

# ~ *FUNDY TIDINGS* ~

## Newsletter of the Bay of Fundy Ecosystem Partnership (BoFEP) September 2022 Issue

### A. BoFEP and its activities:

#### 1. BoFEP 2022 AGM coming up soon – please RSVP ASAP

**Mark your calendars now!!!!** Plan to join us for the BoFEP 2022 Annual General Meeting on Friday October 21st, 2022, 1:30 - 4:00 pm at Tweedie Hall, Mount Allison University, Sackville, NB. The AGM will be preceded by a Steering Committee meeting from 10:00 am - noon. If you will be participating in person, or virtually, please RSVP ASAP to Sandra Currie, for catering purposes, and so that we can send you sign in details and a copy of the agenda and various reports. It is hoped that we will have a guest speaker at the AGM to address coastal flooding issues in the upper Bay and the important role of salt marshes in ameliorating the impacts of climate change. **Note: All SC members must have paid their BoFEP membership to vote at the AGM.**

#### 2. Urgent call for treasurer candidate!!!!

BoFEP is still seeking a new Treasurer as the long serving Susan Rolston wishes to step down. Could someone please step forward and either volunteer for the position or participate in a search committee for this key role. In the meantime, now going on 2 years, Susan continues to serve BoFEP diligently and has also played a vital role in the Conference organization. Thank-you, Susan for all your effort and dedication to BoFEP. Volunteer at <mailto:oceans2@ns.sympatico.ca> ASAP.

#### 3. Candidates needed for BoFEP Nominations Committee !!

BoFEP also needs to appoint a small Nominations Committee prior to the AGM, so that we abide by our By-Laws, confirm continuing members and identify potential new candidates for next year's Steering Committee. If you are interested, please contact the BoFEP Vice-Chair by phone 902-254-2510 or [sandra.currie@fundyforce.ca](mailto:sandra.currie@fundyforce.ca)

#### 4. Ocean Literacy WG expands scope

The Ocean Literacy Working Group has expanded its scope and modified its name to reflect the fact that ocean and climate literacy is the new focus or theme of BoFEP as discussed at the May ACCESS/BoFEP Conference. It is now called the “Ocean and Climate Literacy WG”. In 2015, Canada signed the UN Framework Convention on Climate Change (UNFCCC). Every country in the World is part of the Paris Agreement which strives to limit average global warming to 1.5 degrees C. above pre-industrial levels. To meet this goal, each signatory commits to cut its carbon pollution and submits a plan to reduce its annual greenhouse gas emissions (GHGs). Canada's Nationally Determined Contribution (NDC) is a plan to cut GHGS by 30% below 2005 emission levels by 2030. The paramount role of the ocean in this endeavour was clearly and most recently emphasized at the COP 26 meetings in Glasgow in 2021 and the Ocean Conference in Lisbon this year. Hence the imperative of considering the ocean /climate relationship as a whole, and accordingly in terms of the objective and title of the BoFEP Working Group

#### 5. BoFEP Coordinator busy

BoFEP has employed a part time Coordinator over the summer months - Lauren Lowther (a 4<sup>th</sup> year science student at Dalhousie U.). She has been busy on a poster on ocean literacy for the Conference and is now helping with the Proceedings of the Conference, last years' AGM Minutes and planning for the upcoming AGM.

#### 6. BoFEP Conference recognised in UN-GESAMP report

At the ongoing 49<sup>th</sup> Session of the Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (UN-GESAMP) on Sept 4-8, 2022, in the Report of the Chair of GESAMP, Dr.

Wendy Watson-Wright's plenary keynote presentation given at the ACCESS/BOFEP conference in May, 2022, is mentioned. Her talk was entitled *"Ocean and Climate Literacy – Strengthening the Linkage between Ocean Education and Climate Change Action in Our Coastal Waters"*. Wendy is now Vice-Chair of GESAMP. It is gratifying to see BoFEP receiving such a high-level recognition.

