



Creating ~ sharing ~ using
knowledge about
the Bay of Fundy

~ **FUNDY TIDINGS** ~

*The Quarterly Newsletter of the
Bay of Fundy Ecosystem Partnership (BoFEP)*

April 2008 ~ Spring Issue

For up-to-date information about BoFEP meetings and other events visit: www.bofep.org/calendar.htm

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A. BoFEP and its activities:

1. BoFEP Mailing - Recently a mailing was sent to all BoFEP members containing

- a covering letter from the Chair of BoFEP
- Fundy Issue (#28 - *The "Cause" in Causeway: Crossing the Avon River at Windsor.*)
- A membership application form
- An invitation to the 8th Bay of Fundy Science Workshop - *May 26-29, 2009.*

If you did not receive this mailing please contact secretariat@bofep.org to ensure that you are registered as a member and that we have your correct postal address.

2. BoFEP membership reminder

In an effort to diversify its funding base and make the organization more financially sustainable, BoFEP recently instituted a membership fee - with a number of membership categories depending upon your ability/willingness to financially support the organization. Most of you have received the membership form in the recent mailing. You can also find an online copy at www.bofep.org/join.htm . Please show your ongoing support for BoFEP by submitting your membership form at your earliest convenience.

3. BoFEP in the Energy Business!

The New Brunswick Department of Energy recently contracted BoFEP to conduct a project entitled "*Completion of the Ocean Renewable Energy Strategic Environmental Assessment of New Brunswick's Bay of Fundy Coastal Waters*". This work, conducted during the first two weeks of April this year, was overseen by Project Manager Barry Jones, Chair of BoFEP's Marine Energy Working Group. Essentially it involved a public/stakeholder consultation process to familiarize NB coastal communities with the capture and value of tidal energy, to understand their possible concerns and to gather recommendations. These consultation meetings were held in seven communities within New Brunswick which were selected on the basis of their proximity to potential development sites or might otherwise be influenced by such development. The BoFEP Website included bilingual information about the project as well as online forms for submitting comments and responses to a series of questions pertaining to tidal power development in New Brunswick. The deadline for submitting comments was April 23, 2008. Further information on this project is available on the BoFEP Website at www.bofep.org

4. BoFEP Informatics Project facilitates access to BoFEP publications

The Fundy Informatics Working Group (<http://www.bofep.org/working.htm>) recently completed a pilot project entitled "*Developing an Informatics and Knowledge Repository for the Bay of Fundy*". This is the first step in the development of an online tool to efficiently and quickly access Bay of Fundy information. The prototype platform is a Website providing access to a literature collection based on the Cumulative Index to BoFEP publications prepared by Susan J. Rolston and Peter G. Wells (March 2006) as well as the Proceedings of the 7th Bay of Fundy Workshop on October 2006. The repository can be selectively browsed by categories, authors, articles (titles), documents (type), and keywords. In addition, a search can be made for text strings, authors, titles and keywords. Most of the publications can then be viewed in both HTML and PDF formats. This pilot repository, intended primarily for internal BoFEP use and not for general distribution, is accessible at: <http://docs.informatics.management.dal.ca/bofep/>. Any comments or suggestions regarding the knowledge repository can be sent to: communications@bofep.org

B. Partners and other organizations:

5. Tidal Energy Strategic Environmental Assessment

a) Participant Support Funding Program - Reports on 1st Round Projects

Reports on the following completed projects are now available:

