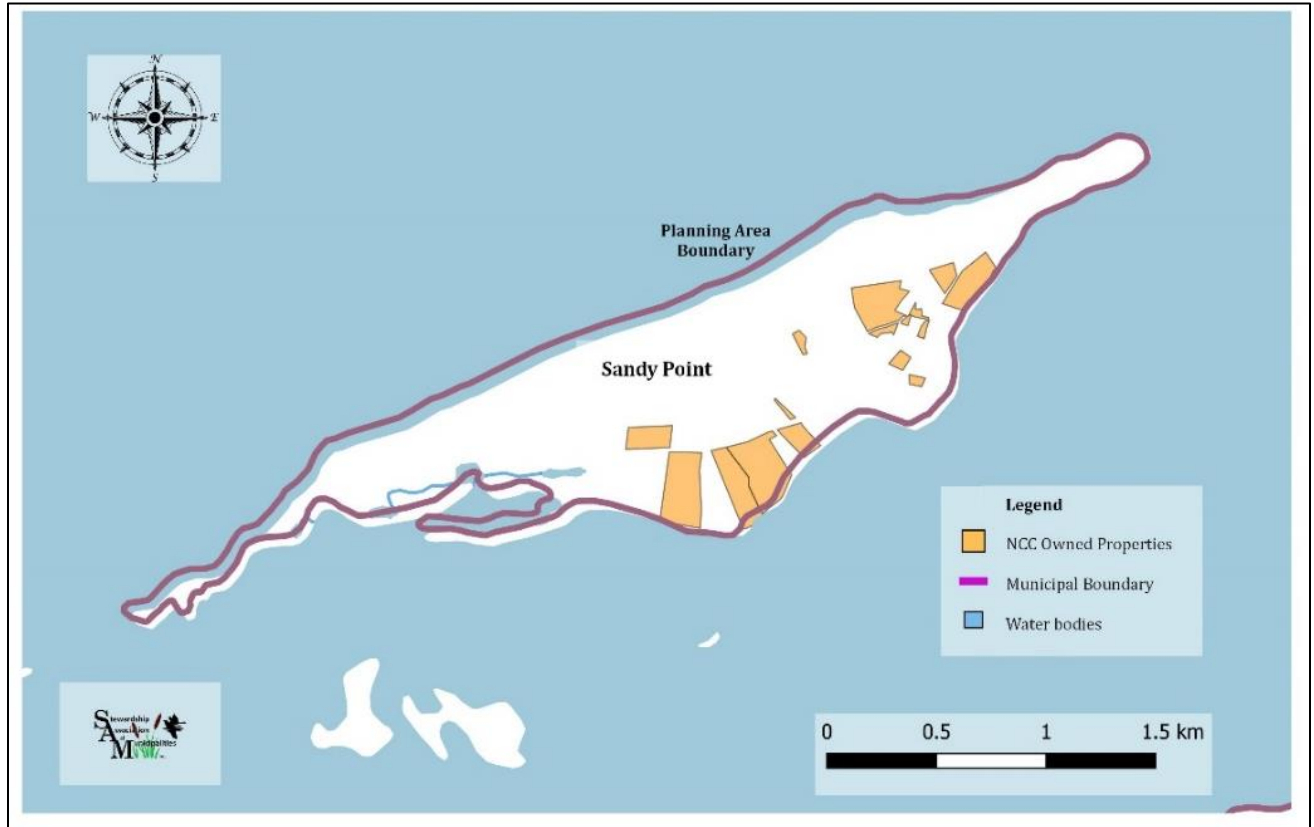


Figure 4: Piping plover eggs in characteristic "scratch" on the sand. SAM staff photo.

Historically, Sandy Point was primarily accessible only by boat, or by travel across a sand bar at low tide. However, in recent years, shifting oceans currents have deposited sediment in the channel between the Island and the mainland, increasing the ability to more easily access Sandy Point via what has become an unregistered ATV trail accessible from Flat Bay and the St. George’s marina. This easier access to the island as renewed community interest in visiting the, now land-linked, island. Visitors to Sandy Point have a variety of reasons for making the trip, from visiting the beautifully restored cemetery site, walking the old roads and viewing the remaining historical foundations, hiking, having a picnic or boil-up, ATVing, exploring the cultural significance of the island, hiking, etc.

Portions of the land on Sandy Point are privately owned, with many of those parcels owned by residents of both St. George’s and Flat Bay. The Nature Conservancy of Canada (NCC) purchased 11 properties encompassing 27 hectares on Sandy Point over the years, which form what are known as the NCC Sandy Point Nature Reserve. The NCC properties remain open to the public, though wise use of the areas is encouraged.

Nature Conservancy of Canada-Owned Properties on Sandy Point



Conservation Areas vs Stewardship Zones

We proposed above to designate Sandy Point as a “**Stewardship Zone.**” Under that designation, future development which may be proposed remains exclusively within the discretion of council, although obviously subject to any existing municipal plan or development regulation requirements. The intent of designating the Island as a Stewardship Zone is to highlight publicly the value council and residents place on the land and to commit to conserving it within your discretion. The Wildlife Division can still provide input on how proposed development or uses might impact the land but would do so only at the request of council. Our mutual goal would be to promote the implementation of wise use stewardship practices for this important coastal habitat.

Conversely, the areas proposed below are proposed as “**Conservation Areas,**” which carries a different weight. Council should first understand that both designations would allow for continued access to the Island while increasing the emphasis on wise use to ensure the protection of the ecological integrity of the area. However, designating an area as a “**Conservation Area**” would limit council discretion in permitting possible future development. Specifically, the Conservation Area designation affords the land a higher level of protection from future development, requiring that any approved development is consistent with the intent of the stewardship agreement - namely the environmental protection of the Island’s ecosystem. All proposed developments are forwarded to the Wildlife Division, Department Fisheries, Forestry and Agriculture for a 30 day review in light of the stewardship agreement commitment made by both the town and the province.

