



2019-2020

RIVER MANAGEMENT ACTIVITY GROUP

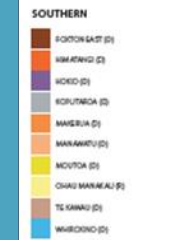
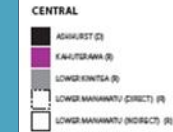
LOWER WHANGANUI RIVER SCHEME MEETING

HORIZONS RIVER MANAGEMENT

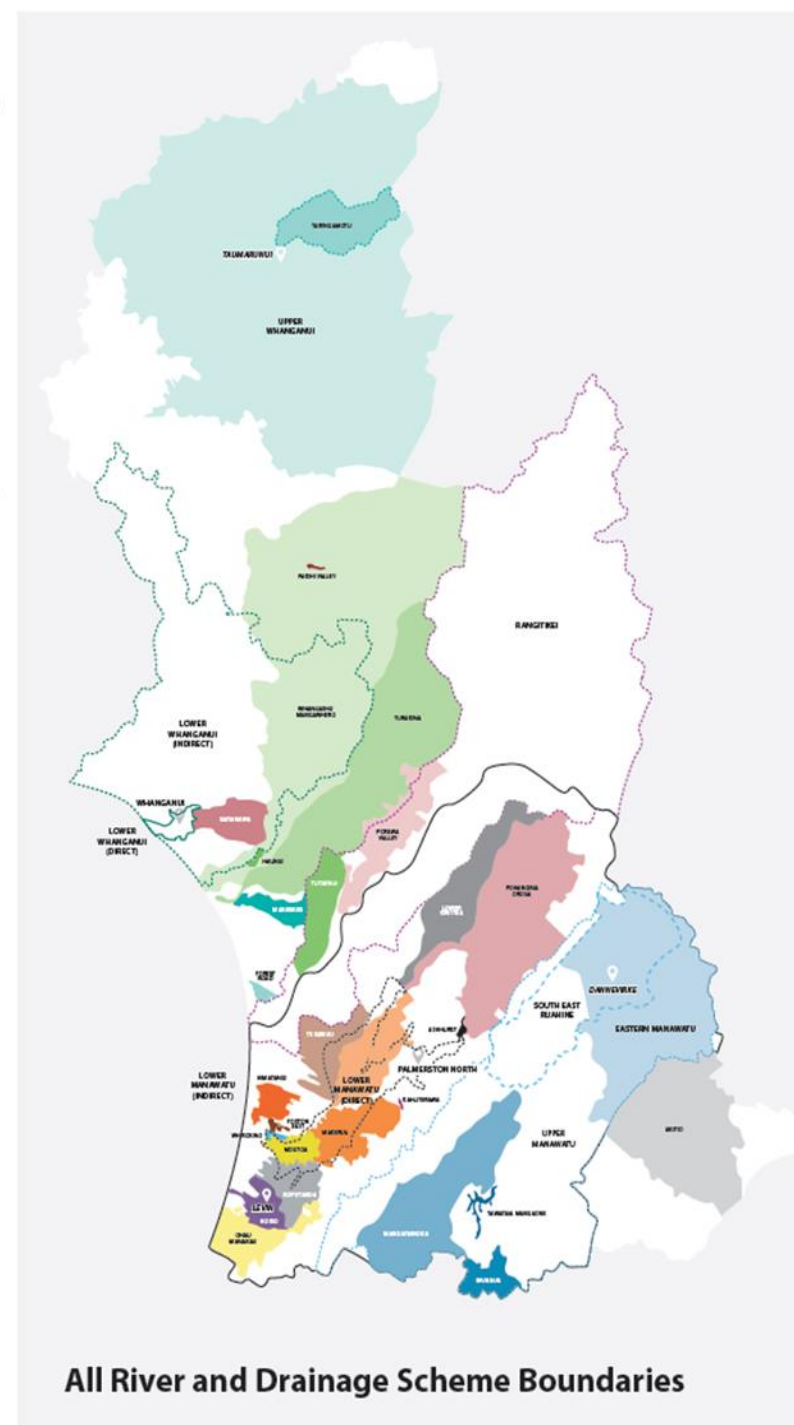
32 staff with a current operating budget of \$11M

