

# ~ *FUNDY TIDINGS* ~

*The Quarterly Newsletter of the*

**Bay of Fundy Ecosystem Partnership (BoFEP)**

**July 2019 ~ Summer Issue**

## **A. BoFEP and its activities:**

### **1. BoFEP Strategic Plan review underway**

A special BoFEP committee has been undertaking an update of the multiyear Strategic Plan that was completed in 2011 [ [BoFEP's Strategic Plan 2011–2015 - Shaping the Future Direction and Agenda](#)]. A draft of the new plan will soon be circulated to both the Management and Steering Committees for review.

### **2. BoFEP considering part-time coordinator**

The BoFEP Management Committee has tentatively agreed that a part-time coordinator should be hired to ensure that BoFEP's ongoing activities are supported at an adequate level. The possibility of the coordinator also being responsible for maintaining the BoFEP website is also being looked into. It is anticipated that a complete job description and call for applications will be available shortly.

### **3. BoFEP supports Cliffs of Fundy Aspiring Geopark**

The Chair of BoFEP has submitted a letter in support of the application for the designation of the Cliffs of Fundy Global Geopark. It states:

The Bay of Fundy Ecosystem Partnership (BoFEP), a local NGO focussed on information and education related to the Bay of Fundy and its watersheds ([www.bofep.org](http://www.bofep.org)), is very pleased to offer its total support for the Cliffs of Fundy Aspiring Geopark being given broader Canadian and UNESCO recognition. As you know, the entire "Parrsboro shore" of the northern coastline of Minas Basin, upper Bay of Fundy, is unique for its geological, ecological (nature), historical, cultural, and community features. These features offer countless opportunities for education and tourism in this part of Nova Scotia, along the Minas Basin shore. At this time of rapid environmental change, especially related to climate, it is very important to bring attention to this part of Nova Scotia through this Geopark initiative. This Geopark's wider and global recognition will enhance both community and tourist interest in the region's uniqueness, especially for its important geology, paleontology and native culture. It will encourage exploration by all age groups, hence acting as a magnet for further education, outdoor activities, and environmental protection and conservation. The partners of BoFEP offer unqualified support to this application for the UNESCO recognition and wish the Geopark team every success.

Yours sincerely,

Peter G. Wells, Chair, BoFEP.

## **B. Partners and other organizations:**

### **1. Gulf of Maine 2050 Conference - Call for abstracts**

From November 4-8, the [Gulf of Maine 2050 International Symposium](#), *Challenges and Opportunities for Regional Resilience*, will be held in Portland, Maine. The conference will focus on the changes expected in the Gulf of Maine over the next 30 years, with the goal of developing ideas, next steps, and collaborations for climate resiliency throughout the region. Organizers are now accepting abstracts for posters, oral presentations, panel presentations on current scientific research related to the Gulf of Maine, examples of climate impacts on communities and businesses, and case studies on efforts to promote resilience. For details, see the [Call for Abstracts](#), which are due by August 5. [Register early](#) as participation is limited to the first 320 people who register.

### **2. Funding for First Nations coastal restoration project in NB**

In May the Minister of Fisheries, Oceans and the Canadian Coast Guard, announced that the Maliseet Nation Conservation Council (MNCC) will receive more than \$400,000 over four years for a Coastal

Restoration Fund project to help restore Atlantic salmon fish habitat in Wolastoq, tributaries and coastal habitats in Saint John, NB. The MNCC will identify and restore deteriorated fish habitat in the Wolastoq (Saint John River) watershed and associated coastal areas and also build the capacity of Maliseet people to undertake restoration work. [Canada makes significant investments in coastal research and restoration in New Brunswick](#) (Mirage News)

### **3. Book on ocean governance available online**

The International Ocean Institute-Canada has produced this collection of over 80 essays on the future of ocean governance and capacity development. Major themes include the law of the sea, ocean sciences, integrated coastal and ocean management, fisheries and aquaculture, communication and negotiations, maritime safety and security, ocean energy, and maritime transportation. Through the generosity of many donors, open access was secured from the publisher, Brill / Nijhoff. This allows readers, free of charge, to access the entire book online and download it as an 11Mb PDF file. Separate access to the individual essays and links to related PDF files is also available, see <https://brill.com/view/title/36420>.

