

Jackett Island Erosion Study

Progress Report June 2012

1. Summary

This report sets out the project progress for the studies to investigate the long term resolution of the erosion issues at Jackett Island, since the interim works were completed on 5 September 2011.

This document identifies work progressed during June 2012 and provides an assessment of progress to the original programme.

2. Monitoring of shoreline along Jackett Island

Photographic monitoring was completed under the management of Council on 29 May 2012. These photographs were taken as part of the general monitoring process. The photographs (1-5) at the end of this document display that there is sand accretion at the northern end of the wall as well as that end of the island. There is also evidence that there are high levels of erosion beyond the southern return of the wall and to the southern tip of Jackett Island (see photos 6-12). At low tide there is a significant amount of gravel exposed and also clay, which can be seen in the photos 12,13 and 14.

3. Removal of existing geotextile groyne

The resource consent for the removal of the groyne was granted on 12 March 2012. The conditions of the consent state that the full groyne needs to be removed between from June through to the end of August.

Taylor's Contracting has been awarded a short-form contract to remove the groyne. Work on the removal of the groyne began in mid June 2012. It was delayed owing to damage from the storm event to Jackett Island works which took place on 5-6 June 2012, plus further poor weather restricting access to the groyne site. A variation to the resource consent also had to be undertaken so that the contractors were able to refuel on site. The Department of Conservation agreed to this variation. Philip Drummond is the Engineer to the Contract and is making regular visits to the site.

To date, the removal of the groyne is going well. The progress can be seen in photos 15-17.

4. Tasks of development of long term option

4.1 Data Acquisition – COMPLETED

4.1.1 Sand sampling and analysis COMPLETED February 2102.

4.1.2 Review and Analysis – COMPLETED **Date?**

4.2 Consultation

In progress. Council staff met with the Jackett Island residents on 17 April 2012.

Discussions have taken place between the experts regarding the modelling that is in progress. A teleconference was also held to discuss how the modelling should be refined. Once the modelling has been completed and a preferred physical works option has been identified, consultation will be held with the community. All appropriate options will be considered by the expert panel.

4.3 Numerical Modelling

4.3.1 Modelling of existing situation - COMPLETED

This was recently calibrated and validated. This required meeting with experts and changes to meet the comments made.

4.3.2 Development of options

In progress. One location was selected for numerical modelling with the possibility that others may be selected at a later date.

4.3.3 Modelling of options

In progress. Preliminary results are expected in early July 2012. These results will form the basis as to whether other options need to be modelled.

4.4 Development of preferred options

No progress. The option development has been delayed as a result of the calibration/validation of the existing model.

4.5 Consent process

No progress. This cannot proceed until practicable options are identified and reported back to Council.

4.6 Detailed design and implementation

No progress. This cannot proceed until final option is considered by Council and approval to proceed is granted.

5. Reporting

5.1 Practicable options report (final)

Completed. Discussed at 14 March 2012 meeting between experts.

6. Programme

A timeline was discussed with the Van Dyke Family Trust plus the other experts. The collaboration process and the agreement to ensure a robust modelling process has delayed the timeline and the final practicable options report.

7. Applicability

This report has been prepared for the benefit of Tasman District Council and reviewed by Richard Reinen- Hamill for Tonkin & Taylor Ltd.

May 2012 monitoring of Jakkett Island – photographs

Photos 1-5 looking north from survey points along the beach



Photos 6 - 11 looking south from survey points along the beach



Photos 12, 13 and 14 show the sand bag wall and exposed clays near the Van Dyke property



Photos 15 – 17 show the removal of the groyne



Report prepared by Sarah Downs (Project Manager), Tasman District Council