

Memo

Date: 24/06/2020

To: Rod Edwards

From: James linehan

Subject: Report to Advocates for the Tongariro River on 2019/20 Works

Flood Scheme Asset maintenance 2019/20

Asset defects and backlog maintenance identified in the 2018/19 inspection round has included.

Bridge Lodge Stop Bank

Defect: Vehicle damage compromising stability.

Maintenance: Access blocked and face re-shaped, coconut matted and re seeded.

Tongariro Lodge wooden floodwall



Figure 1: Bridge Lodge Stop Bank Maintenance.

Defect: Warped / damaged sections.

Maintenance: Warped and damaged sections replaced with the river side batter reshaped compacted and seeded.



Figure 2: Tongariro Lodge Floodwall Maintenance.



All assets including stop banks, floodwalls, flood gates, flap valves, culverts, erosion protection structures have been inspected. Most Scheme assets have been given a grade score of 2 meaning that normal yearly maintenance applies such as mowing, spraying, greasing and clearing debris for continued access etc.



Figure 3: Tongariro Flood Scheme.

The Culvert 1 & 2 Floodgates are situated on the SH1 Bridge to Te Aho Reserve Erosion Control Rock Wall on the Tongariro River, Turangi. The flap valves of these two floodgates are currently assessed as unserviceable due to pest vegetation growing along this section of the rock wall preventing access to inspect or maintain them. The vegetation consists primarily of blackberry and broom.

My recommendation is to remove all vegetation within the rock wall allowing access to inspect. The vegetation removed will also allow for easier maintenance of the rockwall if required.

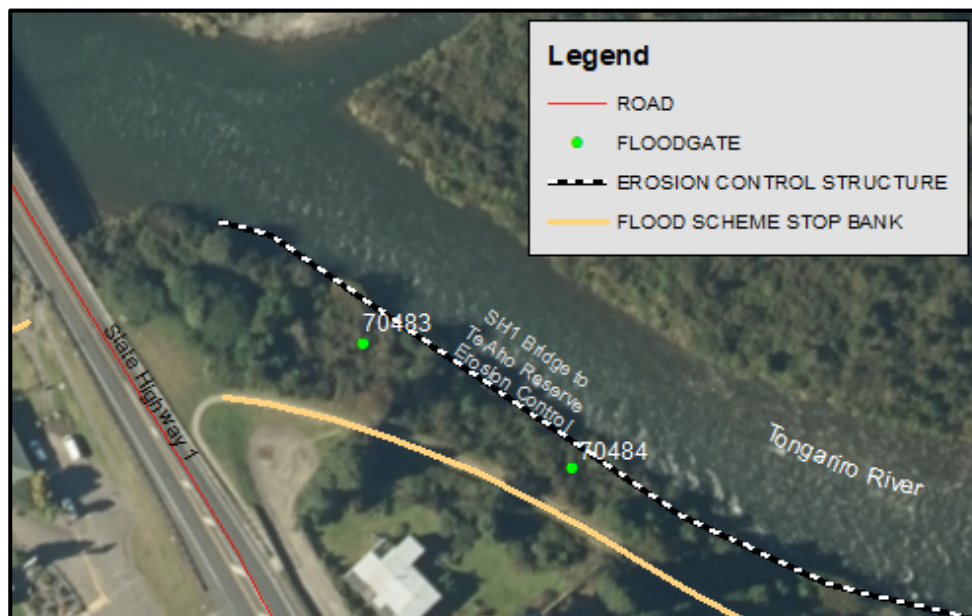


Figure 4: Te Aho Rd Flood gate flap valve locations.

Bridge Lodge Stop Bank, Tongariro River

Pest broom on the river side of the Bridge Lodge Stop Bank needs to be sprayed in order to keep the stop bank clear of vegetation. This prevents woody vegetation growth from damaging the stop bank and allows for greater ease when inspecting or maintaining the asset.



Figure 5: Bridge lodge Stop Bank Location

Awamate Road

Pest broom on the river side of the stop bank and the amount of broom present, mowing would be the most effective method.

Vegetation management 2019/20

There is a requirement for ongoing management of woody species on assets and within the floodway. It is important that invasive vegetation control is ongoing and managed annually to

Figure 6: Awamate Rd Stop Bank Location.



ensure these invasive species do not become dominant and uncontrollable. A normal maintenance round this year was undertaken clearing around flap valves, flood gates and removing of invasive woody species from selected rock walls and the toes of stop banks.

A programme to manage inappropriate invasive vegetation within the floodway also started. Unfortunately, Covid-19 lockdown reduced the planned works timeframe before winter leaf fall, however several key areas within the schemes reach have been managed. This was done by a team of three spot sprayers targeting Willow, Broom, Buddleia, Poplar and Pine on gravel shoals and islands. Areas highlighted below are expected to not flush back in leaf next summer. vegetation management is planned for the start of the 2020/2021 works season to continue this work throughout the scheme.



Figure 7: Before /after. Foreground - Vegetation removed from the floodplain adjacent Tongariro Lodge. Background – Invasive vegetation sprayed.



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