### **4. Discovery Centre spring newsletter available**

The [spring issue of In With the Tide](#), the quarterly newsletter of the Bay of Fundy Discovery Centre is now available online. This issue features articles on Surf Scoters, Lichens, climate change, cap and trade plan and a volunteer award to Roger Outhouse (see below). Previous copies of the newsletter are also [available in the archive](#).

### **5. Congratulations to Fundy volunteer Roger Outhouse**

Roger Outhouse, a founding member and long time (20 years) supporter of the Bay of Fundy Discovery Centre, was recently nominated by the Municipality of the District of Digby at the provincial Volunteer of the Year Awards ceremony. Working with the Friends of the Islands trails committee and the Brier Island Trails Society, he promotes all Long and Brier Island trails. With a great passion for preserving and promoting the natural wonders of the Bay of Fundy and the environment around it, he has inspired many people to stop and consider the area's natural beauty. BoFEP congratulates Roger on this well-deserved recognition.

### **6. Congratulations to GOMC 2019 award winners**

During a ceremony on July 10th the Gulf of Maine Council presented international awards to honor individuals, businesses and organizations that have made a significant difference in protecting the health and sustainability of the Gulf of Maine watershed. Among the notable local winners were:

Sustainable Communities Award - **ACAP Saint John, NB**

Visionary award New Brunswick - **Dr. Tony Diamond**

Visionary award Nova Scotia - **Wanda and Calvin Van Tassel**

Visionary award Nova Scotia - **John Brazner and Jennifer West**

Distinguished service award Nova Scotia - **Heather Breeze**

[Additional information about all the Gulf of Maine Council 2019 awards](#) with details about recipient.

### **7. New NB Shorebird discovery centre opens**

The Federal Government has announced the opening of a new shorebird discovery centre in the Shepody National Wildlife Area, located between the Bay of Fundy and Hopewell Rocks. The new centre offers interpretation programming in the summer months for visitors to learn about the migration of shorebirds and the important role the Shepody National Wildlife Area plays in their survival. [Canada opens new shorebird discovery centre in Shepody National Wildlife Area in New Brunswick](#)

### **8. Second Global GeoPark proposed for Fundy**

Last year the Steering Committee of the [Cliffs of Fundy Aspiring Geopark](#) submitted an application to the Canadian Geoparks Network to have the area around the upper Bay of Fundy declared a Global Geopark. Recently, the steering committee had its application accepted and has been approved for site evaluation by the Canadian National Committee for Geoparks this summer. BoFEP has provided a letter of support for this worthwhile initiative. The area includes 40 impressive geosites within a 125 km drive where visitors can learn about Earth's incredible natural history. If this bid is successful it will join the [Stonehammer Geopark](#) located in southwestern NB which was designated in 2015.

## 9. NB lags in marine protected areas

The Canadian Parks and Wilderness Society says that New Brunswick is "lagging behind" other Canadian jurisdictions when it comes to protecting marine areas. [New Brunswick 'lagging behind' protecting important marine areas](#) (CBC News).

## 10. New Digby Neck and Islands Website

A new website has been created that provides a wealth of information about the Digby Neck and Islands region in southwestern Nova Scotia. [Digby Neck and Islands Website](#).