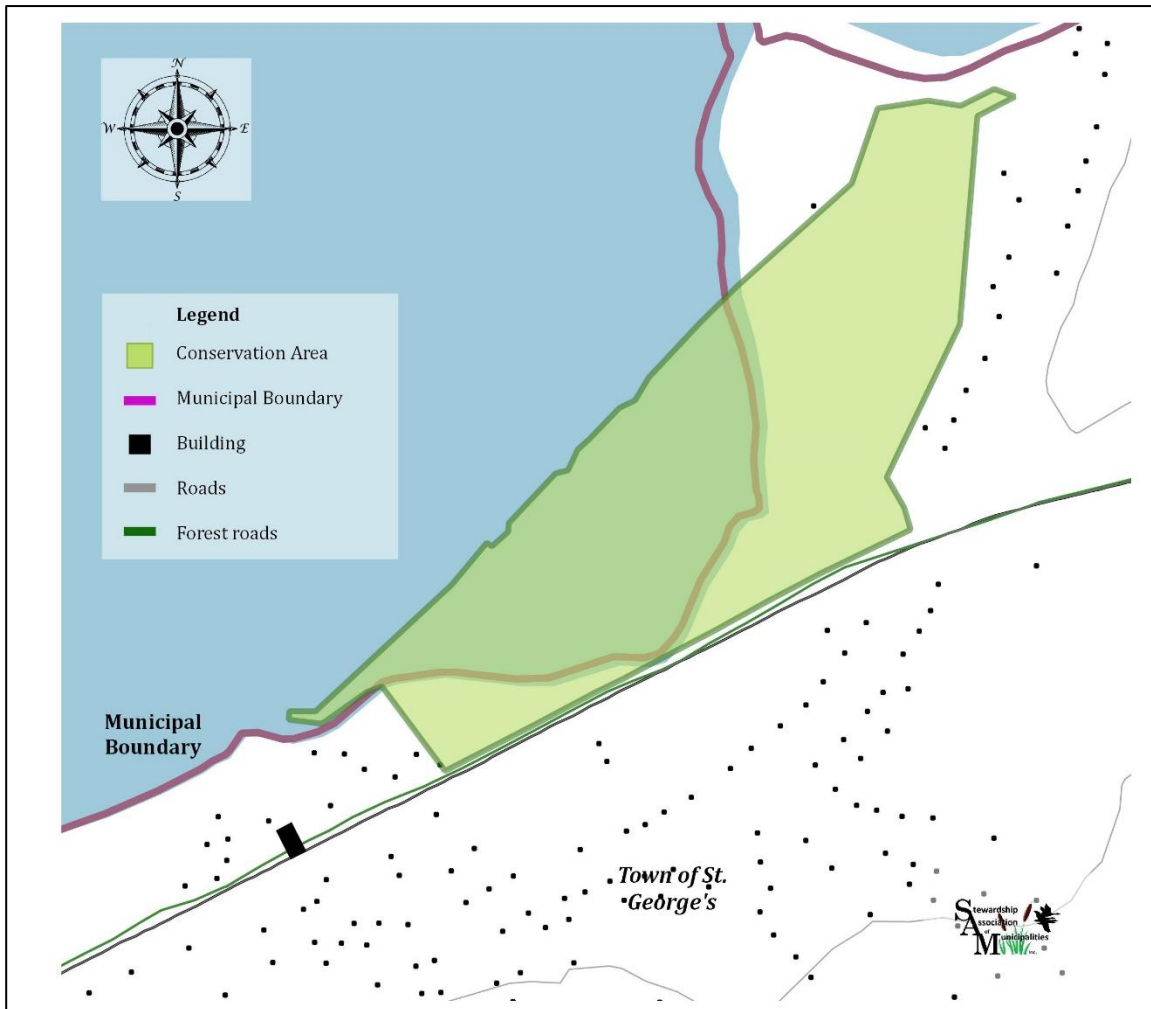
B) Sunset Trail Barachois Pond

The access road between the St. George's Marina and the Turf Point Loading Dock forms a small barachois, (a small, brackish, coastal lagoon formed by some kind of barrier), between the larger saltwater body and the pond. The Sunset Trail Barachois, is bounded by the service road to the loading dock on the western side, and circled by a portion of the well loved Sunset Trail to the east.



Figure 5: Sunset trail boardwalk around the barachois pond. SAM staff photo.

Sunset Trail Barachois Pond Conservation Area



The Sunset Trail Barachois Pond Conservation Area is drawn following the town's existing development regulation zoning as outlined by your municipal plan. The Conservation Area would incorporate area currently zoned Environmental Protection and extending it into the water to the roadway forming the barachois. The marina, Turf Point loading dock, and access road connecting the two would be explicitly excluded from the conservation area, though we encourage the implementation of best practices to minimize unintended effects from the ongoing activities in these areas.

This small barachois forms a protected inlet for many species of waterfowl, including mergansers, mallards, goldeneye, and Canada geese, among others. These waters, as well as other ponds within the town of St. George's, are habitat for banded killfish, which is considered to be a species of special concern under the federal Species at Risk Act and vulnerable under the provincial Endangered Species Act. Beautiful sea-lavender, which is considered imperiled in Newfoundland, is also known to grow on the banks of the barachois.

