

LOSSIEMOUTH BREAKWATER

BACKGROUND

Moray Council is the Coastal Protection Authority for the coastline in Moray under the Coast Protection Act 1949. Concern has been raised by the public about the general condition of the breakwater immediately east of the River Lossie estuary. While a gap has appeared in the concrete wall, this is less significant than the loss of foundation due to erosion at the base of the wall that can only be seen at low tide. This loss is not recent, but stability will be affected by the loss of the stone bund placed on either side of the wall.

The exact date of the breakwater's construction is unknown however, it may have been built in the 1950's. It is sited on a sandy beach below the high water mark and constructed of mass concrete. The breakwater was built to control the position of the mouth of the River Lossie and to prevent long shore drift currents sweeping sand into the river outlet. The structure itself does not prevent the sea from flooding the estuary or adjacent properties but without it, the river course could meander, and upstream river levels would rise making land drainage on farmland more difficult to achieve.

In summer 1998, Moray Council, again acting as Coastal Protection Authority, recovered stone and rocks from the adjacent beach and river and constructed a bund against either side of the breakwater. This gave limited protection to the wall, however in recent years storm damage has caused some the stones to move and undermining and settlement of the wall is evident. This has been reported in the local press.

Initial investigations estimate that a repeat of the 1998 works, combined with placing sand/cement bag work in the undermined areas will cost £10,000. However, this option is not recommended as a permanent solution. A more substantial alternative would combine that work with imported rock armouring to construct a revetment on either side of the breakwater, at an estimated cost of £250,000. A scheme of this value will require compliance with E.U. Procurement regulations and this will add considerably to the contract preparation and tendering period. A scheme to completely replace the breakwater is estimated at over £2m.

Access to the site involves crossing the river estuary and any works at the breakwater will require consents. Consultations with regulatory bodies such as Scottish Natural Heritage, Marine Scotland and SEPA, as well as Crown Estates are underway. Coastal protection works including inspections of this nature are normally carried out during the summer months to take advantage of daylight, reduced swell, suitable low tides, and calmer weather.

RECOMENDATION

The repairs recommended involve repairing the undermined foundations of the existing wall and placing rip rap armouring (rock) along both sides of the wall at an estimated cost of £250,000.

If repairs are not carried out, undermining of the breakwater will continue and it will settle further. Maintaining the breakwater is however believed necessary to keep the river in its present course.

Ownership of the breakwater is unknown and so the proposed works would be carried out by the Council as Coastal Protection.

(712667)