Port Darlington Community Association (PDCA)

Response to Report # PDS-007-21

Cedar Crest Beach – Property Loss Study

The embayment shoreline features a natural long-term recession trend

- 1954-2018 recession rate for CCB reach .17 m/yr
- Reach 1, Ajax to Whitby .23 m/yr (35% more than CCB)
- Reach 7, Port Hope to Cobourg .9 m/yr to 1.3 m/yr (500% 760% more than CCB)
- PDCA conclusions:
 - relevance of this factor is dubious
 - Failure to account for recession and replenishment
 - SMC headland unique to the Lake Ontario shoreline
 - PDCA weighting 0%

Shoreline orientation not conducive to accumulation of sand and gravel

- S. 4.1: " due to the natural shoreline orientation in the Port Darlington West Embayment, the sediment transport modelling suggests that local beaches would have been narrow with low potential for sediment retention"
- S. 4.2: "Sediment arriving from the west during SW storms moved along the shoreline in the western half of the embayment but **likely** did not accumulate in this region due to the shoreline orientation".
- PDCA conclusions:
 - Report conclusions are speculative and inconsistent with lived experience
 - Report ignores dynamics of replenishment dynamics in this reach
 - Testamentary and photographic evidence ignored
 - PDCA weighting: 0%

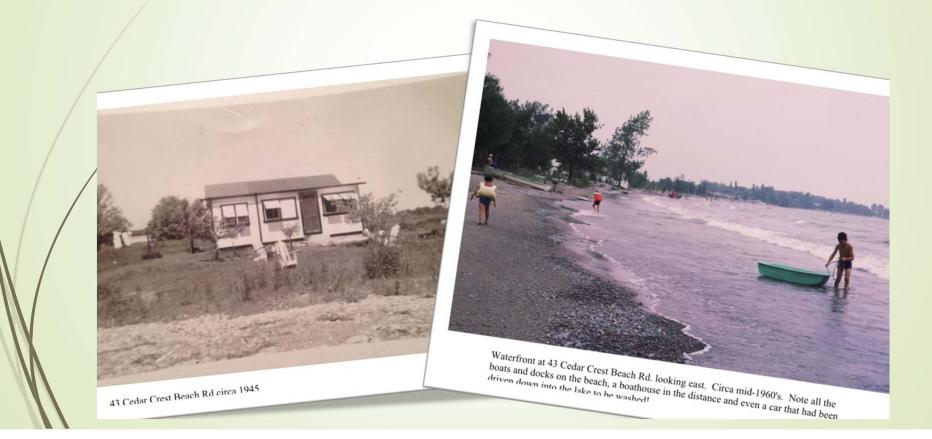
The beach at 43 Cedar Crest Beach Rd. – early 1960s



Homes were constructed too close to the water's edger and on top of a dynamic receding low-lying barrier beach

- Location and dating of original cottages
- Testamentary and photographic evidence ignored
- Presence of these homes DID NOT contribute to the erosion problem
- PDCA conclusion: this factor is a red-herring
- PDCA factor weighting: 0%

43 Cedar Crest Beach Rd.



55 Cedar Crest Beach Rd.



Vertical shore-parallel protection structures were constructed on the beach that are not conducive to beach building

- Report fails to acknowledge when and why these structures were built
- Erosion well-advanced prior to install of gabions and rock walls
- Town of Newcastle Report #WD-1-91
- CLOCA has continued to mandate such structures
- PDCA conclusion:
 - we agree with the assessment of impact, but not cause
 - failure to analyze these structures in context of what was happening is troubling
 - PDCA factor weighting: 5%

A reduction in sediment supply to the Port Darlington West Embayment due to the SMC Headland

- S. 4.4: "The SMC headland has reduced the supply of sand and gravel to the Port Darlington embayment by approximately 660 m³/yr, which is one factor that has contributed to the loss of the beach"
 - BUT...
- Report speculates that this sediment would not have accumulated in large volumes along CCB (even if true, large volumes not necessarily needed – rather, a give and take of removal and replenishment)
- PDCA conclusions:
 - Report unfairly conflates this factor with lesser factors
 - No attempt to evaluate actual loss of beach in the period since construction of the headland
 - PDCA weighting 95%

PDCA concludes ...

- Report fails to address quantum of property lost
- Full impact of SMC headlands undermined and underweighted
- SMC headlands, in good conscience, must be viewed as the catalyst for and predominant on-going factor contributing to property loss in the CCB zone
- PDCA factor weighting of SMC headlands: 95%
- The Zuzek report cannot be relied upon for purposes of determining whether to pursue shoreline protection measures as set out in the Baird report