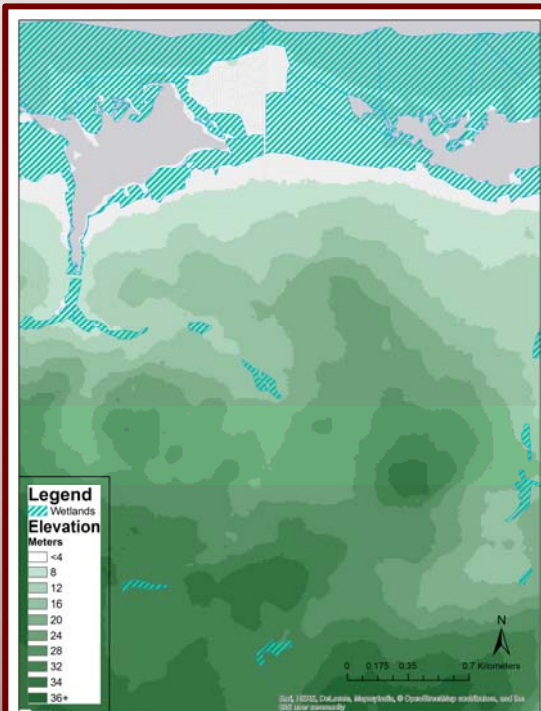




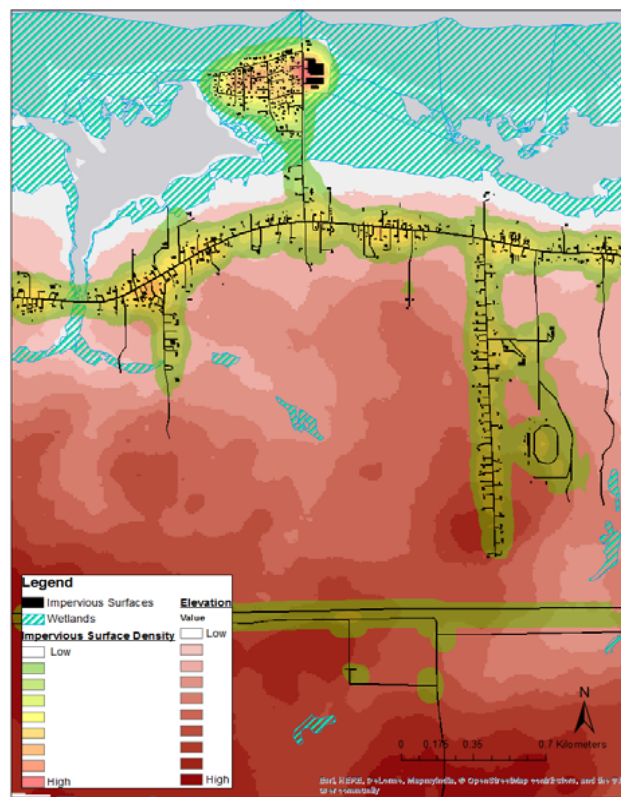
Shediac Bay Faecal Contamination

A GIS Investigation

Presented by Rohit Bhojwani, Dylan
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Supervised by Dr. David Lieske
GENS4721 Advanced GIS
April 10, 2017



*Digital Elevation Model with
Wetlands Indicated.*



*Map that visualizes impervious surfaces (black), Impervious
Surface Density (Green to Red semi-transparent gradient),
Wetlands (Blue/Green area) and Elevation (Light to dark red)*

TO LEARN MORE OR HELP WITH THIS ISSUE:

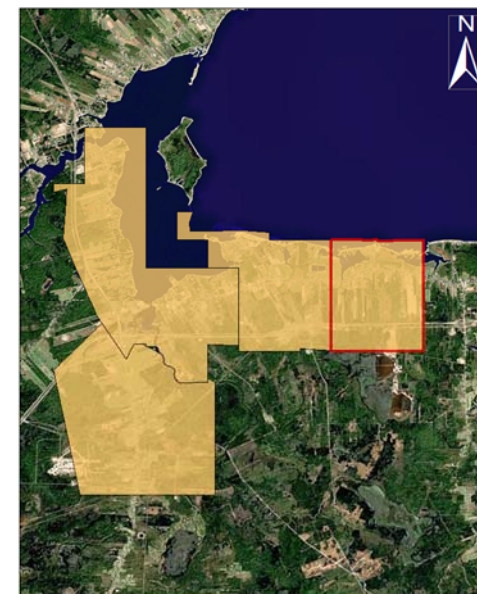
- Read *Water Sampling in Shediac Bay 2015-2016* by the Shediac Bay Watershed Association –Jim Weldon
- Sign the petition at <https://www.change.org/p/indian-point-community-committee-shediac-bridge-residents-against-the-seagull-condo-resort>
- Read *Analysis of Factors that Influence Water Quality in Shediac Bay* –Henderson Environmental Consulting Ltd



Thanks for coming, we hope you enjoy
the presentations!