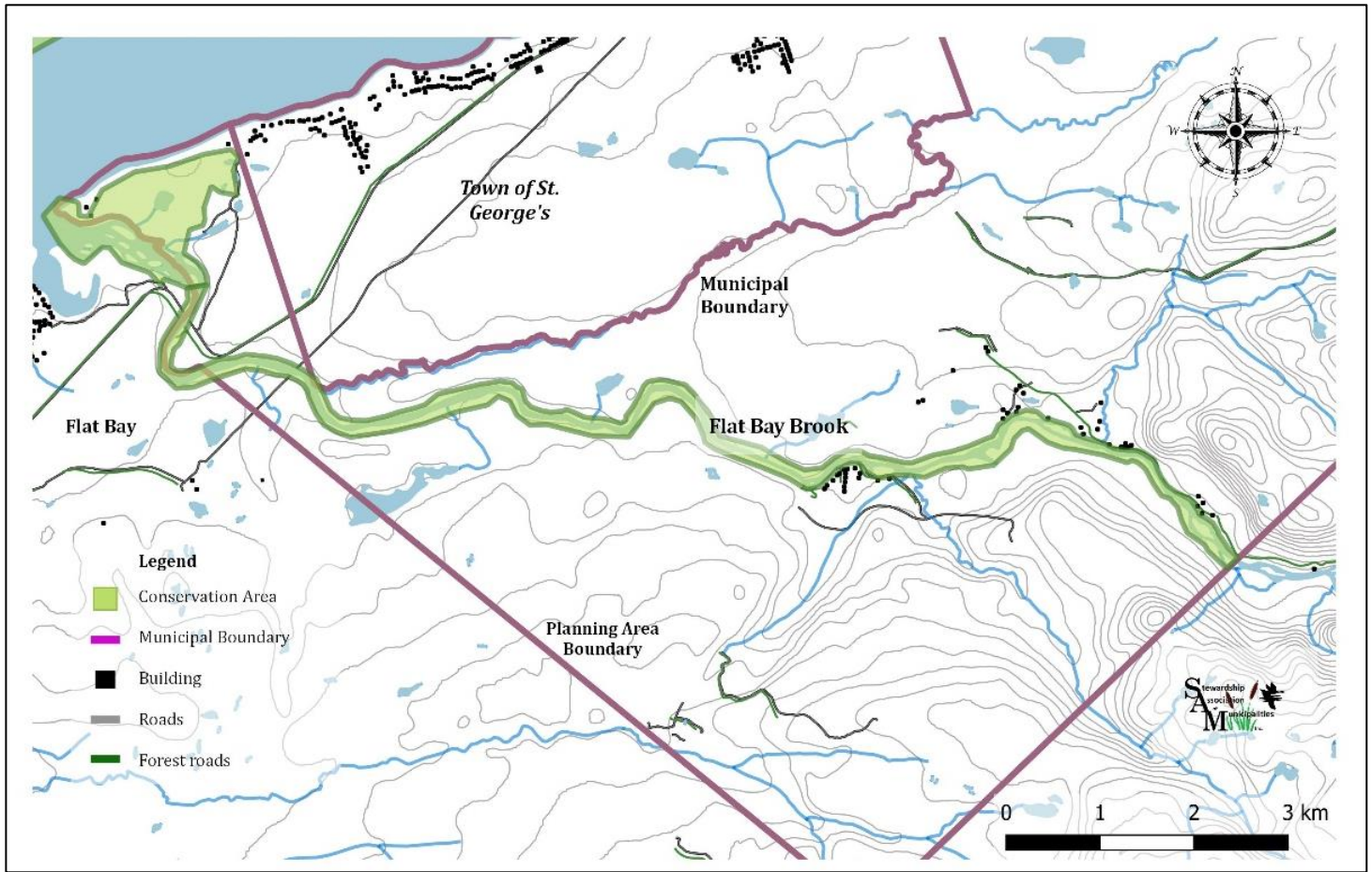


Figure 6: Interpretive panel about SAR in the town of St. George's. SAM staff photo.



Figures 7 and 8: Barachois pond conservation area as viewed from the Sunset Trail. SAM staff photos.

C) Flat Bay Brook and Estuary Flat Bay Brook and Estuary Conservation Area



Flat Bay Brook and the associated estuary on the southern boundary of St George’s is a prime salmon river, of which a significant portion runs within town planning boundaries. The proposed Conservation Area is designed to encompass the entirety of the river, including a 15 m buffer on either side. The northernmost part of the river, where the river forms a small estuary at the westernmost border of town, is also included in the designation, extending west roughly halfway across the waterway towards Flat Bay, and eastward to include the large bog complex to the south of Highway 461. The road (Highway 461), and two existing buildings are excluded from the Conservation Area, as is the existing quarry site to the east of the management unit, as well as the associated access road.



Figure 9: Sign detailing fishing regulations along Flat Bay Brook. SAM staff photo.

The river portion of the Conservation Area runs primarily within the planning area boundary of the Town of St. George's, with a small bend roughly 1 km long that runs along the planning area boundary, with the associated western buffer extending into Flat Bay. This river is a scheduled salmon river, and should be managed in such a way as to preserve the integrity of the resource through the concept of wise use. Importantly, designation of the area as a Conservation Area would **not** change fishing access – where it is otherwise permissible to do so (i.e. the river is not closed), it would remain legal.



Figure 10: A view of the estuary at the mouth of Flat Bay Brook. SAM staff photo.

D) Barchois Brook Bridge

Indian Pond flows into Barchois Brook on the western side of town and feeds a significant wetland. The proposed Conservation Area include a 15 m buffer along the shoreline and extends the protected area outward into the pond and brook, from the ocean mouth upriver to, but excluding, the Barchois Brook Bridge. Barchois Brook is an Atlantic salmon river, and originates in Barchois Pond Provincial Park. The river widens into Indian Pond before emptying into the open water. In 2019, funding from the Atlantic Salmon Conservation Foundation allowed the Bay St. George Area Development Association to conduct snorkel surveys in the river to better assess the salmon stock in the river and the success of the DFO monitoring program. It was determined that the river and associated pond are active salmon habitat, with hundreds of individuals using the river and the associated ponds.

