

Report No:	RESC11-09-09
File No:	
Date:	6 September 2011
Information Only – no decision required	

REPORT SUMMARY

Report to: Engineering Services
Meeting Date: 15 September 2011
Report Author: Jeff Cuthbertson, Utilities Asset Manager
Subject: **Paton's Rock – Stormwater Improvements**

EXECUTIVE SUMMARY

Flooding at Paton's Rock during storm events has been a continuing problem for some residents for a number of years. This report outlines a solution to manage this issue.

RECOMMENDATION/S

That the report be received.

DRAFT RESOLUTION

THAT the Engineering Services Committee receives the Paton's Rock Stormwater Improvements report RESC11-09-09.

Report No:	RESC11-09-09
File No:	
Report Date:	6 September 2011
<i>Information Only – no decision required</i>	

Report to: Engineering Services
Meeting Date: 15 September 2011
Report Author: Jeff Cuthbertson, Utilities Asset Manager
Subject: **Paton's Rock Stormwater Improvements**

1. Purpose

- 1.1 The purpose of this report is to inform the Engineering Services Committee of the proposed stormwater improvements at Paton's Rock community.

2. Background

- 2.1 For a number of years the Paton's Rock community has made submissions to Council relating to issues of flooding during storm events.
- 2.2 Several meetings have been held with members of the local community to discuss the problems. In Council's 2009 Long Term Plan, a budget of \$494,500 was set aside to evaluate the problem in 2010-11 with the work to be undertaken in 2011-12.

3. Community Meeting – December 2010

- 3.1 Staff and Councillors met with some members of the Paton's Rock community (approximately 22 people) in December 2010 to discuss the flooding issue. Three conflicting messages were delivered at the meeting:
- Those landowners who believe that there is a flooding problem that needs resolution;
 - Those landowners that believe that there is a flooding problem but that they can live with it; and
 - Those that believe there is no flooding problem.

Comments included:

- In 2005, he took photos of flooding to a Council meeting.
- 29 September 2005 there was 98mm of rain after a 3 day period of 175mm of rain.
- The photos were taken on October 1 (attached).
- He suggests this was probably the worst possible conditions but there were generally few problems.

- The main problem was at the Drummond property (bottom of Bay View Terrace).
- The drains (outlets to beach) were not open before the storm.
- They have been in Paton's Rock since 1966.
- Water off the paddocks flows through his place.
- He is unhappy with the special rate for the UDA and the amount that he has paid.
- He has put in his own drainage (sounds like pipes to pass water through his property) and doesn't have any problems.
- A liner (pipe?) was put in at the foot of Bay View Terrace – he couldn't see how this could be big enough to work.
- A stream used to come through his property and across the road.
- His private bridge at the western end of town was washed away in a storm.
- This watercourse here is private – Jeff Cuthbertson explained that property owners were responsible for maintaining watercourses on their properties.
- He thinks it sounds like people can live with most of the problems.
- Drummonds is where most of the problems are.
- Otherwise it just needs some bigger pipes.
- You can't get it 100% fixed – there will still be a flood problem here.
- The pipes need to be 30m further out on to the beach, and to be bigger (Jeff Cuthbertson explained problems of getting consent for this, and that they will cover with sand).
- Suggested a high-head pipe through the settlement.
- There has been no surface water on the road for longer than a few hours in the past few years.
- Says Jeff Cuthbertson had suggested a previous solution to break the kerb & channel and run a path through to the beach. He thinks the levels are ok for this – at the reserve and near #256.
- The basic problem is that the openings to the beach are closed.
- There was general talk of problems with the contractor clearing the pipes.
- Ivan Walker used to do this.
- No-one comes to clear the drains before a storm.
- There is no problem – water gets deep at her place but then clears after a few hours. It doesn't go in the buildings.
- Maybe the issue is from permanent residents who don't like driving through this water.
- It is not worth paying \$1400 to fix it.
- She still thinks something needs to be done to keep the outlets clear.
- The beach is aggrading, and the pipes used to be 10m out in to the beach.
- Whether you think there is a problem seems to depend on where you live.
- Try to keep the drains open.
- In September 2009 Richard and Mark cleared the ditch by Bay View Terrace and things were much better then.
- It needs something that doesn't rely on a few (who may be away, leave, die).
- The outlets can sometimes need clearing each tide.