*Aerial photo of Le Rivage Condominium
Complex on the Cap Bimet Peninsula.*



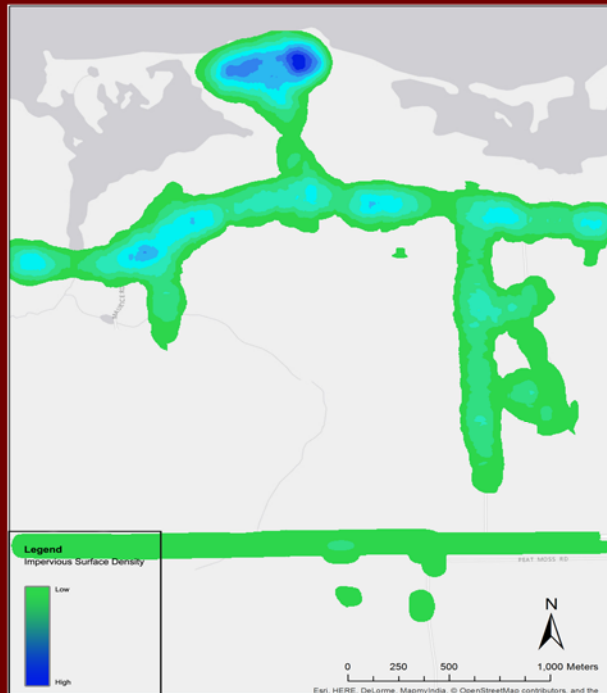


OUR STRATA (#3)

The Eastern-most Strata, our area is located in the Western part of Beaubassin East, a coastal rural community in Westmorland County. About 12km² in total, the area is comprised of mainly agricultural and forested land. Accompanying the NB Highway 133 is a series rural homes, a peninsula (Cap Bimet) with a condominium complex, and other Oceanside properties. Running through the Southern area of the Strata is NB Highway 15.

WHAT WE LOOKED AT

- Impervious Surfaces (Buildings & Roads)
- Land Type (Crop, Pasture & Forest)
- Agricultural Data
- Elevation
- Wetlands



Visualization of Impervious Surface Area Density. Note: Does not show the impervious area, only density.

Key Results

Fig 1 - Density of Urbanism in Strata 3

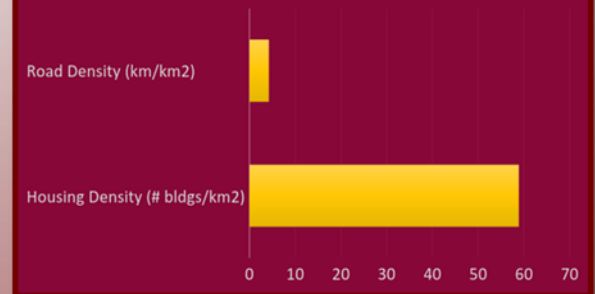
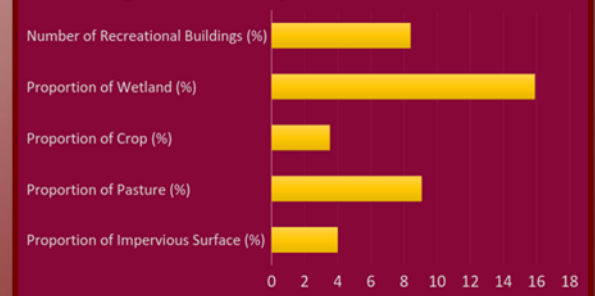


Fig 2 - Land Proportions in Strata 3



In Summation

- Impervious surfaces show area likely to facilitate and/or accelerate runoff.
- Land type shows the locations of water absorption in to soil in forest and natural land cover. The crop and pasture land show possible sources from crop irrigation and possible contamination from animal waste and increased water runoff.
- The DEM shows the change in elevation and possible pathway of runoff from South to North where the coast and much of wetlands are located.