Barachois Brook Conservation Area

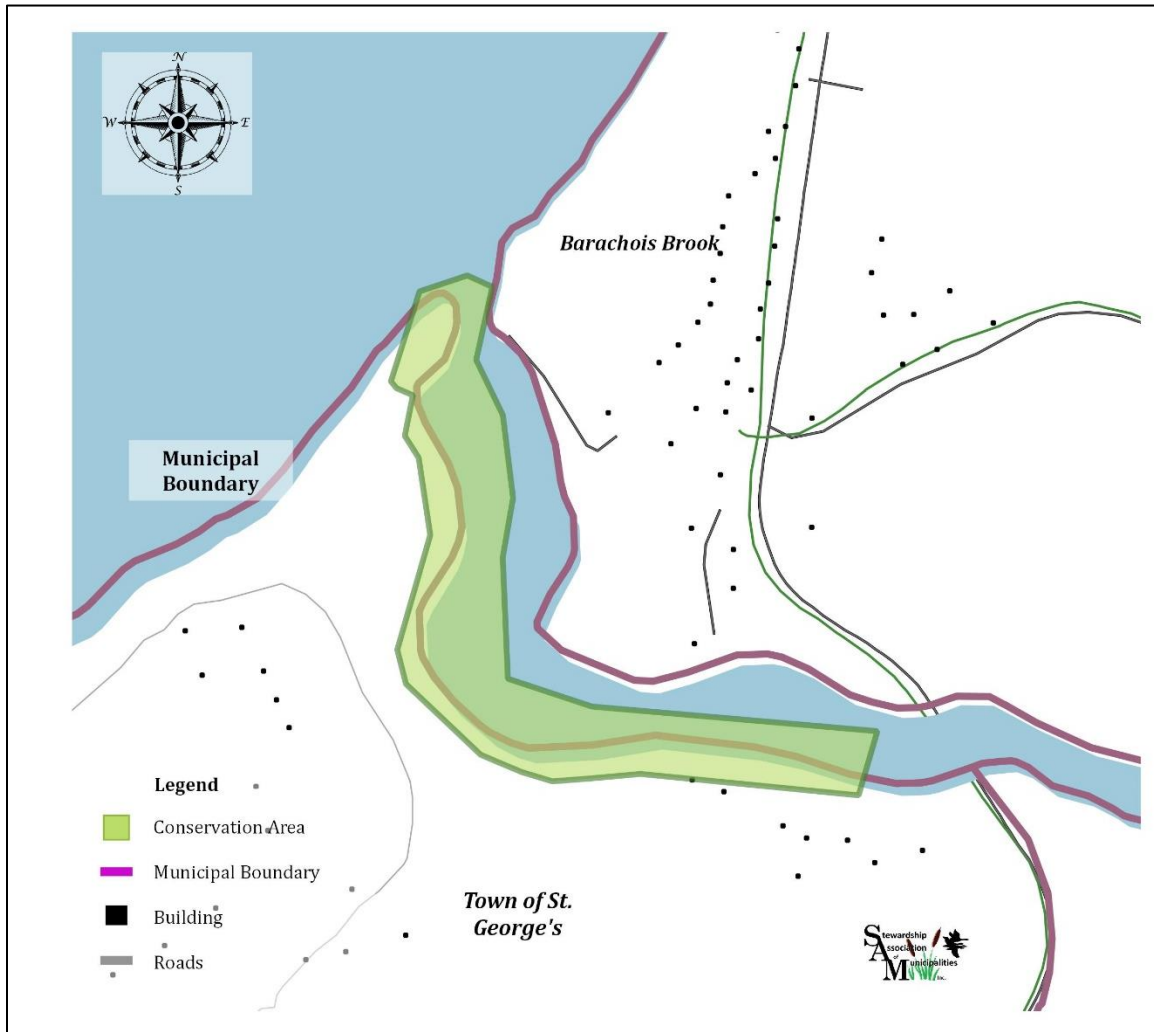


Figure 11: Snorkel survey conducted along Barachois Brook. Intervale Associates photo.



Figure 23: Aerial view of the Barachois Brook bridge and associated habitat. Web photo.

Section 3: Policies for Habitat Conservation

a. Incorporate your Stewardship Agreement into your Municipal Plan

During the preparation of any draft Municipal Plan, or during the process of a future Municipal Plan Review or development regulations, the Town Council will incorporate the Habitat Conservation Plan concept and maps into any resulting Municipal Plan or related Master Plan. The “Conservation Areas” **shall be zoned Open Space Conservation, Environmental Conservation, Open Space Recreation**, or some similar consistent zoning designation within any future municipal planning documents as governed by the Urban and Rural Planning Act (2000).

b. Refer all possible developments to the Wildlife Division

Activities within the Conservation Areas will be managed whereby permitted activities do not result in the loss of wildlife habitat or wildlife populations. As such, conservation will be at the forefront of management decisions. When council reviews/approves permits, regulations, developments or by-laws which could affect the Management Units (Conservation Areas), **Council will first consult with the NL EHJV Program Manager** at the Wildlife Division, Department of Fisheries, Forestry and Agriculture providing a 30 day notice period.

Development potentially impacting the Stewardship Zone may also be forwarded to the Wildlife Division for comment, but this remains at the sole discretion of council.

c. Participate in SAM

When the Town of St. George’s signs a Habitat Stewardship Agreement with the province, it is provided opportunity to become a participating member of SAM (Stewardship Association of Municipalities, **samnl.org**). SAM is an incorporated, non-profit organization whose member municipalities together conserve, enhance, and restore important wildlife habitat. SAM represents its members on issues related to wildlife conservation. SAM will maintain a public page about your agreement featuring maps, photos, facts, and information on local attractions. This link can be included on your town’s website; this will help increase residents’ knowledge and understanding of the agreement and program. To view examples of these pages, please refer to **samnl.org/membership**.

SAM meets each spring (May or June) and fall (September or October) with host municipalities rotating among members and regions. Identify a representative of your town (mayor, councilor, staff, or involved resident) to attend at least one of these meetings per year. This will connect St. George’s to like-minded municipalities

and link you to resources and training. You may also be interested in co-hosting a SAM meeting in the Town of St. George's in the future; many municipalities enjoy this for the exposure it provides for their wildlife habitat and associated projects.



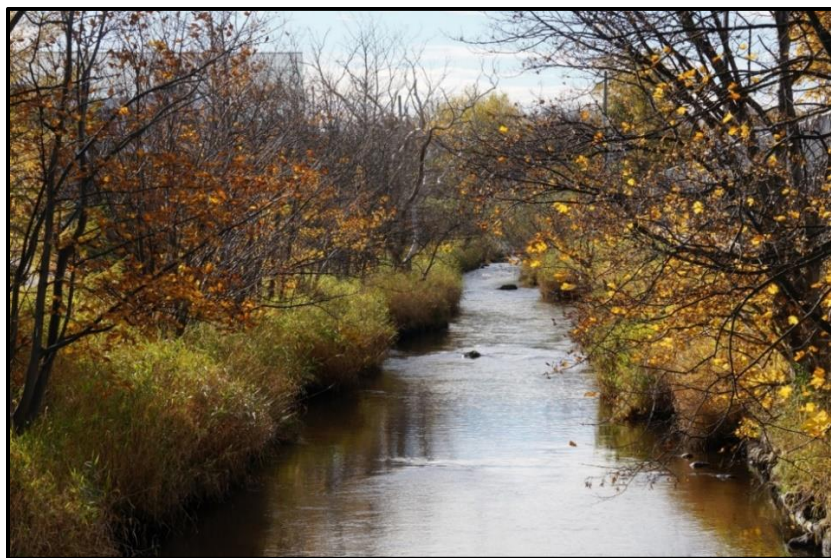
Field trip at a recent SAM meeting in Gander. Staff photo