# 1. C. Fundy/GOM and other News:

## Twinning across the Avon

The 1146-foot massive rock and earth filled causeway spanning the Avon River estuary between Windsor and Falmouth, NS was completed in 1970 and has been a source of controversy ever since. It was built without provision for fish-passage. Also, Highway 101 and a section of railway line use the causeway to cross the river. The causeway converted the upstream side of the Avon River Watershed from a saltwater system to a freshwater one. Directly below the causeway mud began accumulating in vast quantities; a few decades later this has grown to a massive mudflat and salt marsh complex stretching many kilometres down the estuary. The issue is again reaching a boiling point as decisions are being made about twinning the remaining stretch of highway 101 where it crosses the Avon. The government's preliminary plan to widen the causeway is now available; however, many details regarding the most controversial aspects of this project are being withheld. The Friends of the Avon River (FAR) group has long had a mission to restore proper fish passage at the Avon River Causeway. Recently it launched a series of blogs exposing the story of the Avon River Causeway, near Windsor, Nova Scotia. [Back to the Future Part 1: A Tale of Two Rivers](#)

## 2. Salmon updates

In the bay of Fundy salmon are always newsworthy, whether they be wild or farmed. A few recent reports include:

[A guide to ASF's new map of North American Atlantic salmon rivers](#) (Atlantic Salmon Federation)  
[Third Player Looks At Millinocket for Maine Land-based Salmon Farm](#) (Atlantic Salmon Federation)  
[Journal article disputes claims that aquaculture is a sustainable industry](#) (Globe and Mail)  
[Dal fish farm study claims data lacking, but another researcher calls work 'opinion piece'](#) (Chronicle Herald)  
[History of Nova Scotia Aquaculture](#) (seafarmers)  
[A fish tag that knows it's been eaten is helping endangered Atlantic salmon](#) (CBC News)  
[Cermaq Plans for up to 20 Salmon Farms in Nova Scotia](#) (Undercurrent News)

## 3. Land-based salmon farm setting up in Bucksport ME

Whole Ocean , A recirculating aquaculture system (RAS) company, recently purchased a former paper mill on the Penobscot River to set up a land-based salmon farming operation. Later this year, Whole Oceans plans to break ground on the RAS facility, which is expected to initially produce 5,000 metric tons (MT) of Atlantic salmon annually, before quickly growing to 10,000 MT production annually. As time goes on, the company plans on increasing the facility's capacity to 20,000 MT per year, boosting its regional capacity to 50,000 MT. It is heartening to see the spread of such environmentally sustainable aquaculture operations throughout the region. [With Maine property officially purchased, Whole Oceans moves ahead with planned salmon RAS facility](#)

## 4. Bad and Good news for wild salmon

Wild Atlantic salmon in the Bay of Fundy and Atlantic coast of mainland Nova Scotia are near historic lows, says a recent population report by the Atlantic Salmon Federation. But it's not all negative news across Nova Scotia. The Margaree River in the Gulf region, saw an increase in returning salmon in 2018. [Bad news and good news for Atlantic salmon in recent population report](#) (Chronicle Herald)

## 5. Fundy fish oil sans fish!

A Dartmouth company, Mara Renewables is using a strain of microalgae derived from the Bay of Fundy to produce commercial quantities of Omega 3 fish oil. Chief scientist Roberto Armenta states “we are not compromising wild fish. We’re making (the oil) in a controlled environment — in a six-storey high tank. The process is similar to brewing beer. The sustainable oil is, like fish oil, a very rich source of omega-3 fatty acids, which are important to human health.

[Dartmouth's Mara Renewables Corp. set to market environment-friendly fish oil](#) (Chronicle Herald)

[Atlantic Canada fosters homegrown bioeconomy at BIOCON 2019](#) (Canadian Biomass)

## 6. Herring fisheries lose sustainability status

All three Marine Stewardship Council-certified herring fisheries in Atlantic Canada have lost their MSC-sustainability certification. In May the Seafood Producers Association of Nova Scotia voluntarily suspended its MSC certification on behalf of the 10 companies that operate an 11-vessel fleet of herring purse seiners primarily out of southwestern Nova Scotia. The suspension means product can no longer be sold with the MSC blue check mark, which assures consumers the fisheries are sustainably managed. This move is indicative of the precarious state of the herring stocks in Atlantic Canada. [Atlantic Canadian herring fisheries lose sustainability label](#) (CBC News).

