

Tidal Energy Generation in the Bay of Fundy

I have read relevant sections of the Jacques Whitford Background Report for the Fundy Tidal Energy Strategic Environmental Assessment and I offer some thoughts and suggestions on the proposed energy generation projects. If you find any of my comments redundant or have already considered them in depth, please disregard them with my apologies.

As I read the JW background report, my primary concerns were for the topography of the bottom of the Bay of Fundy. I noticed that your team is aware of the complicated formations present throughout the Bay and their effect on currents and erosion patterns. I would suggest before plans are made to alter this specific aspect of the environment that comprehensive models of the bottom of the Bay be constructed and studied. It is vitally important that the construction and operation of power generation devices in this environment have only the most minimal effects on currents and erosion in the Bay and other coastal areas.

The Bay of Fundy poses unique problems in the selection of a specific power generation device. One thing to consider is the heavy sedimentation that exists throughout the Bay, but is highly concentrated in the upper reaches. Grit and other particles suspended in the water will have effects on the service life and maintenance period of the devices, and the project should be designed with this detail in mind. The concentration of sediment also varies with the seasons, and it should be ensured that this phenomenon is well understood when designing the maintenance program for these devices.

I am by no means an expert on the biology and fisheries of the Bay of Fundy, but I think it is important to take some lessons from the collapse of the inshore cod fishery in Newfoundland. In that case, coastal pollution and over fishing of capelin and other baitfish decimated inshore cod populations despite the predictions of DFO scientists. This project will only receive wide support from the communities that currently base their livelihoods on the halibut, salmon, lobster, and scallop fisheries if it can be shown that effects to the whole food chain involved in these industries are minimal. Protection of

vulnerable coastal habitats should be a top priority in the construction and installation of power generation devices.

I noticed that some of the proposed areas for development of power generation are in the upper reaches of the Bay of Fundy, specifically the Cobequid Bay and Cumberland Basin. I'm sure you're aware of the presence of salt marshes in this area, and of the importance of protecting them from development and disturbance. While these marshes provide a habitat for many fish and migratory birds, their most relevant importance is in feeding the Outer Bay fisheries that so many people depend on. Great care must be taken in these areas to ensure that no part of the project interferes with the normal operation of these ecosystems.

I fully support the development of a project proposal for tidal energy generation in the Bay of Fundy. I believe that it is an area with enormous potential for local energy extraction and economic benefits. I would appreciate for the project development process to be transparent and important decisions to be reviewable by the public. I would suggest holding information sessions in all communities that border the Bay of Fundy, to ensure public support and hear suggestions for minimizing the environmental impact of this project. Thank you for your time spent reading my suggestions, and I hope they will be helpful in your research.