d. Keep riparian buffer areas intact and protect salmon habitat

Riparian buffers are strips of untouched land surrounding wetlands, lakes, rivers, ponds, and streams. They are composed of trees, shrubs, grasses, cattails, and sedges and provide for a high level of wildlife use, as corridors for travel, for protection from predators, and against inclement weather. Healthy riparian areas filter and reduce surface water runoff from upland areas by trapping sediment and filtering out excess nutrients, pesticides and bacteria. Vegetation in riparian areas affects how readily water enters soil and has a positive effect on replenishing of local groundwater. They also serve to anchor soil with roots, helping to build stream banks and prevent erosion and help control flood levels.

Fish habitat quality is strongly influenced by the amount of riparian edge left along shorelines. Treed buffers provide shade and help keep water temperatures down, impact water quality, and provide spawning and rearing areas for fish and nesting areas for waterfowl. They provide food for wildlife when leaves, insects, and larvae drop into the water body off surrounding trees and shrubs.

The province, via the provincial Lands Act – Section 7(1), requires a crown land reserve (sometimes called an easement or buffer) of 15 metres along all water bodies greater than 1 metre in width and the maintenance of permanent riparian areas next to all watercourses. Note that the Province, via the Provincial Environmental Protection Act (2003), requires any projects undertaken within 200 metres of a scheduled salmon river to be registered with the province and undergo an Environmental Impact Assessment.



Healthy riparian buffers surrounding an urban stream in the autumn. Staff photo.

e. Conserving Atlantic Salmon Habitat

Wild Atlantic salmon (*Salmo salar*) is an important species for the people of Atlantic Canada for a variety of reasons, including social, cultural, recreational, economic, recreational, and food security reasons, as well as an indicator of environmental quality. Conserving the resource for current and future use is therefore a priority – and it cannot be achieved without the cooperation and stewardship of local communities.



Atlantic salmon, photo from Fisheries and Oceans Canada

Unfortunately, wild Atlantic salmon populations are declining throughout their range. Declining stocks have prompted various government responses, including (though not limited to) the closure of commercial fisheries in Eastern Canada, reduction of daily and seasonal bag limits, and the introduction of mandatory catch and release programs of large salmon in the recreational fisheries of insular Newfoundland. Protecting salmon habitat is essential to ensure the continued survival of the species, so that the resource can be enjoyed for generations to come.

Fishing and angling has long been a source of food security, industry, and recreation in Newfoundland and Labrador. It is not the intention of the EHJV to restrict the use and enjoyment of this resource – rather, the intention is to help conserve and protect its use for current and future generations. Promoting sustainable use, ensuring residents and visitors are familiar with Department of Fisheries and Oceans (DFO) regulations, and reporting illegal fishing activity to the appropriate authorities, are all ways in which Municipalities can promote wise use of recreational fisheries within their towns. For more information, an angler's guide can be found at nfl.dfo-mpo.gc.ca/NL/AG/anglersguide.

f. Conserving Banded Killifish Habitat

Banded killifish (*Fundulus diaphanus*) is a small freshwater fish found throughout eastern North American waters, including throughout the island of Newfoundland. Averaging 7-9 cm as adults, these slender fish are olive coloured with light and dark vertical bands. Though relatively inconspicuous, these fish are an important part of freshwater ecosystems, as they are a food source for some of our most economically and culturally significant fish species, including Atlantic salmon, Brook trout, and American eel. Habitat destruction is the major threat to banded killifish, as they are sensitive to disturbance, especially those caused by industrial development.



Figure 6: Banded killifish. DFO photo.

Some best practices for residents which can support healthy fish populations include:

1. Know, respect, and enforce current angling regulations and restrictions for the area.
2. Leave nothing but footprints – remove all litter and waste.
3. Report blocked culverts or barriers to fish passages to the appropriate authorities.
4. Report instances of poached to 877-820-0999.
5. Maintain and protect riparian buffers (see Section C above).
6. When appropriate, restore and enhance habitat.

g. Reducing Marine Pollution

Perhaps one of the greatest ecological challenges facing coastal communities is reducing the amount of waste, plastic, garbage, and pollution that enters our waters. The negative effects of plastic pollution in our marine ecosystems is well documented, causing marine life to die and for the toxins found in plastics to move throughout the food web and wind up on our dinner tables. For those that rely on ocean resources for food security and our livelihoods, the impact of this ecological disaster will be felt even more acutely.

Marine pollution is a problem that can seem insurmountable at times, but small actions can have a large impact. Promoting, developing, and implementing the following practices is a great way to start.

- Keep shorelines and waterfronts clean. Keeping debris away from shorelines and out of the water reduces how much waste gets carried in by wind and rain.
- Properly maintain boating and fishing equipment in order to minimize accidental release of oil into the water.
- Organize beach and waterfront clean-ups.

- Promote the proper disposal of single use plastics which can otherwise accumulate in our oceans and on our shores.
- Encourage reduction and diversion of waste.

The best way to reduce marine pollution is to cut it off at the source. Fewer plastics, diversion of organic waste to compost, and proper management of wastewater all result in less waste in our oceans.

h. Protecting species at risk and their habitat

The greatest threat to species at risk in the province is the loss, degradation, and disturbance of the habitats on which they depend. Disturbances from development, heavy road, boat, or ATV traffic, or human activity can all cause degradation to sensitive habitats. When considering development applications, the potential impacts, both direct and indirect, of that development on the surrounding ecosystem and habitats needs to be considered and will be impacted by federal and provincial Species At Risk legislation. Council should be aware the future development which may impact species at risk should be brought to the attention the federal and provincial governments responsible for this legislation and can assist council in responding to such development applications.