## 7. Shubenacadie Bass threatened by gas storage project?

Controversy still rages around the plan by Alton Gas to flush out massive amounts of subterranean salt deposits to create huge caverns (2-15 of them) to store natural gas. There is concern that dumping the brine (up to 3000 tonnes daily) into the Shubenacadie River will threaten the well-being of the last significant Striped bass population in Fundy rivers as well as other aquatic life. Brine released could have a salinity of up to 260 ppt, while anything above 40ppt is considered harmful to bass. The nearby Sipekne'katic First Nation has been leading the fight against this questionable project. [Last of the Fundy bass](#). (The Weekly Press) [Mi'kmaw grandmothers to launch land title claim against Alton Gas project](#) (CBC News)

## 8. Footprint mapping for various fisheries

A recent Canadian Technical Report of Fisheries and Aquatic Sciences (#3293) shows commercial fishery footprint maps for directed fisheries using bottom and pelagic longlines for groundfish and large pelagics respectively on the Scotian Shelf, the Bay of Fundy, and Georges Bank. [Maritimes Region Longline and Trap Fisheries Footprint Mapping for Marine Spatial Planning and Risk Assessment](#).

## 9. New video on Fundy Shorebirds

Prolific videographer Jerry Lockett has just released another remarkable documentary short entitled [“Sharing the Coast with Shorebirds”](#) (11:31 mins). It includes interviews with a number of biologists in the field of shorebird conservation (including BoFEP founding member Peter Hicklin) and addresses the issue of human disturbance on shorebird resting beaches, as well as quite a lot of shorebird and mudshrimp footage. The upper Bay of Fundy is a critical staging area for migrating shorebirds that “fuel up” here before making a 4000km over-ocean flight to their wintering grounds in South America. But human disturbance on the beaches where they feed and rest can have a negative impact on their ability to complete their nonstop flight. In this film conservation biologists describe efforts, past and present, to protect the birds’ habitat and reduce disturbance by recreational beach users.

## 10. Peregrine Falcons have poor nesting year in NB

Peregrine falcons at Hopewell Rocks have failed to produce any viable young this year for the first time, and theirs isn't the only empty nest across New Brunswick, according to a wildlife biologist with the Department of Energy and Resource Development. There are about 16 nests the department keeps an eye on each year and checks on about half of them so far revealed that only one has chicks. The cold, wet spring is being blamed for this. [No peregrine falcon chicks at Hopewell Rocks for 1st time, say staff](#). (CBC News)



## 11. Right Whales still threatened on east coast

This summer is turning out to be a particularly disastrous one for the endangered North Atlantic Right Whales as they migrate from their wintering grounds off the southeastern US to their summer feeding grounds off Canada's east coast. It appears that climate change may be influencing the distribution of their planktonic food and forcing them to seek new feeding grounds in areas such as the Gulf of St. Lawrence. With this shift comes an increasing interaction with the shipping and fishing industries, leading to more ship strikes and entanglement in fishing gear. The following is a small sampling of some of the recent discouraging news reports:

[Warmed waters linked to diminished food for right whales](#) (Cape Cod Times)

[Uncertain future of North Atlantic right whale linked to tiny food source](#) (CBC News)

[Minivan carries decades of right whale DNA research to new home in Halifax](#) (CBC News)

[Right whale deaths: 4 of remaining 400 perish in Canada's Gulf of St. Lawrence](#) (Florida Times-Union)

[Climate change is killing the right whales](#) (Halifax Examiner)

[North Atlantic Right Whales Are Dying in Horrific Ways](#) (The Atlantic)

[Rules aimed at helping right whales based on outdated info, says scientist](#) (CBC News)

[EDITORIAL: Don't fail whales](#) (Chronicle Herald)

[COUNTERPOINT: Right whale plight not as dire as portrayed](#) (Chronicle Herald)