## B. Partners and other organizations:

### 1. Community Event Celebrated Fundy Biodiversity

On August 30<sup>th</sup>, CPAWS-NS and Oceans North held the third in a series of community events entitled, *"Conserving and celebrating biodiversity in the Bay of Fundy."* The event was timed to coincide with the tidal bore so participants could watch the tidal phenomena and then gather around for talks and a reception. Speakers included Reanne Harvey from CPAWS-NS who gave us an overview of biodiversity of the Bay and protections to date, followed by talks on the important research and community education work that Alanna Syliboy from Mi'kmaq Conservation Group, Dr. Kate Sherran from Dalhousie University and Kathryn Townsend from Maritimes Aboriginal Aquatic Resources Secretariat are all doing in the Bay. About 20 community members and tourists attended and enjoyed learning more about the Bay, important research that is underway, and needed protections in the future. (submitted: Katie Schleit: Oceans North)

### 2. Facebook group focuses on Fundy marine garbage

A Facebook group spearheaded by Karen Jenner in Kings County NS seeks to visually chronicle the vast array of man-made debris (particularly plastics) fouling the Fundy shoreline as well as encouraging local efforts to clean it up. Keep up the great work Karen!!! [Nova Scotia Beach Garbage Awareness](#).

### 3. First Nations move to protect Big Salmon River

Mi'kmaw and Wolastoqey leaders have signed a declaration they hope will lead to the protection of the Big Salmon River watershed, which reaches from almost near Sussex down to the Bay of Fundy. The two First Nations are working together to establish what is known as an Indigenous protected and conserved area, *"where Indigenous governments have the primary role in protecting and conserving ecosystems."* In a joint news release, the Mi'kmaq and Wolastoqiyik say that would mean no decisions would be made about Crown land use, including mining exploration and commercial forestry, without their written consent. [Mi'kmaq and Wolastoqiyik sign declaration to protect Big Salmon River](#) (CBC News)

### 4. FORCE community meeting features project updates

Fundy Ocean Research Centre for Energy (FORCE) IS organizing an evening community gathering in Parrsboro featuring research updates from staff as well as project updates from technology developers. Come find out what's planned for tidal energy testing and demonstration at the FORCE site. Date: Wednesday September 28<sup>th</sup>, 2022, Time: 6 – 8 pm Location: The Hall – Parrsboro Culture and Community Centre, 44 King Street, Parrsboro, NS for more information visit Web: [www.fundyforce.ca](http://www.fundyforce.ca) Email: [sandra.currie@fundyforce.ca](mailto:sandra.currie@fundyforce.ca)

### 5. NS shorebird roosts protected

A Birds Canada program protecting shorebird roosting locations in Nova Scotia has received renewed funding from the province. Space to Roost has been running since 2016. The program closes off certain areas of beach around the Bay of Fundy to allow migrating shorebirds like semipalmated sandpipers to rest and feed on their journey from the Arctic to South America. [Shorebird protection program given boost from N.S. conservation fund](#) (CBC News)

### 6. Tidal energy monitoring program

Sustainable Marine has engaged a series of Canadian specialists to further support its environmental monitoring efforts, regarded as one of the most ambitious and advanced in the tidal energy industry. In May 2022, it became the first company to successfully deliver floating in-stream tidal power to Canada's grid, harnessing the enormous tidal currents in Nova Scotia's Bay of Fundy. It is now trialing advanced techniques that could further enhance knowledge of the marine ecosystem – including fish tag triangulation, tests of close-range high-resolution imaging sonar and exploration of artificial intelligence

techniques for video processing. [Sustainable Marine joins forces with Canadian specialists for tidal energy environmental monitoring](#) (Offshore Energy)

## 7. New high tech fish counting developed in NS

A Nova Scotia-based company Innovasea has successfully developed technology to instantaneously detect and count fish using underwater cameras, imaging sonar and artificial intelligence — technology that could help prevent fish kills at hydroelectric dams. The prototype was field tested this spring at a Nova Scotia Power hydro dam outside Kentville, N.S., where it counted nearly 900,000 fish during an upstream migration of gaspereau — a species of herring. [Fish-counting A.I. developed in N.S. could help avert fish kills at hydro dams](#) (The Weather Network)

## 8. Study examines turbine effects on marine fauna

The [Fundy Ocean Research Centre for Energy](#) (FORCE) is leading a collaborative project to develop predictive models of where key species will be found in the Minas Passage, N.S., based on environmental conditions. This would then be used to establish the likelihood that fish would be present in the same area as tidal turbines. The risk assessment project is researching nine species, including ones important for commercial fisheries, like striped bass and alewife, as well as ecologically and culturally significant species such as American eel, tomcod, and white sharks. [How do tides and turbines affect sealife? Fundy study hopes to find out](#) (CBC News)

