

## ~ *FUNDY TIDINGS* ~

*The Quarterly Newsletter of the*

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

**December 2018 ~ Autumn Issue**

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

#### **1. BoFEP 2018 AGM**

The 2018 Annual General Meeting of the Bay of Fundy Ecosystem Partnership (BoFEP) was held on Wednesday November 14, 2018 at Mount Allison University. At the meeting a complete slate of Steering Committee members were elected and these in turn chose members of the Management Committee from their ranks.

[Chairperson Report 2018 AGM](#)

[BoFEP Steering Committee 2018-19](#)

[BoFEP Management Committee 2018-19](#)

[Report to 2018 AGM on Science Workshop](#)

#### **2. Proceedings of 2018 Workshop Available**

The [Proceedings of the 12th Bay of Fundy Science Workshop](#) (2018) “A Changing Fundy Environment: Emerging Issues, Challenges and Priorities”, Editors: Joshua McNeely, Marianne Janowicz, Blythe Chang, Sarah Chamberlain, Susan J. Rolston, and Peter G. Wells, held 9-12 May 2018 at the Agricultural Campus, Dalhousie University, Truro, NS, is now available on the BoFEP website. (PDF 1.99MB). [BoFEP Technical Report No. 11]. The 12th workshop was attended by approximately 115 people, mostly from Nova Scotia

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

#### **1. BoF Discovery Centre Fall Newsletter Available**

The most [recent issue of “In With The Tide”](#), the quarterly newsletter of the Bay of Fundy Discovery Centre Association is now available. Back issues are also available in the [IWTT Archive](#). If you are interested in becoming a member of the organization, there is a membership application form on the last page of the newsletter.

#### **2. Major Symposium: Gulf of Maine 2050**

Gulf of Maine 2050 – International Symposium, November 4-8, 2019, The Westin Portland Harborview, Portland, Maine. This international symposium will integrate environmental, economic, social, and institutional perspectives on emerging climate challenges and opportunities. It will bring together multiple science disciplines, natural resource managers, municipal planners, representatives from key industries, a diverse mix of community leaders, non-governmental organizations, and the donor community. Prior to the symposium there will be a Strategic Scenarios Workshop [March or April 2019 Huntsman Marine Science Centre, St. Andrews, NB], where interdisciplinary teams will meet together to develop scenarios for key issues related to the Gulf of Maine in 2050. These scenarios will provide strategic insight about how potential changes related to climate and other factors could impact the Gulf of Maine environmental, community, and economic conditions over the next 30 years.

[More info on symposium.](#)

#### **3. BoF Blog Worth Checking Out**

Art MacKay produces an eclectic and interesting blog [ [Fundy Tides Blogspot](#) ] that features images, news and opinion from around the Bay of Fundy and beyond. Two recent items of interest include an exploration of dead and dying zones in the St. Croix River and “NOTES ON FISH STOCKING HISTORIES FOR EAST COAST RIVERS”. One can subscribe to this blog and received the latest inputs in your e-mail.

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

#### **1. Marine Mammals in the News**

Stories featuring a variety of marine mammals appeared in local media, fortunately, few dealing with the high whale mortalities [Right Whales] that occurred last year along the east coast. Not surprisingly, technology is playing an increasing role in studying and protecting marine mammals in the region.

[In Changing Climate, Endangered Right Whales Find New Feeding Grounds](#) (NPR)

[Humpback whale died in 'horrific way' tangled in ropes, trap](#) (CBC News)  
[Entangled right whale freed from buoy after being spotted on Sunday](#) (Global News)  
[Underwater robots tracking right whales and their prey](#) (CBC News)  
[Drones, satellite tagging will help monitor harbour seals in Saint John](#) (CBC News)

## 2. Fundy Tidal Power Faces Major Hiccup?

Over the past few months much of the news about tidal power development in the bay has largely focused on the financial failure of one of the major consortia and its repercussions. Particular concern has been expressed about the fact that a turbine was put in place in the Minas Channel just a week before the announcement of the bankruptcy of OpenHydro. It is also troubling that the turbine appears to be damaged and that no efforts have been made to remove it from the water, with unknown ecological consequences.

