**PROPOSED MSc PROJECT -**

**FUTURE Of LARGO PIER, FIFE , UNDER INCREASING STORM FREQUENCY**

**Background**

Largo Harbour Regeneration Group are planning to restore the village pier which was badly damaged in an easterly storm about six years ago. This storm reduced the front third of the pier to rubble. Since then, further damage has occurred leaving the pier even more vulnerable to ongoing degradation.

The pier created a historical tidal harbour that was used in the past for commercial coal and potato transport, as well as one of the main ferry ports along the Fife coast. It is now used for leisure and some lobster fishing. The cost of a new pier is c. £2-3M.

**Issue**

The continuing degradation of the pier, coupled with rising sea levels, is causing real fear amongst the residents regarding flooding of nearby houses, infrastructure and physical damage to the adjacent road bridge. At present the higher spring tides now reach the top of the pier and if this is coupled with an easterly storm and surge then the pier is totally inundated. With no guarantee about the rate of ongoing degradation to the Pier, the need for expert opinion and evidence to estimate the likely risk to life, property and roads is now key in seeking Council and/or Government funding and assistance. Both the local MP & MSP are supportive of this initiative.

**MSc Topic**

**The Group seeks assistance to estimate the effect of future predicated storm patterns would have if the pier continued to be damaged by the weather/tides and fails. This project is open to Master's students in relevant subjects**

**Project Scope** – whilst the calculation of an evidence-based estimate of the likely effect of the pier's failure on the village and infrastructure – and thus potential risk to life and cost of remediation – is the primary request, wider aspects worthy of investigation might also include:

- Determine & quantify wider risk factors associated with the pier's failure.
- Determine the impact to the marine environment - local and wider into the Forth – if the pier continues to fail.
- Determine options for pier design that could promote and protect the local & wider marine environment and assist with its Carbon Cost – whilst also promoting local use by families.

**Primary contact for this project** – Ross Paterson on email at rpat61@gmail.com