

Risk Assessment Program Completes Year Three

Some of the Bay of Fundy's most exciting research continued this year in a large, collaborative effort to better understand how fish move through the Minas Passage and calculate the risk that they may encounter a tidal energy device.

As marine renewable energy activity continues to grow - with exciting developments from Sustainable Marine, BigMoon Power, DP Energy, and Nova Innovation - there are still important research questions to answer, in particular, around marine life.

Many perceive the greatest potential risk of tidal turbine operations as collisions between marine animals and turbine blades. These types of interactions are difficult to ob-

serve directly both because of the fast flowing, turbid waters of tidal energy sites and because of the limitations of monitoring instruments that have been designed for use in more benign marine environments.

International research has been generally encouraging - for example, Scottish research in 2021 found that porpoises avoid turbines, especially at higher water flow rates - but more work remains to understand the unique conditions of the Bay of Fundy and, in particular, the perceived risk to fish.

RAP - the Risk Assessment Program for tidal energy - aims to do just that. Now completing its third year, RAP is a collaborative effort between

Acadia University, FORCE, Marine Renewables Canada, Mi'kmaq Conservation Group, Confederacy of Mainland Mi'kmaq, Ocean Tracking Network at Dalhousie University, and local fishers to observe the distribution and movement of nine different species of fish in the Bay of Fundy ecosystem.

Working together, the team is designing RAP as a tool to estimate the probability that fish may encounter a tidal energy device. They are creating this tool by combining two things: a real-time flow atlas that tracks the movement of the tidal current; and a fish atlas that tracks acoustically tagged fish as they swim past a network of subsea acoustic receivers in Minas Passage.

RAP ocean data is collected from various sources, including high resolution X-band marine radar installed at the FORCE site and at Cape Sharp. The radar data is validated by subsea current data to create a "flow atlas." The radar can measure unique flow features in high resolution that affect the distribution of fish.

This environmental data is combined with fish data to create a "fish atlas." Acoustic tags are surgically implanted in fish that are then released back to the wild. These fish transmit a signal captured by a network of 12 acoustic receivers which allows the research team to learn more about their movement in the Minas Passage.

The fish atlas is an unprecedented collaborative effort to collect, combine and analyze multiple data sets of hydroacoustic fish-tagging studies - both existing and new. The studies cover nine (9) species: alewife, American shad, American eel, Atlantic salmon, Atlantic sturgeon, Atlantic tomcod, spiny dogfish, striped bass, and white shark. The species were chosen based on historic tagging data availability, conservation concern and value to commercial, recreation, and Mi'kmaq fisheries.

As important as the data is the process: RAP is a collaborative effort, that welcomes knowledge, expertise and per-

spectives from academia, Indigenous, industry, government and community groups. It provides regulators, rights holders, technology developers and other stakeholders a practical approach to estimating risk.

The next step in the RAP program is to calculate the likelihood that striped bass will encounter a turbine, and expanding this risk measurement to the other eight species in the fish atlas.

Platform Streams Ocean Data in Real Time

Earlier this year, as part of ongoing efforts to improve data collection in the Bay of Fundy, the FORCE team deployed a large, cabled platform in Minas Passage and is sharing that data online.

Shaun Allain, FORCE's environmental program manager says: "The great thing about the platform is that it's cabled - powered right here from shore at the FORCE visitor centre. We can get data in real time."

Sensors on board the VITALITY platform can detect harbour porpoise and measure current speed and direction.

"We deployed the platform right here in Minas Passage - the highest tides in the world - so it's a very challenging environment to work in," says Allain. "Usually when we deploy platforms like this, we have to deal with battery life and storage capacity of the instruments. Now that we're cabled, it really reduces the amount of field work and time to access that data."

The VITALITY platform has the capacity to reduce time spent on the water recovering instruments and helps ensure that data is being collected. When an instrument on the platform stops working, the team knows right away - and can then recover the platform and fix the problem.

The Hall to Hold On-Line Auction

By Patricia Burke

The Hall in Parrsboro is sponsoring a Valentine On-Line auction from February 3 till February 10 with pick-up of item Sunday, February 12. This is a facebook fundraiser so if you are not a facebook user just sign up for that one event or a friend that uses facebook to bid for you. We are accepting donations of gently used items (no clothing at this time), baking, gift cards or gift certificates. This is a fun way to support The Hall in Parrsboro. Watch for the details as to the time this will start.

For more information contact:

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brendawheaton@gmail.com;
Lori Lynch,
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or
David Forbes,
dave4bz@gmail.com

Movies are continuing at The Hall and on Wed. Feb. 1 we will show Amsterdam at 7:30 pm and on Wed. Feb. 15 we will show Ride Like an Eagle. Donations at the door appreciated.

Open Mic will be on Feb. 3 and 17th. Always welcoming new musicians. Come and enjoy and evening of great entertainment. Donations appreciated at the door and will go to insulating the building.

It is membership time again: Have you been a past member and not renewed? Now is the time to do this. Single is \$15 or a family for \$25. By being a member you get updates weekly of what is going on at The Hall. The best benefit of all is when you are a member you get advanced notice of when there will be a

concert so you can purchase tickets before the general public. You can join at www.thehall.ca or forms will be available at all events at the hall. Lets get a huge membership list for 2023.