[Failing Fundy tidal project leaves string of unpaid debts](#) (CBC News)  
[Cape Sharp Tidal owner files for bankruptcy in Ireland](#)  
[Tidal turbine in Minas Passage now under control of receiver in Ireland](#) (Truro Daily News)  
[Questions surround Bay of Fundy tidal turbine as OpenHydro faces liquidation](#) (CBC News)  
[No word on fate of NS turbine as OpenHydro's future questioned](#) (CBC News)  
[Emera ends involvement in troubled Bay of Fundy tidal turbine project](#) (CTV News)  
[OpenHydro bankruptcy: Turbine owner unclear](#) (Truro Daily News)  
[Team investigating why rotor not turning on Cape Sharp tidal turbine](#) (Global News)  
[Tidal turbine in the Bay of Fundy will be monitored: OpenHydro](#) (Global News)  
[Cape Sharp Tidal turbine in Bay of Fundy being monitored remotely: Emera](#) (CTV News)  
[Cape Sharp Tidal turbine was 'damaged beyond repair' in September](#) (Global News)  
[Clock ticking on Bay of Fundy tidal turbine removal](#) (Chronicle Herald)  
[Tidal turbine can't stay in Bay of Fundy indefinitely, province says](#) (Globe and Mail)  
[Environmental monitoring of abandoned tidal turbine to start soon](#) (Halifax Examiner)  
[Ownerless Bay of Fundy turbine operating without fish kill monitoring gear](#) (Chronicle Herald)  
[Bay Of Fundy tidal turbine not in compliance with environmental assessment](#) (CTV News)  
[Lack of monitoring of Cape Sharp turbine breaks rules, says energy minister](#) (Chronicle Herald)  
[Turbine not meeting environmental rules but NS has no action planned](#) (CBC News)  
[No talks to raise turbine in Bay of Fundy, says energy minister](#) (CBC News)  
[Is tidal power dead in the water?](#) (Halifax Examiner)

Thankfully, a few positive Fundy tidal energy stories have appeared amongst all the gloom and doom.

[EU tidal energy expertise arrives in Canada](#) (Maritime Journal)  
[Wither Tidal-Current Power?](#) (Canada Free Press)  
[EDITORIAL: Tidal power still has a future in Bay of Fundy](#)  
[Ottawa commits \\$30 million for new tidal power project in Bay of Fundy](#) (CBC News)  
[OERA Announces Launch of the Nova Scotia Tidal Energy Research Portal](#)  
[Nova Scotia issues permit for tidal energy project in Bay of Fundy](#) (CTV News)

And on a tidal power related note? YouTube has a short (2:40 mins) video illustrating [simulated water speeds](#) in Digby Gut over a number of tidal cycles. The simulation starts Jan 25th 2012 and runs for 6 M2 Tidal Cycles.

## 3. Salmon Farming (Open Pen)

Salmon farming in the bay of Fundy and elsewhere faces a rising tide of adverse publicity on a number of fronts. Particular concerns are being raised about the presence of illegally introduced European salmon in Fundy waters. Also, a recent study indicates that salmon farms adversely affected the ecosystem and cause lobster stocks to plummet in surrounding waters. And once again there are reports of ongoing illegal use by pesticides at some aquaculture sites. All of these issues are compounded by the Federal government's seeming lack of transparency when it comes to aquaculture matters.

[NGO claims Canadian farms have illegally imported European salmon](#) (Undercurrent News)  
[Atlantic salmon aquaculture farmers cited as 'likely source' of European strain spawning in Fundy ...](#) (Cape Breton Post)  
[ASF Statement on European Origin Aquaculture Atlantic Salmon in the Bay of Fundy](#)  
[Salmon group alleges illegal importation of European fish](#) (CBC News)  
[Farm salmon spawning in Bay of Fundy since 1997](#) (ASF)  
[Near Fish Farms, Lobster Catches Plummet](#) (Hakai Magazine)  
[New Brunswick officials suspected pesticide use near lobster pens](#) (CBC NEWS, ASF)  
[Fish Farms Protected by Ottawa's Cone of Silence](#) (The Star, ASF)

#### 4. Salmon Farming (Land-based)

In marked contrast, steady progress seems to be made in the promotion and development of land-based aquaculture operations. This more sustainable approach will clearly be the wave of the future.