[Government of Canada introduces new, additional measures to protect the North Atlantic right whale](#) (Benzinga)

[With billions at stake, Canada to level to U.S. its fisheries offer protection to whales](#) (TheCells)

[6 recent deaths push rare whales closer to extinction](#) (National Geographic)

[Where crab is king: Lucrative fishery hauls in millions while avoiding whales](#) (Chronicle Herald)

[As death toll rises, scientists struggle to track massive, elusive right whales](#) (CTV News)

[How Climate Change Has Moved Endangered Right Whales Into Deadly Waters](#) (WCAI NPR)

[As death toll rises, scientists struggle to track massive, elusive right whales](#) (CTV News)

## 12. Minke Whale dies in upper Bay

A minke whale died in June along the shore near Clifton near the mouth of the Shubenacadie River in the upper bay. The first calls to the Marine Animal Response Society reported a live whale stranded at the mouth of the Shubenacadie River. A first responder from the society headed out right away but before he arrived the animal had died. [Minke whale beaches near mouth of Shubenacadie River](#) (Chronicle Herald)

## 13. Large bass taking advantage of Annapolis Tidal Station shutdown?

A surprised local fisherman landed a 22 Kg striped bass on a 20 pound test line recently in the Annapolis River. This was just before breeding season on a river where the local population was supposed to have been largely killed off by a causeway built in 1960, and again by a tidal generating station that opened in 1984. However, after decades of protests and recent revelations that Nova Scotia Power was not relaying reports of fish kills to the federal regulator, Fisheries and Oceans Canada ordered a review of existing scientific data on the turbine's effects. Based on the review's findings, [Fisheries and Oceans told NSP in April 2019](#) that it would no longer be permitted to operate the turbine without being first granted an exemption to kill fish under Section 35 of the Fisheries Act. At the time, a Nova Scotia Power spokesman said the plant had been shut down since January. Since then the gates have been open on the Annapolis River, allowing the water to flow freely with the tide and also, presumably, for fish to travel through. Nova Scotia Power won't be allowed to restart its Annapolis Tidal Station without Fisheries and Oceans Canada approval.

[DFO puts brakes on Annapolis Tidal Station](#) (Chronicle Herald)

[Nova Scotia man hooks monster fish in Annapolis River after tidal station shutdown](#) (Chronicle Herald)

[EDITORIAL: Fish kill at Annapolis Tidal Station ignored](#) (Chronicle Herald)

## 14. New tidal turbine to be tested in Bay

An Alberta-based company has been granted permission to try to harness electricity from the powerful tides of the Bay of Fundy. Nova Scotia has issued two renewable energy permits to Jupiter Hydro. The application says it will use three "floating barge type platforms" carrying its patented technology. The

company says it uses helical turbines mounted as if they were outboard motors. [Nova Scotia government approves new tidal power project for Bay of Fundy](#) (CTV News)

## **15. Rising seas a threat to Fundy dykes?**

There is steadily growing concern about the ability of Fundy's aging dykes to resist the inexorably rising sea level accompanying global climate change. Studies have identified many areas of particular concern and various projects have been announced to shore up dykes in some of the most vulnerable regions. But there is growing recognition that of coastal flooding is an even bigger problem that threatens many coastal communities throughout the Maritimes. Many of these communities are coming to grips with the realization that they are going to have to start adapting themselves to the new reality, sometimes by taking drastic action. The following is a small sampling of news reports relevant to this issue, particularly in the Fundy region:

[Province, Ottawa spending \\$114m to reinforce Bay of Fundy dikes against rising seas](#) (Chronicle Herald)

[Dike projects will help Nova Scotia prepare for rising sea levels, storms](#) (Toronto Star)

[Dikes, aboiteaux in Advocate, Nappan, Amherst Point to be upgraded](#) (Cumberland News Now)

[Projects will help Nova Scotia prepare for rising sea levels, storms](#) (Globe and mail)

[EDITORIAL: Shoring up the coastline](#) (Chronicle Herald)