## 9. Join the Atlantic Salmon Federation - Special Offer!!!

If you are not already a member of ASF please take a moment to check out the Atlantic Salmon Federation membership offers below and visit ASF's website [www.asf.ca](http://www.asf.ca) to learn more about ASF. The Atlantic Salmon Federation would like to extend to you this special membership offer! Membership gets you four copies of ASF's award winning magazine, the Atlantic Salmon Journal but more importantly it helps grow and solidify the international salmon conservation movement. (Development Assistant, Membership Services, Atlantic Salmon Federation, PO Box 5200, St. Andrews, NB E5B 3S8 [cbartlett@asf.ca](mailto:cbartlett@asf.ca) [www.asf.ca](http://www.asf.ca))

# C. Fundy/GOM and other news:

## 1. Debate continues: highway twinning and Avon River crossing

A twinned highway and upgraded aboiteau across the Avon River were supposed to be just about done by now. At least that was the plan in 2017, when the Nova Scotia government applied for and received environmental approval from itself to twin 9.5 kilometres of the Trans-Canada Highway, from Three Mile Plains to Falmouth, and alter the existing aboiteau in the causeway across the Avon River. Work was supposed to begin that fall. Instead, construction hasn't started yet, design costs have spiralled, and the now very different project is back before both provincial and federal environmental regulators. The Public Works Department doesn't know when or if it'll be allowed to start construction. Some residents want free flow of fish passage and some want the lake (Pisiquid) back. It's dividing the community of Windsor and the delays are perpetuating that animosity between both factions. [Endless delays, debate over fate of Avon River aboiteau and Highway 101](#) (Chronicle Herald, Saltwire)

## 2. Land Link between NS and NB vulnerable

Seven years ago, the sun, moon and Earth aligned to produce a tidal surge in the Bay of Fundy, pushing the sea within centimetres of a national rail line connecting the eastern Canadian provinces of Nova Scotia and New Brunswick. The water lapping at the edges of the train tracks marked the zenith of an 18-year astronomical cycle due to repeat in about a decade's time – and fuelled concerns among locals conscious of the ever-present flood risk. Today, even a heavy storm risks inundating the slender Chignecto Isthmus, a 21km-wide land bridge at the edge of the Bay of Fundy that serves as a vital economic corridor. [Surging tides: How sea-level rise could sever a vital transport link in Canada](#) (Al Jazeera). **Note: This is an excellent summary of the situation with lots of interesting detail!!**

### 3. NB announces major nature legacy protection plan

On July 14th the [Government of New Brunswick](#) announced the first 84 [Nature Legacy](#) protected areas! GNB has committed to doubling its permanently protected land and freshwater from 4.6 per cent to 10 per cent, an area equivalent in size to 19 Fundy National Parks. The first 84 areas will protect about 90,000 hectares and more than 10,000 hectares will soon be added for a total of more than 100,000. (ASF River Notes)

### 4. Boost in Federal funding for marine ecosystem protection.

The Canadian Government announced in July that almost \$450 million in federal funding has been pledged to protect and restore vulnerable marine ecosystems and wildlife across Canada. This money will be available for groups to apply for different projects, to make sure our waterways are safe. [Feds pledge \\$447M to protect Canada's marine ecosystems](#) (Yahoo!News)

### 5. Ottawa and NS commit to conserving coastal lands

Environment Canada has started talks with Nova Scotia on the creation of national wildlife areas on Isle Haute, in the Bay of Fundy; St. Paul Island, in the Gulf of St. Lawrence; and Country Island, which is off the province's eastern shore. The province has plans to conserve at least 20 per cent of its land and water areas by 2030, which is part of Canada's goal of protecting 30 per cent of the country's land and inland waters by 2030. [Ottawa and Nova Scotia commit to creating new parks and conserving coastal lands](#) (CBC News)