Given the known history of Piping Plover (endangered both federally and provincially) on Sandy Point we provide the below guidelines for sustainable use of Piping Plover Beaches. We hope the residents of St George's will become stewards of this rare bird.

Guidelines for Sustainable Use of Piping Plover Beaches

1. Obey signs restricting use of motorized vehicles on beaches during the breeding season (May 1 to August 31).

A central factor confronting Plovers which might potentially nest/breed on Sandy Point is the use of all-terrain vehicles/dirt bikes on beaches. Inappropriate use of these vehicles on critical beaches used for breeding and chick-rearing by the Plover has been documented in other areas to result in destruction and/or abandonment of nests and eggs, and has very likely caused the death of chicks and adult birds.

Piping Plover are very hard to see in their natural habitat, and the nests are even harder to see. An ATV or dirt bike rider could crush a nest and/or chick and not even be aware of it. Even if the nests and birds are spared, motorized vehicles on Plover beaches can alarm the birds and prevent them from returning to their nests, consequently putting the nests in danger. Riders need to be made aware of the

existence of Piping Plover on Sandy Point and understand that the loss of one bird or one nest can have implications for the entire provincial population of birds.

2. Observe and photograph Piping Plovers from a distance, walk at the water's edge, and conduct all activities away from nesting or feeding areas.

Piping Plovers are easily disturbed. Even someone hanging around the beaches trying to get a picture can prevent a Plover from feeding and resting, putting the nest in danger. When a Plover nest is approached, the incubating adult will be forced to leave the nest, causing a break in incubation. When this occurs, the eggs can become overheated or chilled which could kill the embryo. Disturbed adults may even abandon the eggs completely.

Sandy Point's beaches are a popular place for recreation, especially during the summer. Studies show that fewer young are raised on beaches that are popular for recreation than on less-disturbed beaches. Therefore, to be sure no Plovers are affected by beach users, all human activities should be conducted far from nesting or feeding areas as possible.

3. Do not remove natural debris such as driftwood.

Not only can the Piping Plovers be disturbed when individuals walk along the beach to remove the debris but beach cleaning removes important components of Plover habitat. Things such as wrack and other natural debris provide feeding areas and shelter from inclement weather for the Plover.

4. Remove trash and food scraps.

Predation has been identified as one of the most important factors limiting populations of Piping Plovers across the North American breeding range. Trash, food scraps, and dead fish attract predators. These predators will also hunt or opportunistically take adult Piping Plovers, chicks, or eggs. Therefore, it is important for beach users to not litter in the first place and to remove any trash they may see lying on the beach.

5. Keep pets leashed.

Domestic pets, specifically cats and dogs, pose a serious threat to Piping Plover eggs, chicks, and adults. While domestic cats are not suspected to be a great threat on sandy beaches, cats are natural born hunters and even well-fed cats chase and kill

birds. Domestic dogs are more likely to pose a threat and unleashed dogs have been known to chase adult Plovers, destroy their nests, as well as kill chicks. Even when these pets are on leashes, they can frighten Piping Plover, who see them as predators, which keeps the birds from feeding.

All pets, dogs in particular, should be kept on a leash (less than 6 feet) and walked at the water's edge to prevent them from disturbing Piping Plovers or their habitat. Furthermore, under Wildlife Regulation 40(3), it is illegal to allow your dog to chase or harass wildlife.

6. Do not pick up Piping Plover chicks or eggs.

Although this is an uncommon occurrence, there have been several confirmed instances of children removing chicks from nesting beaches. Young children should be supervised at all times while on Piping Plover beaches and it is important to make them aware of the importance of avoiding Piping Plover nests.

7. Protect the dune systems by limiting ATV/dirt bike activity to designated trails and by not burning beach grasses.

Beaches and dunes are important feeding, breeding, and nesting grounds for Piping Plover. These beaches and dunes are also a popular place for human recreation and this popularity means that many sand dunes are at risk of sustaining irreparable damage. Grasses create wildlife habitat and help hold the dunes in place. The loss of dune vegetation due to vehicular traffic and fires is a major trigger for dune erosion. When vegetation is lost, the exposed, dry sand is easily mobilised by high winds and large volumes of sand can be rapidly transported, sometimes forming large depressions in the dunes resulting in loss of important Piping Plover habitat.

8. Promote public education and awareness

Residents of St. George's should do their best to spread the word about the endangered Piping Plover and the difficulties they face on local beaches. Residents should also be aware and supportive of the work of Beach Guardians. Piping Plover Beach Guardians have been hired in recent years on the southwest coast of Newfoundland and work during the summer breeding season, primarily in an educational capacity aiming to reduce levels of human disturbance around nest sites or broods. Guardians will intercept beach users who appear to be intruding upon Piping Plover territory.

Section 4: Habitat Conservation and Education Strategies

This section presents a few central ideas for community education, engagement, and habitat enhancement that could be implemented over time in the community as resources and opportunities may arise. Community engagement and partnerships are the true strengths of any stewardship agreement. Communities across the province who have also signed stewardship agreements have had great success becoming involved in exactly these types of projects and will also be resources for you to connect with, especially at SAM meetings. The ideas below, and many others like them, can be found at samnl.org/resources.

Explore grants and funding

Many activities and programs are free or can be funded through small community grants and via partnerships. Large grant applications may take several months to prepare if committees are involved. Allow enough time to apply for these grants and to obtain the letters of support that local partners such as SAM or the Wildlife Division may provide; keeping an eye on deadlines as they approach.

SAM provides a regularly updated list of many grants that will be relevant to you along with their deadlines at samnl.org/resources.

Apply to Hire a Green Team

Funding from the Conservation Corps Newfoundland and Labrador (ccnl.ca) can help you hire summer Green Teams and interns. Students or recent graduates can work with municipalities on environmental projects. Municipalities with Stewardship Agreements have often received Green Teams. Examples of potential projects could include nest boxes, bird monitoring, trail maintenance, community outreach, wildlife surveys, and developing field guides. Green Team members and interns could help train local high school students in monitoring and could develop educational material designed to raise awareness for conservation and stewardship initiatives. Sharing a CCNL Green Team with neighbouring towns might be explored, especially if other towns are beginning environmental projects as well.