- *"A Report of First Nations Fishing Activity in the Bay of Fundy"* prepared by the Atlantic Policy Congress of First Nations Chiefs. The report profiles 17 First Nations communities in Nova Scotia and New Brunswick with fishery access to the Bay of Fundy and describes the different fisheries they are engaged in. Report available in PDF format at: <http://www.offshoreenergyresearch.ca/LinkClick.aspx?fileticket=zIH4cedLU08%3d&tabid=199&mid=931>
- *"Sustainable Energy and Rural Development: Options and Alternatives"*, prepared by the Bay of Fundy Marine Resource Centre submitted is an exploration of how rural citizens and their communities might benefit directly from tidal energy, with a review of the legislative and jurisdictional context, and suggestions for the way in which benefits could be linked to community economic development. Report available in PDF format at: <http://www.offshoreenergyresearch.ca/LinkClick.aspx?fileticket=KjAKSg07Km8%3d&tabid=199&mid=931>
- *"Public Engagement and Renewable Energy Development: Options and Alternatives for Tidal Energy Development in the Bay of Fundy, also prepared by the Bay of Fundy Marine Resource Centre*, examines options for improving citizen engagement in natural resource and energy projects, and recommends ways in which these options might relate to Bay of Fundy tidal power development. Report available in PDF format at: <http://www.offshoreenergyresearch.ca/LinkClick.aspx?fileticket=jypaav7%2fEBg%3d&tabid=199&mid=931>
- *"Integrated Coastal Zone Management (ICZM) in the Bay of Fundy: Implications for Tidal Power"* prepared by the Ecology Action Centre reviews the challenges and opportunities of ICZM through lessons learned from six past and ongoing ICZM efforts, and recommends a way forward for tidal energy. Report available in PDF format at: <http://www.offshoreenergyresearch.ca/LinkClick.aspx?fileticket=wJnCsad8%2bao%3d&tabid=199&mid=931>

b) Participant Support Funding Program - 2nd Round Awards

The successful recipients of the second round of awards under the Participation Support Funding Program are:

- The Nova Scotia Environmental Network will organize a day-long workshop for network members (total of 45 environmental groups) and submit a research report (see below).
- Richard Sanders, Resource Management Inc. will carry out secondary research on submerged ice to complete a paper prepared in 2006 titled *"Documenting Ice in the Bay of Fundy Canada 1968-2006 As a Preliminary to Developing Ice-Tolerant In-Stream Tidal Current Harvesting Devices"*. Richard will work collaboratively with Emile Baddour, Institute of Ocean Technology and Parrsboro resident, Carl Byers.
- Scotia Fundy Mobile Gear Fishermen's Association will conduct a database search to document the fleet's activities and catches in the Bay, and carry out in-depth interviews with fishers to collect relevant traditional knowledge.

c) SEA Newsletter

The offshore Energy Environmental Research Association (OEER) publishes a monthly newsletter "Currents" intended to keep people informed about the latest news regarding the SEA process and to provide an opportunity for feedback. The March 2008 issue (as well as all previous issues) is available online at: www.bayoffundyseas.ca, where you can also subscribe and have copies e-mailed directly to you. You can also contact OEER via e-mail at: oeer@offshoreenergyresearch.ca.

d) SEA Community Forums - 2nd Round

OEER will once again be holding a series of six Strategic Environmental Assessment (SEA) Community Forums in May in Halifax, Yarmouth, Digby, Wolfville, Parrsboro and Truro. The Forums will seek feedback on the recommendations of the Fundy Tidal Energy Strategic Environmental Assessment. The forum schedules and venues are posted at: <http://www.offshoreenergyresearch.ca/Events/tabid/96/Default.aspx>. Participants should pre-register online.

e) NS Energy Research and Development Forum 2008

OEER is organizing a forum with the theme "*Securing Our Energy Future: Research-Resources-Results*" at St. Francis Xavier University in Antigonish, NS on May 21-22, 2008. Posters can be submitted by students, faculty and researchers in the following categories: Geoscience and Engineering; Renewable Energy; Environment; Alternative Energy. For more details, including registration information visit:

<http://www.offshoreenergyresearch.ca/Events/NovaScotiaRDForum2008/tabid/221/Default.aspx>

f) NSEN Report on Tidal Energy Workshop

The Nova Scotia Environmental Network (NSEN) organized an "*Environmental Input on Fundy Tidal Energy Strategic Environmental Assessment Workshop*" at the NS Public Archives on March 19, 2008. The final workshop report is available at: www.bofep.org/nsen_tidalreport.pdf.