- Her property is where “2 catchments go into 1”. She gets debris and overflow into her property.
- It is currently neap tides. If the outlets are cleared now then they should be ok at least through the weekend.
- The problems with pipe blockage are when there are spring high tides.
- The outlets are currently blocked.
- Comments seem to confirm that the higher outlets at the east do not block.
- We will look at:
 - The footpath option again
 - A long bypass pipe
- Discuss extending the outfalls with Iwi/DoC
- There are about 14 properties out of the 70odd in the UDA represented here.
- They own 12 Bay View Terrace.
- A watercourse is piped through their property.
- It goes down a waterfall to the stream below. That stream doesn't flood.

4. Annual Plan 2011-12

- 4.1 Following the meeting in December 2010 and considering the defined areas that have a flooding issue at Paton's Rock, the original Long Term Plan budget was refined and amended in the Annual Plan 2011-12 to a project cost of \$245,000.
- 4.2 Within the Annual Plan it was suggested that the work as proposed be undertaken and reviewed to assess if further remedial works are required in the future.

5. Paton's Rock LiDAR Levels

- 5.1 Appendix 1 is a plan of Paton's Rock showing LiDAR levels of the beach area, township and the hills behind. One of the comments made at the meeting related to the issue of keeping the stormwater outlet, which discharges on to the beach, open. The biggest problem is that sand fills up around the outlets and prevents them from opening. It is also almost impossible to change these pipes as there is no fall between the road and the adjacent beach.

6. Proposed Improvement Works

- 6.1 There are two distinct areas of concern at Paton's Rock.
- How do we keep the stormwater outlets on to the beach open?
 - How do we stop flooding of the intersection of Paton's Rock Road and Bay View Terrace?

- 6.2 It is proposed to modify the stormwater outlet at the beach face by removing the existing flap gates and installing rubber tide-flex valves. We would then raise the outlet and reinstall the flap gate valves (see attached plan).
- 6.3 This will result in the flap gate being located at a level similar to the kerb and channel on Paton's Rock Road and thus maximise the ability for some stormwater to discharge.
- 6.4 At present there is a soak hole located at the Paton's Rock Road and Bay View Terrace intersection which, over time, does allow water to finally soak into the ground. There are two issues with this flooding that cause concern:
- The flooding covers a majority of the carriageway (see photos below). Vehicles driving through the water cause waves that could potentially cause damages to houses.

DRUMMOND PROPERTY SEPT 29



DRUMMOND'S SEPT 29



DRAINAGE FLOW TO SEA FRONTING
MRS WERNERS PROPERTY



DRAIN ALONGSIDE RESERVE TRACK SEPT 29
CLEAR FLOW TO SEA

DRAINAGE FLOW NEAR WOMERSLEY'S PROPERTY SEPT 29



- The septic tank located at the dwelling is inundated with stormwater. This raises the issue of septic tank effluent overflowing and contaminating the property, the waterway and the beach.

6.5 It is proposed to remedy this ponding issue by the installation of two sumps and piping stormwater south along Paton's Rock Road to the water course.

7. Consultation

7.1 Staff will consult with and consider feedback from the Golden Bay Community Bay and affected landowners regarding the proposed remedial works.

8. Recommendation

That the report is received.

9. Draft Resolution

THAT the Engineering Services Committee receives the Paton's Rock Stormwater Improvements report RESC11-09-09.

Appendices:

Appendix 1 – Plan showing LiDAR levels at Paton's Rock

Appendix 2 – Not for construction drawing – Patons' Rock Stormwater