### 6. Larger number of Shorebirds appeared in Fundy

Johnson's Mills Shorebird Reserve, near Dorchester, N.B., experienced a spike in shorebird numbers. There have been over 100,000 shorebirds in a day this year - that's more than double the numbers recorded last year. The shorebirds show up in large numbers from July to September each year, but the peak season is from mid-to-late August. The birds spend about three weeks feeding on the mud flats and resting to gain enough energy for the remainder of their trip to South America, which is a 72-hour non-stop flight. It was 35,000 last year and the year before that it was 20,000, but the numbers that being seen now are typical, so it appears the low numbers last year were possibly a fluke rather than an actual increase this year. [100,000 shorebirds spotted in 1 day at Johnson's Mills Shorebird Reserve](#) (CBC News). [Highest number of shorebirds in years at N.B. reserve](#) (Global News). ['They put on a great show': shorebirds are back at Johnson's Mills in healthy numbers](#) (CHMAFM), [Shorebirds ready for long trips](#) (Durham Region) [A murmuration of shorebirds near the Bay of Fundy](#) - Video 0:30 mins (CBC News)

### 7. Great White Sharks visiting Fundy!!

In late August a female white shark named Andromache, first located by researchers off Cape Cod, Mass., about two years ago, was found in Chignecto Bay off the New Brunswick coast. This marks the first time Andromache has travelled to Canadian waters. Until about six years ago, Atlantic Canada was thought to be a part of the range of the white shark, but just a "fringe area." [Andromache, the white shark 8. hitting N.B waters, 'a good sign for wildlife'](#) (CBC News)

### 8. Blue sharks also visiting Fundy in numbers

Blue sharks might be one of the most dominant sightings along the Atlantic coast, but they are rarely seen in the Bay of Fundy. Now, however, a video posted by the Grand Manan Whale and Seabird Research Station (0:28 mins) of a blue shark sighting in the Bay of Fundy is making the rounds on social media. There have been more than 30 sightings recently. Blue sharks might be one of the most dominant shark sightings along the Atlantic coast, but they are rarely seen in the Bay of Fundy. Now, however, [a video posted by the Grand Manan Whale and Seabird Research Station](#) (0:28 mins) of a blue shark sighting in the Bay of Fundy is making the rounds on social media. There have been more than 30 such sightings recently. [Bay of Fundy sees dozens of blue shark sightings -](#) (CTV News Atlantic)

### 9. Grand Manan beckons visitors

Grand Manan is an island in the Bay of Fundy in New Brunswick where you'll find uncrowded beaches, hiking trails and tons of opportunities to immerse yourself in nature. Volcanic rock from the Triassic period

makes up the western part of the island, making it look like something you'd find in Hawaii rather than Canada. The picturesque island was named one of the world's seven best small islands by Reader's Digest in 2018. [This Scenic Island Made Up Of 200 Million-Year-Old Lava Looks Like Canada's Version Of Hawaii](#) (Narcity)

#### **10. Fifty new bugs found in Fundy Park**

A 2021 survey in Fundy National Park found 50 insect species that were identified for the first time in the park. Many of them have probably been around for a long time without being officially noticed by scientists. The list includes flies, bees, beetles, moths, wasps, and butterflies. More than half of all the new species were identified in the park's pollinator garden, a 400-square-metre area that includes about 80 native plant species. [Dozens of new insect species discovered at Fundy National Park](#) (CBC News)

#### **11. Opposition to planned LNG terminal in Saint John**

As discussions about the potential for a liquefied natural gas (LNG) export terminal in Saint John heat up, environmentalists are calling for any such plans to be cancelled. The potential for European countries to experience a shortage of natural gas at the hands of Russia has prompted talks for Canada to step up to the plate in providing liquefied natural gas. The Conservation Council of New Brunswick has denounced calls for the terminal, including any decisions involving the removal of the shale gas moratorium. [No Place for Liquefied Natural Gas Export Terminal in Saint John: Environmentalists](#) (TankTerminals).

#### **12. New data collection to assess health of Saint John Harbour**

New public data involves new depths of understanding about ecosystems beneath and along the Saint John Harbour. Information from the last five years is now online for projects completed within the [Coastal Environmental Baseline Program](#). The partners represent Indigenous organizations, the marine fishing industry, environmental non-profits, academics, and the government. These are all still collecting data on everything from water quality to fish species, invasive species, seabirds, wetlands, contaminants, and micro plastics. The Fundy North Fishermen's Association is collecting data on Bay of Fundy surface currents to create a model predicting where any oil spill might travel. [Research offers deep dive into health of Saint John Harbour ecosystem](#) (CTV Atlantic News).

## **D. ADMINISTRIVIA**

Fundy Tidings is circulated, usually 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:

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