6. Bay of Fundy Tourism Partnership launches new blog

Terri McCulloch, Manager of the Bay of Fundy Tourism Partnership, has launched an interesting new blog site devoted to interesting aspects of the Bay of Fundy. She says "*So here I was on the Bay of Fundy, minding my own business, when I realized that normal people don't get to see 100 billion tonnes of seawater flowing back and forth in front of their kitchen windows every day. As someone who has grown up living and working here, I've taken it upon myself to blog my experiences with the highest tides on the planet.*" The site itself offers short, interesting, informal write ups on an eclectic array of topics related to the Bay and its coastal communities. Recent blogs touched upon shad, a Fundy Children's book, tidal power consultations, a video of a Fundy whirlpool, a mud drum workshop and a host of other topics. There is an index of all 24 subject categories (examples - beachscapes, geology, environment, lighthouses, Bay of Fundy maps etc.) that make it easy to browse particular topics. The site, which will be of considerable interest to tourists and the general public, can be found at:

<http://bayoffundy.blogspot.com/search/label/Fundy%20dogs>

7. AGS Colloquium- Special Session on Fundy

The Atlantic Geoscience Society Colloquium was held February 1-2, 2008 in Dartmouth NS. A special session on "sediment dynamics, oceanography and ecology of the greater Bay of Fundy" that may be of particular interest to BoFEP members included the following papers:

- A Research Agenda for Fundy: results from the 2006 'Fundy Session' at Atlantic Geoscience Society (*Elisabeth C. Kusters, Karl Butler, Gordon Fader, Tim Milligan, Kee Muschenheim, Russell Parrott, and Danika Van Proosdij*).
- Preliminary results from multibeam bathymetry and LiDAR surveys in 2007 of the Bay of Fundy, Canada (*D. Russell Parrott, Brian J. Todd, John E. Hughes Clarke, Jonathan Griffin, and Timothy Webster*).
- Evidence from LiDAR and Multibeam data of Post-Glacial relative sea level change in the Bay of Fundy region, Nova Scotia. (*Tim Webster and Peter Macdermott*).
- The relationship of actively migrating sand bodies to the tidal streams and eddies in the Bay of Fundy - new insights through combined mapping and modeling. (*John E. Hughes Clarke, Susan Haigh, Russell Parrott, and Garret Duffy*)
- The Quaternary erosional and depositional history of the Black Point area, Saint John, New Brunswick based on seismic sub-bottom profiles (*James Whitehead, Karl E. Butler, and D. Russell Parrott*)
- A conceptual model of horse mussel reef formation, Bay of Fundy, Canada (*Gordon B.J. Fader, D. J. Wildish, D. Russell Parrott, and Laura Hussey*)
- Winter ice and sediment budgets in upper Fundy (*Elisabeth C. Kusters*)
- The Severn Estuary (UK): Quaternary investigations and human exploitation (*Simon K. Haslett*)
- A Tale of Two Estuaries: Comparison of Anthropogenic Impacts on the Contemporary Evolution of the Avon and Petitcodiac River Systems, Bay of Fundy (*Danika Van Proosdij, Tim Milligan, Gary Bugden, and Karl Butler*)

Abstracts of all papers presented at the Colloquium can be found at:

http://ags.earthsciences.dal.ca/Colloquium_Abstracts/AGS08AbstractVolume.pdf

8. GOMCME-ESIP Indicator Reporting Tool

The Ecosystem Indicator Partnership (ESIP) was formed by the Gulf of Maine Council to develop indicators of change for the Gulf of Maine. ESIP activities are focused initially on six indicator areas: coastal development,

contaminants and pathogens, eutrophication, aquatic habitat, fisheries and aquaculture, and climate change. The first version of the Indicator Reporting Tool is now available at <http://www.gomoos.org/esip/>.

9. GOMCE 2008 Visionary Award Nomination Deadline

The deadline for nominations to the Gulf of Maine Council Visionary Awards is April 25th. These awards recognize innovation, creativity, and commitment to protecting the marine environment. The Awards are given to individuals, businesses, or organizations within each province and state bordering the Gulf. For further details about the awards and nomination forms please visit:

<http://www.gulfofmaine.org/council/opportunities/#awards>.