Construct trails & put up interpretive signs



Many SAM municipalities have found that trails increase recreation and health for residents and improve tourism possibilities. When constructed carefully, trails can increase stewardship by allowing people to discover new areas. They can help residents and visitors connect to nature, especially where interpretive signage is used to help point out interesting landscape and wildlife.

Recreational and tourism opportunities can help raise awareness and educate visitors and residents about waterfowl and the importance of wetlands. Hiking, walking, birdwatching, cross-country skiing, snowshoeing, and geocaching are popular activities in many Conservation Areas across the province. Other activities such as photography and paddling (canoeing and kayaking) could be further encouraged as low-impact, healthy recreation opportunities for both residents and visitors.

In developing recreational and tourism opportunities, wildlife must be carefully considered during the planning process. Otherwise, human activities can negatively impact the resource that provides the attraction.

As part of the Stewardship Agreement, the Town of St. George's will be provided with a large highway road sign and if interested an interpretive sign suitable for trail entrances. Additional interpretive signage could possibly be funded through grants to the Town of Pasadena; for example, the TD Friends of the Environment Foundation often funds trail and park projects (see funding opportunities link above for other possibilities)



Example Sign: Lewisporte's Habitat Stewardship Road sign. Staff photo

Watch wildlife

Local groups and interested volunteers can watch and monitor birds, plants, and wildlife in all areas of the Town. This can provide information on changes in populations and can indicate problems or progress. By involving residents, they become more aware of these special places.

iNaturalist and **Seek** are free smartphone apps for those interested in learning to identify plants, butterflies and other insects, other invertebrates, birds, fungi, and mammals. They can be used to build plant and wildlife lists for any area, as a learning tool, for school students, family nature walks, and just for fun.

iNaturalist is great for adults as each nature observations turns into a real scientific data point. It also has a neat feature where other experts will identify your sightings for you - after taking a photo, it will often be identified within a few hours by another experienced user on the app. Turn your location services on so that your sighting can be found on the map and so others can help with your identifications. **Seek** is best for kids as it never saves location data and provides fun badges.



ebird.org is another free website and app to record bird sightings. It is already very popular across NL with more than 10 000 bird lists submitted each year.

Start contributing to eBird at secure.birds.cornell.edu/casso/account/create

When watching wildlife, be mindful of tides and wetland (damp, soft, slippery) habitat, making safety your priority. Aim to cause as little stress and disturbance as possible to wildlife.

Help St. George's residents enjoy nature

It's not just kids that enjoy the outdoors – adults and seniors benefit from spending time in nature as well. Birdwatching workshops have been successful in SAM communities, and snowshoe hikes in the winter or hikes in the summer are often enjoyed by adults as well. Intervale Associates has hosted youth birdwatching outreach events as well as clean ups along the waterfront in the past.

Themes such as winter tracking or edible plant hikes can increase interest. Hikes can be inexpensive ways for adults in St. George's to discover the natural areas of

the town, socialize, and learn something new. CCNL Green Teams are required to give interpretive presentations as a part of their work programs; SAM's **Guide to delivering interpretive hikes** and field guides at samnl.org/resources could help CCNL Green Teams or summer staff lead hikes for residents and/or visitors. These could be used to create a small brochure and 'bird checklist' or wildlife list of the area, or as the basis for field guides which could be developed by a Green Team, high school, or a relevant committee.



Interpretive "Winter wetland walk" at Gambo Bog. Staff photo

Explore outdoor education programs

Public education can help foster a greater sense of habitat stewardship among town residents.

There are excellent wetland education programs that can be adapted for activities in St. George's. Programs span every season and age group including *Wetlands in Winter* (Tantramar Wetlands Centre, weted.com), *Marsh Bingo and Creatures of the Night* (Oak Hammock Marsh Interpretive Centre, oakhammockmarsh.ca), *Junior Naturalists* (Wye Marsh Wildlife Centre, wyemarsh.com), and *Wetland Field Trips* (Ducks Unlimited Canada, ducks.ca). Canadian Wildlife Federation's *Project Wild* can foster environmental ethics in youth and adults alike. Many evening programs also exist that would be great for guide and scout groups.

Nature and Art

Some stewardship municipalities such as Grand Falls-Windsor and Whitbourne use natural locations to bring together nature and art. Local art classes and drama groups can use an outdoor theatre for educational exercises. This could involve field trips whereby students could interpret natural beauty through various mediums (chalk, paint, etc.) or a day of sketching to the sound of nature or music. Companies like craiyola.com offer resource grants to educators.

Similarly, drama classes could develop a play or series of dramatic readings based on nature. Several amphitheatres in Eastern Canada use the open-air concept to show nature-related programs outdoors in the evenings. Content can be tailored to various ages and could include nature-related craft projects as a follow up. Good starting points for nature projects for children include **hookedonnature.org**, **planetpals.com**, and **hctfeducation.ca/resource-room**

Conclusion

We hope these ideas have you thinking about ways you could become involved in protecting and enhancing wildlife habitat in your area. Keep an eye on **samnl.org**, our newsletter, and our social media, where additional resources are added regularly – and we hope to see you at the SAM conferences each year. Remember, community involvement is the true strength of a Stewardship Agreement!

APPENDIX A: Municipal Stewardship Agreement for the Town of St. George's

THIS AGREEMENT made at St. John's, in the province of Newfoundland and Labrador, Canada, this 1 day of November, 2021 .

BETWEEN: HER MAJESTY THE QUEEN IN RIGHT OF NEWFOUNDLAND AND LABRADOR, as represented by the Honorable Minister of Fisheries, Forestry, and Agriculture (herein called "the Minister")

- of the one part -

AND: THE TOWN COUNCIL OF THE TOWN OF ST. GEORGE'S, a municipal corporation pursuant to Section 15 of the *Municipalities Act, 1999* (herein called the "The Town")

-of the other part-

WHEREAS the Government of Newfoundland and Labrador has entered into an Agreement with others for the implementation of the of the North American Waterfowl Management Plan through the Eastern Habitat Joint Venture;

AND WHEREAS the parties hereto recognize that the proper protection and management of coastal, wetland and upland habitats are fundamental tools in maintaining and enhancing the wildlife populations, particularly birds, in the province;

AND WHEREAS the Minister proposed that certain important wildlife habitats within the Town be protected and enhanced through and with the cooperation of the Town in accordance with this Agreement;

AND WHEREAS the Town has agreed to enter into this Agreement for the purpose of protecting and enhancing those areas of important habitat within its jurisdiction.