Annual General Meeting: The Hall will hold their Annual General Meeting on Wednesday February 8, 2023 at 3 pm. Everyone is invited to come and hear the committee reports from 2022. You must be a paid up member to vote at the meeting. Memberships will be able to be obtained prior to the meeting.

Refundables: The Parrsboro Band Association has an account set up at Durants for anyone who would like to donate their cans or bottles to us. You can drop them off and tell them it is for The Hall or drop them off at The Hall.

Co op 50/50 in Parrsboro: During the month of December The Hall was the charity for the month of December. Thank you to everyone who supported this fundraiser. We were presented with a cheque for \$800.00. Thank you to Rob and the staff for promoting this.

The King Street Strummers rehearse every Monday evening at The Hall at 7 pm. Everyone welcome. If you have not played a guitar before come and join in and you will get some free lessons from the best and lots of fun happens at that rehearsal. Contact Rob Bentley for more info.

On Thursday evening each week at 7 pm Parrsboro Citizens' Choir rehearses and new people that are interested are most welcome. Contact Dr. Paul Aitken at the Maple inn for more info or just drop by.

UPDATE: RCMP Lay Charges from July 2022

On December 23, 2022 Colchester County District RCMP announced it has laid charges in relation to a serious collision investigation from July 2022 in Lower Economy. On July 24, 2022, at approximately 3:45 p.m., Colchester County District RCMP, Cumberland County District RCMP, fire services, and EHS responded to a report of a collision involving two vehicles on Hwy. 2 in Lower Economy. The two vehicles, a Hyundai Kona and a Buick Lesabre, were travelling in opposite directions when they collided.

A passenger in the Hyundai Kona, a 55-year-old man from Montreal, suffered life-threatening injuries and was airlifted to hospital by LifeFlight. The driver and another passenger, a 65-year-old man and a 59-year-old man from Bible Hill, suffered seri-

ous injuries and were transported to hospital by EHS. The third passenger, a 55-year-old woman from Montreal, suffered minor injuries.

Two of the occupants in the Buick Lesabre, a 37-year-old woman and a child, suffered serious injuries, and another child suffered minor injuries. All three were transported to hospital by EHS. All three are from Lower Economy.

A collision reconstruction-



ist attended the scene to gather evidence, and utilizing judicial authorizations, RCMP officers collected blood and medical records relating to the driver of the Lesabre. The blood of the driver was sent away for analysis to determine the concentration of alcohol or drugs, if any, in her blood.

In December 2022, Colchester County District RCMP received the completed blood analysis and learned that the driver's blood alcohol concentration at the time of the collision exceeded the legal limit.

On December 21, Lindsay Parker, 37, of Lower Economy, was safely arrested. Parker was charged with: Criminal Negligence Causing Bodily Harm (2 counts); Impaired Operation of a Conveyance Causing Bodily Harm (6 counts); Impaired Operation

equal to, or over, 80mg% Causing Bodily Harm (6 counts) and Dangerous Operation of a Conveyance Causing Bodily Harm (6 counts)

Parker was held in custody overnight and appeared in Truro Provincial Court on December 22, where she was released on conditions by the court. Parker will return to Truro Provincial Court on January 30, 2023, at 9:30 a.m.

"Our investigators collected the evidence and facts from the scene, which resulted in impaired driving charges," says S/Sgt. Curtis MacKinnon, Colchester County District RCMP Commander. "We ask Nova Scotians to drive sober. For your own sake, for the sake of your family and friends, and for the sake of fellow travellers who share our roads, always have a plan in place to get home safe and sound. We want everyone to arrive alive."

Modular Housing Options for Healthcare Workers

There will soon be more housing options for healthcare workers in communities where they are needed the most. The Province is investing \$8 million in modular housing projects to provide affordable transitional housing for healthcare workers in communities where housing options are limited.

The Province will partner with the Housing Trust of Nova Scotia, which will work with health partners, municipalities and other key stakeholders to place temporary mobile modular homes in areas where there is an acute demand.

The Housing Trust of Nova Scotia will work closely with government representatives and municipalities to identify locations for the modular homes. The trust will use its current processes to establish a modular partner so the units are delivered as quickly as possible.

Recruiting more health professionals is one of six solu-

tions in Action for Health, the government's strategic plan to improve healthcare in Nova Scotia.

The government recently announced 65 continuing care assistants have received con-

ditional job offers to come to Nova Scotia from Kenya, the result of a recent recruiting trip; the government announced in 2021 that all nurses graduating from Nova Scotia's universities and Nova

Scotia Community College for the next five years will be offered a job and a total of 107 doctors (family doctors and specialists) started working in Nova Scotia between April 1 and November 30, 2022

Community Events at the Hall

Monday is King St. Strummers at 7 pm. Everyone welcome. Contact Rob Bentley for more details. No citizen band rehearsal on Monday evening anymore.

Tuesday is Elastic Big Band rehearsal at 7 pm. Contact Michael Fuller for more details. There is no Men's sectional on Wednesday morning anymore.

Thursday at 7 pm is Parrsboro Citizens Choir, everyone welcome. Contact Dr. Paul Aitken at Maple Inn for more information.

Open Mic at The Hall in Parrsboro is held every second Friday at 7 pm.



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