[JIM VIBERT: Adaptation raises difficult questions](#) (Journal Pioneer)

## **16. Contaminated silt in Saint John Harbour**

The City of Saint John is scrambling to make arrangements for visiting boaters this summer after a plan to dredge contaminated soil at Market Slip fell through when mandatory bottom testing revealed contamination. Silt at the slip has traces of heavy metals as well as polycyclic aromatic hydrocarbons (PAH), a series of carcinogenic compounds that result from burning organic material. This meant that the silt it could not be disposed of at sea, but will instead have to be removed by truck to a licensed land-based disposal site. [Complete article](#) (CBC News). [Cause of Market Slip silt contamination unknown](#) (CBC News)

## **17. NB Tungsten mine dumps tailings in salmon habitat**

Canada's federal government recently approved a toxic effluent discharge system for the Sisson Mine Project near the Nashwaak, headwaters, that will impact Atlantic salmon habitat in NB.

[Federal Cabinet Approves NB Tungsten Mine Plan for Tailings in Salmon Habitat](#) (Ipolitics).

[Statement from the Wolastoqey Chiefs regarding the Sisson Mine announcement](#) (Atlantic Salmon Federation)

## **18. Canada invests \$6.6 million in Fundy National Park**

In May the Federal Government announced a federal investment of \$6.6 million for Fundy National Park. Of this, \$1.8 million is to restore the salmon population in Fundy National Park. A decline in the number of adult Atlantic salmon returning to spawn in the Point Wolfe River and Upper Salmon River watersheds is putting this population at risk. Another \$4.8 million will go towards combining maintenance and storage facilities into one new energy efficient facility. [Press release](#).

## **19. Musquash Estuary protected area enlarged by donation**

An area of protected land near the Bay of Fundy is getting bigger. More than 160 hectares have been entrusted to the Musquash Estuary Nature Reserve by two sisters from Maine. The land will stay in its natural form as part of more than 2,230 hectares of protected land at the Musquash Estuary in southwestern New Brunswick. [Nature reserve in NB gains a large property that would protect 'wide-ranging animals'](#) (Global News)

## **20. Fundy's Ile Haute to become protected area**

In April the Government of Canada announced its intent to establish a new National Wildlife Area on Isle Haute, in the upper Bay of Fundy, Nova Scotia. As a National Wildlife Area managed by Environment and Climate Change Canada, Isle Haute's unique ecosystem would be protected for all Canadians to

enjoy and for future generations. Its protection would also contribute 80 hectares to Canada's goal of doubling the amount of nature protected across Canada. [Press release.](#)

#### **21. St. Croix River dam to be removed**

NB Power will seek approval to remove the Milltown Generating Station, which has reached the end of its life. The Milltown hydroelectric station has been in operation on the St. Croix River since the early 1880s. As such, it is the oldest operating hydroelectric generating station in Canada. Decommissioning of the Milltown Generating Station and removing the dam will allow for the restoration of Salmon Falls and approximately 16 kilometers of the St. Croix River. This will make about five million square metres of spawning habitat available to the various diadromous fish species. [NB Power to decommission the Milltown Generating Station.](#) (NB Power Press Release)

#### **22. Bay of Fundy from space**

Portions of the Canadian provinces of Nova Scotia and New Brunswick separated by the Bay of Fundy are pictured as the International Space Station orbited 257 miles above the North American continent on May 7, 2019 . [Orbital View Of Nova Scotia, New Brunswick and the Bay of Fundy](#) (Space Ref)

### **D. ADMINISTTRIVIA**

Fundy Tidings is circulated quarterly to members of BoFEP and others who have expressed an interest in BoFEP and its activities. If you know someone who might like to receive Fundy Tidings, or if you would like to be removed from the Fundy Tidings mailing list, e-mail a request to: [seapencom@gmail.com](mailto:seapencom@gmail.com) Back issues are available at [Fundy Tidings Archive](#)