NOW THEREFORE IT IS AGREED BY THE PARTIES AS FOLLOWS:

1. The lands herein delineated and designated as Conservation Areas (being the lands outlined on a certain Schedule A annexed hereto) shall be managed in accordance with the terms and conditions of this Agreement and Habitat Conservation Plan for better protection of the habitat for wildlife.
2. Within the limits of its jurisdiction, the Town shall permit only those activities within the Conservation Areas that have no negative or adverse impact upon the habitat or the wildlife which utilize those habitats.
3. The parties may establish other Conservation Areas as may be desirable from time to time.
4. The Town agrees that in the preparation of a Municipal Plan for the Town or any amendments to any existing Municipal Plan, the areas designated as Conservation Areas shall be recommended by the Town to be appropriately declared protected areas under subsection 13(3)(f) of the *Urban and Rural Planning Act (2000)* (or such other legislation in amendment or substitution therefore as may be brought into effect from time to time). The Town in passing regulations or by-laws related to the protected areas so designated under the Municipal Plan or amendments thereto and which may affect the Conservation Area(s) shall do so in consultation with the Minister and in keeping with the principles of this Agreement.
5. The parties to this Agreement, their consultants, servants or agents, shall have and exercise reasonable rights of access to the Conservation Area(s) for all purposes necessary or incidental to this Agreement and in particular, but without limiting the generality of the foregoing, for the purpose of developing and carrying out the Agreement.
6. If at any time during the term of this Stewardship Agreement the Parties deem it necessary or desirable to make any alterations or additions to it, they may do so by means of a written amendment between them which shall be supplemental to and form part of this agreement.
7. Each of the parties hereto agree that they will exercise their best efforts to further develop management measures for more effectively carrying out of their mutual intentions as expressed in this Agreement.

IN WITNESS WHEREOF the parties have caused these presents to be executed in accordance with their respective rules and regulations the day and year first before written.

SIGNED, SEALED, AND DELIVERED by the Honorable Minister of Fisheries, Forestry and Agriculture in the presence of:



Witness



THE HONORABLE MINISTER OF
FISHERIES, FORESTRY, AND
AGRICULTURE

THE SEAL OF the Town Council of the Town of St. George's hereunto affixed in the presence of:



Witness

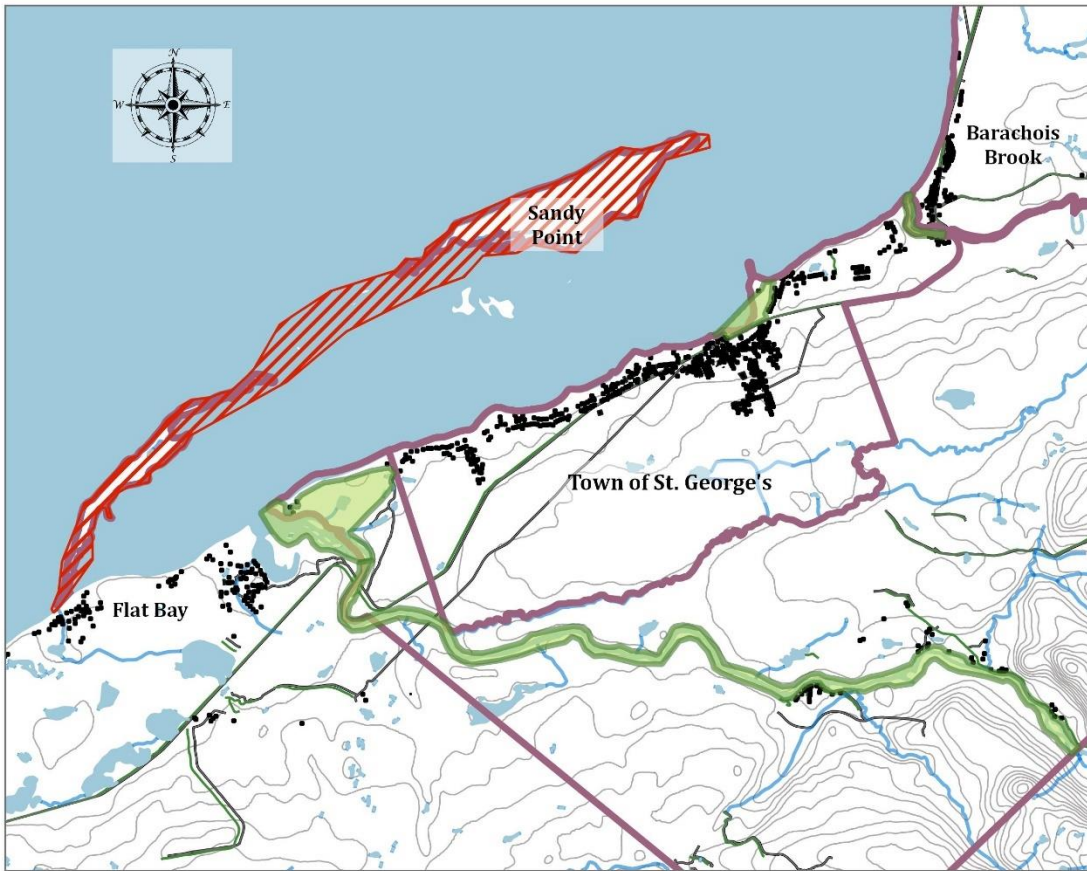


THE TOWN COUNCIL OF THE
TOWN OF ST. GEORGE'S




Schedule A: Habitat Conservation Areas

Municipal Habitat Stewardship Agreement

Town of St. George's, Newfoundland and Labrador, Canada



Legend

-  Stewardship Zone
-  Conservation Area
-  Municipal Boundary
-  Roads
-  Buildings
-  Water



**Newfoundland
Labrador**

June 2021