

## **Colchester County Tidal Barriers Audit Results**

They change salt marshes to mosquito-producing freshwater marshes, they block the passage of salmon on their way upstream to spawn, and cause drastic changes in our coastal landscape. Next time you're driving along the coast, take another look at tidal barriers, or any structure which blocks the natural flow of tidal waters. All river and stream crossings are not made equal! Some allow full tidal passage (like many bridges) while others completely block water and fish from moving upstream (such as causeways).

The Ecology Action Centre (EAC) in Halifax has been conducting tidal barrier audits along Nova Scotia's Bay of Fundy coast for the last 7 years, assessing the impacts of structures on the coastal environment. The results of these audits are now published in a series of five reports by the Ecology Action Centre.

Tidal barriers prevent regular saltwater flooding of salt marshes, which is necessary for the maintenance of a healthy marsh ecosystem. Many shorebirds, wildlife and fish depend on these marshes for feeding, nesting and habitat. "Not only do tidal barriers reduce the amount of salt marsh in an area, they also limit the upstream access of marine animals. This is a particularly big issue for migratory fish such as the endangered inner Bay of Fundy Atlantic Salmon which migrate from the ocean to freshwater streams to spawn." Reports Cory Aldous, Tidal Barriers Outreach Coordinator at the EAC. "It is important that communities are aware of the results of this project so that they can be thinking about salt marsh restoration in their own area" says Aldous.

The Ecology Action Centre identified sites of particular restoration interest in each of 5 assessment areas (Cumberland County, Colchester County, Hants County- highway 215, Southern Bight of the Minas Basin and the Lower Bay of Fundy). Sites were chosen based on the ease with which natural tidal flow could be restored, and the amount of salt marsh and fish habitat that would benefit. Other considerations included whether maintenance work was required anyway, and the possible effects of restoration on surrounding land uses (such as agriculture, housing or roads). Restoration projects can include the replacement of a small culvert with one large enough to allow natural tidal flow, removing dykes, and installing two-way gates on aboiteaux.

52 sites were assessed in Colchester County in 2002 from the Colchester/Hants border to the Colchester/Cumberland border near Five Islands. Of the 52 sites, 13 were found to partially restrict tidal flow, and 11 allowed no passage of water at all. Nine barriers were chosen as potential restoration sites: 2 bridges, 3 aboiteaux, and 4 culverts. The locations of the nine sites are:

1. Cobequid Trail
2. Black Rock
3. Princeport
4. MacKay Siding Road
5. Chiganoise
6. Debert River
7. Great Village River (by the cemetery)
8. Carrs Brook
9. Carr Brook road

The process for tidal barrier removal/alteration is simple, but requires dedication. Local communities can suggest to the Department of Transportation and Public Works that they consider re-design when doing routine repairs on structures noted as tidal barriers. Local people can also ensure that municipal developers and councillors are conscious of the impacts of developments on local streams and rivers.

For more information on this project, or to find out more about tidal barriers in your area, contact the Ecology Action Centre at (902) 442-0199 or by email at [tidalbarriers@ecologyaction.ca](mailto:tidalbarriers@ecologyaction.ca).