10. ACCESS Conference May 14-16, 2008

The Atlantic Canada Coastal and Estuarine Science Society will hold its annual conference on May 14-16, 2008 at the Bedford Institute of Oceanography in Dartmouth, NS. Dartmouth, Nova Scotia. This year's theme is "Where *the People Meet the Ocean: Nearshore Studies*". There will be presentations pertaining to:

- General Nearshore Studies
- Sediment Dynamics
- Habitat Mapping
- Estuarine Eutrophication
- Contaminants

On May 16th there will also be a Special Session on Aquatic Invasive Species. In addition, a concurrent poster session on all of the topics runs all three days. For more workshop details visit: - <http://www.cerf-access.ca>.

11. New CCNB Report on Salmon Aquaculture

The Conservation Council of New Brunswick has issued a new report entitled: "*Salmon Aquaculture in the Bay of Fundy: An Unsustainable Industry*". Written by Janice Harvey and Inka Milewski, the report demonstrates that the salmon aquaculture industry in the Bay of Fundy is not sustainable and needs to be dramatically restructured. The problem with present salmon aquaculture is a combination of scale and technology. The open net-pen systems allow all wastes and contaminants from the farms to flow unimpeded into the coastal waters where the farms are located. As the volume of production has grown over the past 20 years, the impacts on environment, commercial fisheries and communities has become unacceptable. Clearly, this is not a sustainable industry according to the report. In order for finfish aquaculture to be sustainable, it must not discharge untreated waste and chemicals into waterbodies; it must not depend on wild fisheries as a source of feed; it must not release farmed salmon into the wild; it must not displace existing activities; and it must not get special treatment from regulators. The Conservation Council is calling for a move to land-based closed containment systems, and to species of fish which do not require wild fish as feed. A future report will spell out what such systems might look like. A press release about the report is available at:

<http://www.conservationcouncil.ca/News/news02070801.aspx> and the full report can be downloaded at: http://www.conservationcouncil.ca/files/PDF/Aquaculture/Salmon_Aquaculture.pdf.

C. Fundy/GOM and other News:

12. New Fundy Website on Built structures on salt marshes

Kerr Canning of the School of Architecture, Dalhousie University has posted some of his academic presentations to architectural students in a design studio course on a Website entitled "*Dykes, Shipyards, and Coastal Communities: Built structures on and adjacent to the salt marshes and barrier beaches of the Upper Bay of Fundy*". The students focused on several aspects of a proposed marine interpretive centre for the community of Spencer's Island located on the Parrsboro Shore of Nova Scotia. Since the centre is historical in nature, the students needed introductory material on a diverse spectrum of topics. As well, future studio courses may be offered and the students may need ongoing access to information. To meet the requirements of any possible future courses, this web site is to be continually updated. It serves as a useful portal to all sorts of Fundy related material and images. Visit the site at: <http://www.versicolor.ca:80/kerr/Code/>

13. New Book photographically explores Fundy life.

Nova Scotia naturalist and photographer Scott Leslie has a new book entitled "*Bay of Fundy: A Natural Portrait*". The 12,000-square-kilometer Bay of Fundy is just a fraction of the vast Atlantic Ocean, yet its diversity and

biological productivity make it one of the most prodigious cold-water Atlantic ecosystems in the world. Scott Leslie's stunning photographic homage explores every aspect of this dynamic destination from the pristine coastline to the rich fossil record to its vibrant wildlife pictured in flight, underwater, in marshes, tide pools, and on land. Featuring more than 80 full-color photographs, the book is a visual feast for photographers, ecologists, and nature lovers. 176 pages; Published by Key Porter Books; ISBN-10: 1552638561. You can find information about the book and also enjoy additional exquisite wildlife photographs by visiting Scott's Website at: <http://www.scottleslie.com/index.html>.