[Land-based Salmon Farm Conference in Miami Has Strong Interest](#)  
[Maine Land-based Recirculating Salmon Farm Moves Forward](#)

#### 5. Salmon (Wild Stocks)

Meanwhile, the future of wild stocks of Atlantic salmon in the Bay of Fundy is still very much up in the air. Researchers are monitoring populations, seeking for causes of the decline and making efforts at enhancing habitat and restoring populations. Of particular concern are the possible adverse effects on local wild stocks of the escape of European salmon strains from aquaculture sites.

[Year of the Salmon Hopes to Solve Salmon Mysteries](#) (ASF)  
[Editorial Calls for Investigation of European Salmon in the Bay of Fundy](#) (ASF, Telegraph Journal)  
[European genes found in wild Atlantic salmon cause alarm](#) (Seafood Source)  
[Non-native genes create more trouble for endangered Atlantic salmon](#) (CBCNews)  
[ASF Says the European Genes Negatively Impacts Salmon Restoration](#) (ASF)  
[Notes on Fish Stocking Histories of east coast rivers](#) (Art MacKay Blog)  
[For these east-coast fish, human intervention is their only hope](#) (Macleans Magazine)  
[Residence Description for the Atlantic Salmon \(Salmo salar\), inner Bay of Fundy population in Canada](#) (SARA Registry)  
[‘That fish changes everything’: Inner Bay of Fundy salmon found in Windsor’s Lake Pisiquid](#) (The Register/Advertiser)

#### 6. Conservation and Protection advances/setbacks

The [Nature Conservancy of Canada](#) says it has now conserved the last privately owned property inside the Grand Manan migratory bird sanctuary. The newly protected land is on the south-east side of the island between Grand Harbour and Seal Cove. [433 hectares of land on Grand Manan Island protected as bird sanctuary](#) (CTV News)

Plans to apply to UNESCO to establish the Cliffs of Fundy [Global GeoPark](#) are on hold. “There’s an issue with a clause in UNESCO’s literature that we need to have clarified. The clause says UNESCO does not approve of the sale of rocks, minerals and fossils and will not allow the geopark to be associated with businesses that sell rocks, minerals or fossils.” [Cliffs of Fundy geopark application on hold](#) (Cumberland News)

#### 7. Growing interest in Fundy Sharks

There appear to be a steady rise in the number of stories about sharks in the Bay of Fundy, no doubt partly attributable to the fact that quite a few are now bearing transmitters and can be tracked on the [Ocearch Shark Tracker](#). Other stories are more concerned about overfishing of the sharks in the region and efforts to manage species that are deemed at risk.

[All sharks tagged in NS expedition can now be tracked on Ocearch website](#) (Chronicle Herald)  
[Tidal energy investors and fish: the Minas Basin is full of sharks](#) (Halifax Examiner)  
[Shark Snatches Fish From Fisherman in Bay of Fundy, Nova Scotia](#) (Yahoo News UK)  
[Slaughter of sharks provokes Canadian researchers to question US rules](#) (CBC News)  
[Porbeagle: Consultations on listing under SARA](#) (SARA Registry)

#### 8. Pollution: Toxins and plastics in the Bay

Irving Pulp and Paper in Saint John has been hit with a big fine for releasing toxic effluents into the river and Bay. The proceeds are going towards research efforts on salmon. It seems that the Bay of Fundy is not immune from the buildup of microplastics occurring worldwide. Meanwhile, local fishermen are to be commended for their efforts to retrieve larger bits of plastic in the form of nets, ropes and buoys.

