

“Strategic Environmental Assessment of In-Stream Tidal Energy Generation Development in New Brunswick’s Bay of Fundy Coastal Waters”

Summary of Recommendations

Recommendation 1: The Province of New Brunswick should establish and make public its priorities for tidal energy development in the Bay of Fundy in terms of how it will fit into the overall NB energy picture, the flow of benefits and how such development will affect communities. In particular, it should acknowledge that local benefits have priority in the Province and over exports, and should require that all proponents identify the type and extent of such benefits in their project proposals.

Recommendation 2: The Province of New Brunswick should immediately involve fishermen, and other marine industry representatives, in the process of site selection and approval at all stages, even at the beginning research level. On any new site application all relevant provincial departments should work with local fishermen and others to determine whether it should go ahead, and if so, the objectives and conditions under which it should do so. Such conditions should include as a standard element an oversight mechanism with fishermen members. This recommendation to be superseded by Recommendation 11 as sites progress beyond the research level.

Recommendation 3: On any site which is approved to go beyond the research level, the Province of New Brunswick should set up a process to consult/negotiate with local coastal communities and the proponent regarding the potential requirements of specific tidal development projects, and the possible benefits that might accrue, with specific recognition of the human and financial resource implications for all three parties; agreements to be ratified by the NB Bay of Fundy Marine Energy Development Committee (see Recommendation 11).

Recommendation 4: The Province of New Brunswick should specify within its tidal energy development policy that no areas which consist of narrow channels through which marine mammals, fish and/or shellfish migrate seasonally will be considered for tidal energy generation. Such areas should be defined in the near future, with the help of fishermen and the Southwest New Brunswick Marine Resources Initiative, and excluded from further consideration. Applications which come in prior to this determination should have to establish that such migrations do not occur in their areas of interest.

Recommendation 5: The Province of New Brunswick should instigate a research project to determine the possible impacts of vibrations, noise or electromagnetic interference on fish, shellfish and marine mammals and their movements from tidal energy devices and their associated transmission lines.

Recommendation 6: The Province of New Brunswick should compile all existing information on the possible location of potential development sites, the timeframe associated with any development activities, the types of equipment that might be employed and just how such development might unfold through all of its stages, and

prepare presentations oriented toward each stakeholder group as a basis for the finalization of this SEA process.

Recommendation 7: The Province of New Brunswick should hold immediate consultations with stakeholders of all marine industry sectors (in particular with commercial fisheries) on an individual group basis throughout the Bay of Fundy to clarify government tidal energy development objectives and the SEA process, and solicit their opinions and involvement both now and in further development activities.

Recommendation 8: The Province of New Brunswick should immediately clarify with both Bay of Fundy stakeholders and coastal communities the current process underway in terms of tidal energy permits for exploration and research, so that a transparency of process is supported and seen to be supported. In addition, some form of regular timely communications mechanism (possibly an electronic newsletter) should be developed to keep these stakeholders and communities informed of all further tidal energy development activities in the Bay, which would allow them to respond accordingly.

Recommendation 9: The Province of New Brunswick should, in the very near future, hold consultations with coastal communities and aboriginals on a group by group basis throughout the Bay of Fundy to clarify government tidal energy development objectives and the SEA process, and solicit their opinions and involvement both now and in further development activities.

Recommendation 10: This NB SEA process set up by the Province of New Brunswick is intended to provide the basis for tidal development policy. Such policy should focus upon incremental development, done in harmony with other marine stakeholders, and with due consideration of the precautionary principle, utilizing a small scale/small unit perspective to meet community need rather than export opportunity. Its overall objective should be to complement the mix of energy production in the Province, and to promote a reduction in the total carbon footprint.

Recommendation 11: The Province of New Brunswick should set up a permanent NB Bay of Fundy Marine Energy Development Committee, with representatives of all relevant provincial departments, all marine industry sectors (including energy) and major coastal communities, and establish a travel expense fund for those non-government members who required it for participation in committee meetings. The responsibilities of the committee should be two-fold: (1) to plan for the long-term development of marine energy, and (2) to consider all tidal energy development proposals for the Bay of Fundy and to which proponents would have to justify their evaluations. The committee would make recommendations on planning and on each proposal to the Province, which would take them under advisement in decision-making. Any request to change the status of a project, from research base, to pilot, to demonstration, to commercial, should be required to go through the committee again. This recommendation should be in place prior to any tidal energy development project going beyond the research level.

Recommendation 12: The Province of New Brunswick should work to improve the EIA process to enhance public confidence so that, when applied to all tidal development projects in the Bay, they are seen to be more open and transparent, and decision-making is done based on known principles and adequate information.

Recommendation 13: The Province of New Brunswick should make a clear assignment of responsibility and accountability for tidal energy development within its structure (who does what, when, where and how), including that which might be the responsibility of other agencies, and this information should be made available to all the public/stakeholders; and appropriate regulations should be developed, approved, implemented and enforced, with the resources identified within departmental budgets to do so.

Recommendation 14: In tidal energy development in the Bay of Fundy at any scale, whether pilot, demonstration or commercial, the Province of New Brunswick should require that every development proposal demonstrate its feasibility on a full-cost accounting basis, which would include not only its commercial investment potential, but also the financial impact of such development on the ecosystem, on other marine stakeholders, on coastal communities and on the province-wide energy situation. This assessment should include any anticipated offset by potential local benefits from such development.

Recommendation 15: The Province of New Brunswick should require that tidal energy developers indicate, within their project proposals, specifically how they will assess the effectiveness of the technology they intend to employ, and how they will assess the possible impacts of that technology on the Bay of Fundy ecosystem (both living and non-living components), and be required to submit that data and information on a timely basis to relevant provincial departments and the NB Bay of Fundy Marine Energy Development Committee.

Recommendation 16: The Province of New Brunswick should anticipate that any tidal energy development in the Bay of Fundy will entail some level of impact, directly or indirectly, on the ecosystem, on other marine stakeholders and on coastal communities. On a project by project basis, it should require that proponents establish a compensation fund to remediate such impacts, and that an impartial group be set up to assess ecosystem impacts and associated remediation projects, and to assess short and long-term compensation to affected stakeholders and communities, with a timely delivery process and an independent appeal process.

Recommendation 17: The Province of New Brunswick should require that all tidal energy development proposals for the Bay of Fundy include a shut down and removal process based on specific physical, biological and financial criteria, and that each such proposal also include a monitoring and reporting process to address these criteria, such information to be delivered in a timely manner to provincial personnel who have the assigned responsibility to manage this process.

Recommendation 18: As tidal energy develops, the Province of New Brunswick and tidal energy industry proponents should promote and become a part of or more

involved in the integrated management process within the Bay of Fundy, and work toward the betterment of the Bay as a whole, rather than the more-limited interests of the tidal energy sector, starting with participation in existing groups working toward such goals in their operational regions.

Recommendation 19: The Province of New Brunswick should work with the Province of Nova Scotia, the State of Maine and appropriate federal agencies to initiate a cumulative impact assessment process for tidal energy development in the Bay of Fundy, upon the results of which to base its tidal energy development capacity guidelines and future planning initiatives.