14. CEC offers new online Environmental Atlas

A new online information tool from the Commission for Environmental Cooperation (CEC) provides a suite of materials that allows users to visualize significant North American environmental issues at a continental scale. "The *North American Environmental Atlas*", which brings together maps, data, interactive map layers, and links to other related materials, is available at: <http://www.cec.org/naatlas>. Base layers include political boundaries, populated places, roads and railroads, coastlines, lakes and rivers, and other geographic features. The CEC has also added thematic map layers for priority conservation areas, renewable energy capacity, and other environmental topics. The atlas also features the terrestrial ecological regions of North America. New map layers, including protected areas, marine ecoregions, and land cover, are currently under development and will be added in the coming months.

15. Marine Affairs Policy Forum focuses on Georges Bank

A new publication "*The Marine Affairs Policy Forum*" has been initiated by the Marine Affairs Program of Dalhousie University in Halifax, Nova Scotia to provide perspectives on current and emerging issues of concern to the coastal and ocean policy community in the Atlantic Region. The focus of the first issue is an article entitled: "*Understanding the 1999 Georges Bank Moratorium Decision*". It can be downloaded at: http://marineaffairsprogram.dal.ca/Files/MAP_Forum_Feb_2008.pdf.

16. Booklet on Salt Marshes in the Gulf of Maine

A booklet entitled "*Salt Marshes in the Gulf of Maine: Human Impacts, Habitat Restoration, and Long-term Change Analysis*" provides an overview of the ecological functions of healthy salt marshes, human impacts on salt marshes, methods for restoring salt marsh habitats, and the need for a regional salt marsh monitoring program. To obtain a copy in digital or hard-copy formats, visit <http://www.gulfofmaine.org/saltmarsh>.

17. Magazine Explores Coastal Development

The March issue of the magazine entitled "*The Nova Scotia Policy Review*" focuses on coastal development and fisheries management. Subscription information is available at <http://www.policyreview.ca>.

18. Aquaculture Society Meeting

The 25th Annual Meeting of the Aquaculture Association of Canada "*Growing Quality Seafood through Innovation*" will be held 11-14 May 2008 in Saint John, New Brunswick. For details about the conference program and registration visit: <http://www.aquacultureassociation.ca/ac08/index.html>.

19. NS Water Management Strategy deadline for comments

June 1st is the deadline to comment on the discussion paper entitled "*Towards a Water Resources Management Strategy for Nova Scotia*". A copy of the document is available at: <http://www.gov.ns.ca/news/details.asp?id=20080130001>.

20. Study on Fish Plant Effluents

To enable a better understanding of fish processing and its potential impacts on the environment, Environment Canada has conducted an effluent characterization study of fish processing plants in Newfoundland, Nova Scotia, New Brunswick and Prince Edward Island, British Columbia and Québec from 2003 to 2007. For further information on this project, or to request a copy of the report entitled "*Characterization and Toxicity Testing of Fish Processing Plant Effluent in Canada*", email Benoit.Lalonde@ec.gc.ca.

21. Overview of Invasive Species Initiatives

"Government Of Canada Invests In The Prevention, Control And Eradication Of Aquatic Invasive Species" provides a summary of efforts by the Government of Canada, in partnership with many partners and stakeholders, to prevent,

control or eradicate potential new aquatic invaders which pose the greatest threat to Canada's aquatic ecosystems and economy. Check it out at:

http://www.dfo-mpo.gc.ca/media/backgrou/2008/20080409_e.htm.

D. ADMINISTRIVIA

Fundy Tidings is circulated Quarterly to all registered members of BoFEP and other individuals who have expressed an interest in BoFEP and its activities. If you know of others who might like to receive Fundy Tidings or if you would like to be removed from the Fundy Tidings mailing list, simply e-mail a request to communications@bofep.org.

For more news items about BoFEP, its partners and the Bay of Fundy periodically check the BoFEP What's New page at: <http://www.bofep.org/whatnew.htm>. You can also find the back issues of Fundy Tidings archived at <http://www.bofep.org/tidings.htm>

If you would like to post an item in Fundy Tidings pertaining to BoFEP, its partners or the Bay of Fundy send it along to communications@bofep.org.

The submission deadlines are: January 1st, April 1st, July 1st, October 1st.
