



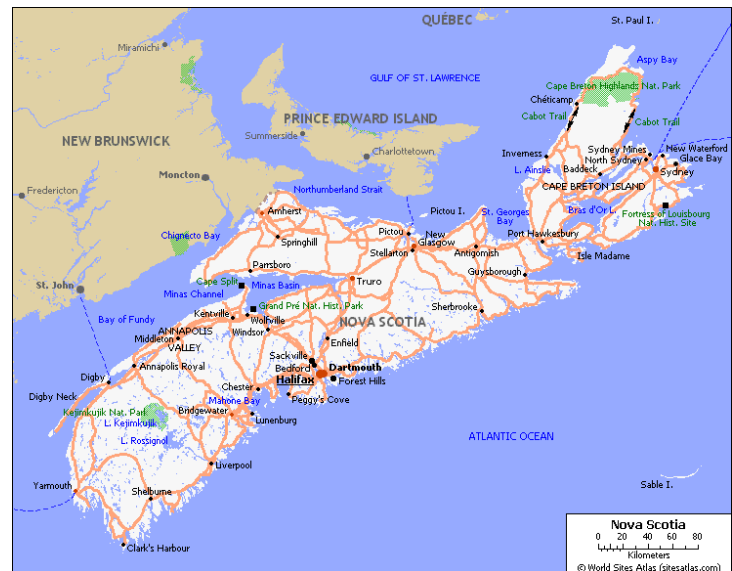
Tidal Influences on Culverts and Bridges

Steve Conway, Nova Scotia Department of Environment

Q1. Do you have future assessment or other work related to tidal crossings planned?

- Watercourse Alteration Program implemented new standards in 2014-15. Certified professionals follow the Standard.
- Tidal influences were not included in those Standards.
- The new program will be evaluated and adjustments made on a “continuous improvement” philosophy.

You're never any more than 50km (30mi) from the coast.



Q2. What is the driver of this work? Is there a funding source?

- The driver is setting of Standards for these types of installations (avoiding damage/erosion/washouts).
- Funding source is the provincial budget.

Q3. Do you have future assessment or other work related to tidal crossings planned?

Yes, NS Environment will be assessing the need to change the Standard.

Queensland Beach washout



Beach after armour rock installed



Q4. Have you run into any road blocks with tidal crossings?

- NS Environment's road blocks are related to the effort and time it takes to change Standards and Regulation.
 - Public and industry consultation

Q5. Anything else you would like to share that could be useful for others and inform the workshop conversation?

- The challenge of factoring in climate change
 - Estimate of a 3 foot increase in sea level by year 2100
 - More extreme weather events
 - World populations are geographically connected to surface water bodies