

STAFF REPORT

TO: Chairman and Members Engineering Services
FROM: Development Engineer, Dugald Ley
DATE: 22 February 2010
SUBJECT: **HIGH TIDES**
Report prepared for meeting of 04 March 2010

1 PURPOSE

This report highlights the results of an extreme tide event on 2 February 2010 and a further one to come on 2 March 2010.

2 BACKGROUND

High tides relate to the position of the moon and the sun and on odd occasions these will combine to produce extreme high and low tides.

This event was demonstrated on 2 February at Totara Avenue, Pakawau, Collingwood-Puoponga Road (see photos below) when this area of road went under water by approximately 300mm (note – a slight on-shore breeze accentuated this tidal movement). In addition a low-lying area at Glenhaven Drive in Motueka was inundated with seawater after a flap gate was removed for repairs.







As mentioned a further extreme high tide will be felt over three days from 1 to 3 March with the peak being midday on 2 March.

Other influences such as:

- a low pressure system (ie, sea water is lifted higher);
- on-shore breeze;
- storm conditions; and
- flooding

will further affect the extremes of this high tide condition.

Staff will be on location at a range of “hot spots” to record the results of the event and a photo presentation will be shown to Councillors at the meeting.

This report is to highlight that even now without the full effects of predicted climate change (sea level rise), Council assets are at risk and staff need to factor in these risks when asset lives are determined in terms of 25 to 80 year timeframes.

In addition Council’s planners need to consider future zonings of coastal land and even closing zones where perceived risks could eventuate.

Councillors may wish to inspect some of the coastal areas in their ward during the forthcoming high tides (1-3 March) and gauge the effects for themselves.

3 RECOMMENDATION

THAT this report be received.

Dugald Ley
Development Engineer