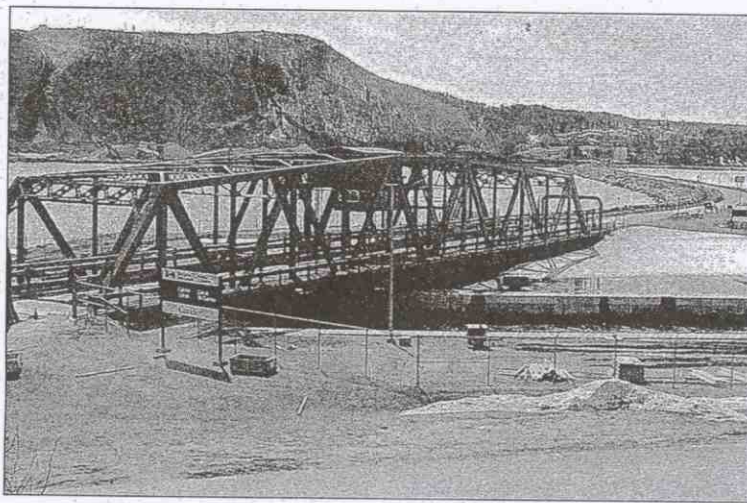


COMMENTARY

Down with the causeway

Structure harms region's ecosystem

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The Canso Causeway, which links mainland Nova Scotia to Cape Breton, was opened in 1955. (File)

Aug. 13 will mark the 50th anniversary of the official opening of the Canso Causeway. On that day 50 years ago, the largest crowd in Nova Scotia's history, over 40,000, gathered to witness the historic event. Many to this day retell the tales of the day's festivity and gaiety. From that day to this, the causeway has been a provincial icon. Yet, this is one icon that has been entirely tarnished, and deservedly so, right from the moment of its conception.

In its day, the Canso Causeway was heralded as a marvel of engineering. It remains renowned for being the deepest causeway in the world. And, as a largely unintended result, the construction of the causeway created an all season, ice-free, deep water port that is reputed to be one of only three locations on the North American Atlantic coast that can accommodate the largest of super tankers. Additionally, its construction created a large stone quarry and enabled the industrial development, albeit with mixed results, of Port Hawkesbury and the surrounding area.

From the moment of its opening, the Canso Causeway replaced ferries and allowed travel to and from Cape Breton Island with ease. Until removed one night about 10 years ago, the mainland-side toll booths led many to observe that while you had to pay to get onto Cape Breton Island, leaving was free. Others concluded that this arrangement reflected two persistent Cape Breton realities. While the island is promoted as a pristine and spectacular tourist destination, many residents are unable to make a viable living and have to leave to find employment. So, the mainland-side tolls squeezed tourists for revenue while leaving Cape Bretoners unimpeded should they need to seek work.

Today, the causeway "solution" to joining the island with the mainland would be neither contemplated nor countenanced. The enormity of its environmental impacts alone would eliminate this as a bridging option.

And, what an impact the causeway

has wrought. It is essentially an enormous pile of rocks dumped into the Strait of Canso for the purpose of creating a water-crossing, raised road bed. It was built during the unabashedly "man conquers nature" era.

Once completed the causeway became a solid barrier spanning the strait that completely changed the oceanographic dynamics of a region stretching from at least St. Georges Bay through to the outer reaches of Chedabucto Bay.

Water no longer flowed through the strait, currents were blunted and redirected, tidal actions were altered, and all of the physical forces and properties of a once dynamic passage were reconfigured. Sludge, other debris, and silt build up on both sides, transforming the physical and biological qualities of the ocean floor for kilometers in both directions. To an extent the causeway's current twists and heaves are a consequence of these properties physically working to overcome the barrier and to return the strait to its previous "state of nature."

The region's marine environment and ecology have also been impacted. It is well known that the migration patterns of some fish species were permanently altered. For instance, white hake no longer move seasonally from the Gulf of St. Lawrence through St. Georges Bay into Chedabucto Bay; and haddock no longer migrate into St. Georges Bay and the Gulf of St. Lawrence from the Atlantic Ocean through the Strait of Canso. Atlantic Ocean herring and mackerel took years to find their way up and around Cape North and into the Gulf of St. Lawrence, appearing in abundance

only once the new route had been learned. In fact, the full extent of the causeway's impact on the region's environment and ecology is under studied and, as a result, poorly understood.

Of course, these changes and conditions have been observed by and impacted directly on the region's fisheries livelihoods and fishing communities. The community-university research alliance Social Research for Sustainable Fisheries has interviewed a range of fish harvesters working in St. Georges and Chedabucto Bays about their experiences with and understandings of the marine ecosystem.

Their experiences with the causeway's effects were made clear to us throughout the interviews. For example, as one Canso fish harvester stated, "Some of the fishermen told me before they put the causeway there. They used to get a lot of hake but since they put the causeway through there, they never got none."

Another fish harvester, this time in Petit de Gras, spoke of how people in places such as Ingonish and Sydney would be hard pressed, before the causeway, to find any large amounts of fish in their waters. But, after the causeway was in place, "Those places were overrun with herring and mackerel."

Some fishermen on the Antigonish side of St. George's Bay claim that their lobster fishery has achieved recruitment growth and stability since the causeway has blocked the passage of larvae into the strait and out into Chedabucto Bay. Yet, many fishing at the bottom of the bay and along the

Inverness shore claim changed water circulation and silting are destroying lobster bottom and catches.

The Chedabucto Bay harvesters speak in one voice about the impacts of the causeway on their lobster fishery. In their view, the causeway is a barrier that has prohibited the movement and recruitment of lobster larvae from St. Georges Bay and into Chedabucto Bay, transforming what was once a flourishing fishery into an uncertain basis for their livelihoods.

As with most anniversaries, the causeway's 50th is a time to look back on what has been, and to look forward to the possibilities for what lies ahead.

The "twinning" of Highway 104, from Truro to North Sydney, provides the people and government of Nova Scotia with an opportunity to begin the process of mediating negative ecological impacts. The challenges of moving increased volumes of truck and car traffic across the strait need not be met by only the causeway option.

Shouldn't a bridge spanning the strait be considered a more environmentally acceptable option, or perhaps even a tunnel? Certainly sections of the existing causeway might be employed in the support structures for a bridge. But, regardless of the option chosen and the engineering challenges faced, the causeway must cease to be a simple barrier and should be dismantled for the purpose of reconstituting the region's ecosystem.

Falling this, surely the existing causeway structure can be re-engineered to enable a greater flow of water and ease of migration for fish and other marine life. Any changes will likely have to be done very gradually in order to minimize the impacts of increased water flow on redistributing accumulated silts and bottom sludge, much of it known to contain high levels of toxins and other pollutants.

While no doubt contentious and costly, it is now time to begin taking the steps to right the damage done to the strait ecosystem, and in the process help to revitalize local fisheries livelihoods. Leaving the last words to a Saint Francis Harbour fish harvester. "But I am sure that I can say that when they put the Canso Causeway there, they ruined Chedabucto Bay. (They) talk about the benefits of all that steel and rock but we (the fishermen) have yet to see them. It's just a lot of talk."

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