[Irving Pulp and Paper pleads guilty to pollution charges, faces \\$3.5M penalty](#) (CBC News)  
[J.D. Irving plea deal raises questions of conflict of interest, say law professors](#) (CBC News)  
[Irving pollution fine will not go to Irving non-profit](#)  
[Researcher discovers microplastics in Bay of Fundy clams](#) (CBC News)  
[Ocean group confirms microplastics pollution in Atlantic Canada](#) (Truro News)  
[Three tons of rope gathered in Canadian recycling effort](#) (Undercurrent News)

## 9. Kelp in Decline

The kelp in many coastal areas worldwide, including Nova Scotia and the Bay of Fundy, is being replaced by a thin carpet of turf algae. Many marine species including cod, haddock and sea urchins depend on the kelp forest, which rises to five-metre canopies in the Bay of Fundy and much higher in other parts of the world. [Kelp decline going global, researcher says](#) (Chronicle Herald)

## 10. Highway Twinning across Avon River Raising Concerns

As work progresses on twinning Highway 101 between Falmouth and Three Mile Plains, it will include the need for another crossing at the existing causeway over the Avon River. It's that crossing that has people worried because one of the options would be a design that would use a controlled tidal exchange to allow for fish to pass. Such an approach would see the popular lake next to the town fluctuate significantly with the tide and create problems that would run all the way up the river. [Why Highway 101 twinning has some people in the Windsor area concerned](#) (CBC News)

## 11. Future of Gaspereau in St. Croix River Promising

A Maine-based conservationist is projecting gaspereau numbers in the St. Croix River could climb to a million fish in five to six years. That prediction comes after news 270,000 gaspereau were counted during the spring-summer migration this year. That's a big difference from 2002, when just 900 gaspereau were counted at the same St. Stephen fish ladder. [Gaspereau Revival in St. Croix Takes a Leap](#) (ASF, CBC News)

## 12. Climate Change and Sealevel Rise

Climate change and its correlated sealevel rise are still very much in the news worldwide. The Bay of Fundy isn't immune to the impacts of these threats as evidenced by a number of recent news articles. These touched upon vulnerable low lying lands around the upper Bay, the need to maintain and even raise dykes, the possibility of restoring some dyked land as natural tidal salt marshes and the development of models to assess vulnerability of coastal lands around the Bay to flooding.

[RISING SEAS: Farmer offers solution to Cumberland flooding](#) (Chronicle Herald)

[RISING SEAS: High tides threaten low-lying Isthmus of Chignecto](#) (Chronicle Herald)

[RISING SEAS: As land disappears, governments shore up plans to cope with climate change](#) (Chronicle Herald)

[Surging water a threat provincewide](#) (Chronicle Herald)

[SEA RISE IMPACTS AROUND THE BAY OF FUNDY](#) ( interactive maps - Fundy Tides Blogspot )

[RISING SEAS: Saint Mary's University prof begins project to focus on breached dikes](#) (Chronicle Herald)

Meanwhile, on the climate change front there is a growing recognition of the important role of salt marshes and other wetlands in sequestering carbon and protecting coasts. The worrisome rapid warming of the waters of the Gulf of Maine and the possible impacts on fish stocks and other wildlife is also drawing a lot of attention.

[What the world needs now to fight climate change: More swamps](#) (The Conversation)

[An ocean 'heat wave' just drove temperatures off Maine's coast to near record levels](#) (SFGate)

[Waters off New England warming at record pace](#) (The Salem News)

## 13. Waterfowl and Shorebirds in the News

Concerns are being raised after the deaths of eider ducks that contacted power lines in the Tantramar Marsh area in the upper bay. The marsh is a major crossing area for various waterfowl. It is suggested that deterrents be installed to alert the birds to the threat. [Time to keep birds away from power lines in Tantramar Marshes, say specialists](#) (CBC News)

CBS recently posted a dramatic video (2.22 mins) of sandpipers performing their iconic aerial ballet over the mudflats of the upper bay ..... Truly an inspiring sight. [Video of flocks of sandpipers in upper bay](#) (2.22 mins CBS Sunday)

## **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 available at [Fundy Tidings Archive](#)