34 River and drainage schemes

Providing protection/benefit to 10 urban areas and 75,000 hectares of rural land



(D) Drainage | (R) River



All River and Drainage Scheme Boundaries



1,270km of river channel



1,100km of drain



23 pump stations with a total discharge capacity of 43m³/s

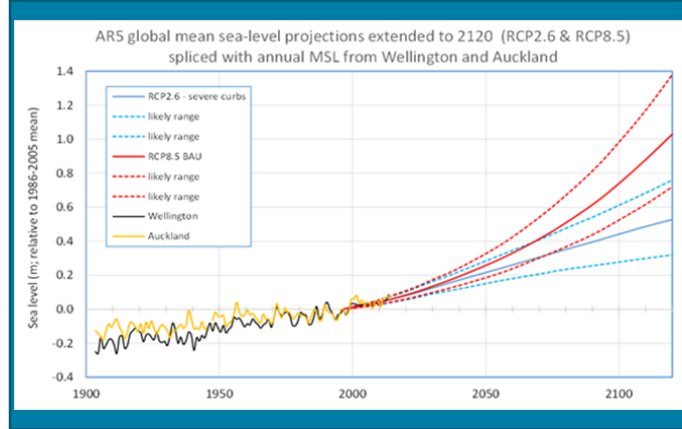


53 detention dams that store 4.3 million cubic metres of floodwater



500km of stopbanks





SIGNIFICANT RIVER MANAGEMENT ISSUES FOR THE REGION

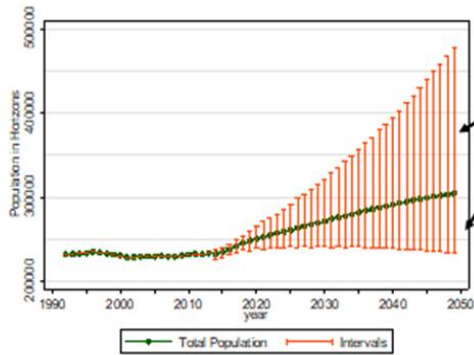
Operational reliability

Sediment build-up reducing flood protection standards

Urban growth

Climate change

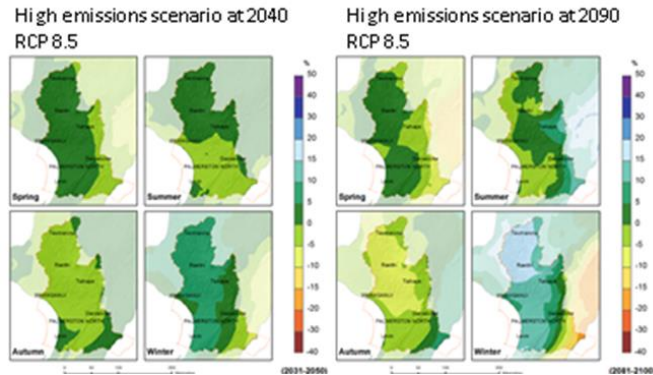
The population within the region is likely to grow to over 300,000 by 2050.



Shows likely upper and lower bounds

Annual growth for 1995-2015 was almost 0%
For 2015-2048 population projected to grow at an average of 0.9%

Horizons rainfall projections



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LOWER WHANGANUI RIVER SCHEME

Strategic Direction

The focus of the Scheme over the next 3 years is to continue to maintain existing infrastructure and to review the respective responsibilities of the Whanganui District Council and Horizons for the provision and maintenance of flood protection assets as well as extending the scheme to include the Whanganui Port area.

Aim

To provide flood protection to selected Whanganui urban areas and bank protection to erosion areas primarily through the use of vegetation management through the urban river reaches.

Scheme Level of Service

To ensure that the assets are managed in a consistent, efficient and sustainable manner.

To ensure the long-term performance of the assets and ensure cost-effective delivery of service to the standard agreed with the ratepayers.

To maintain a clear and stable channel that provides an equitable level of flood protection to land in the Lower Whanganui River Scheme.

To manage Scheme assets, vegetation and general channel condition within the Lower Whanganui River Scheme in order to maintain desired flood protection and channel alignment, and to minimise lateral erosion.



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Scheme Funding

Funding Policy

The Schemes funding comes from three revenue sources:

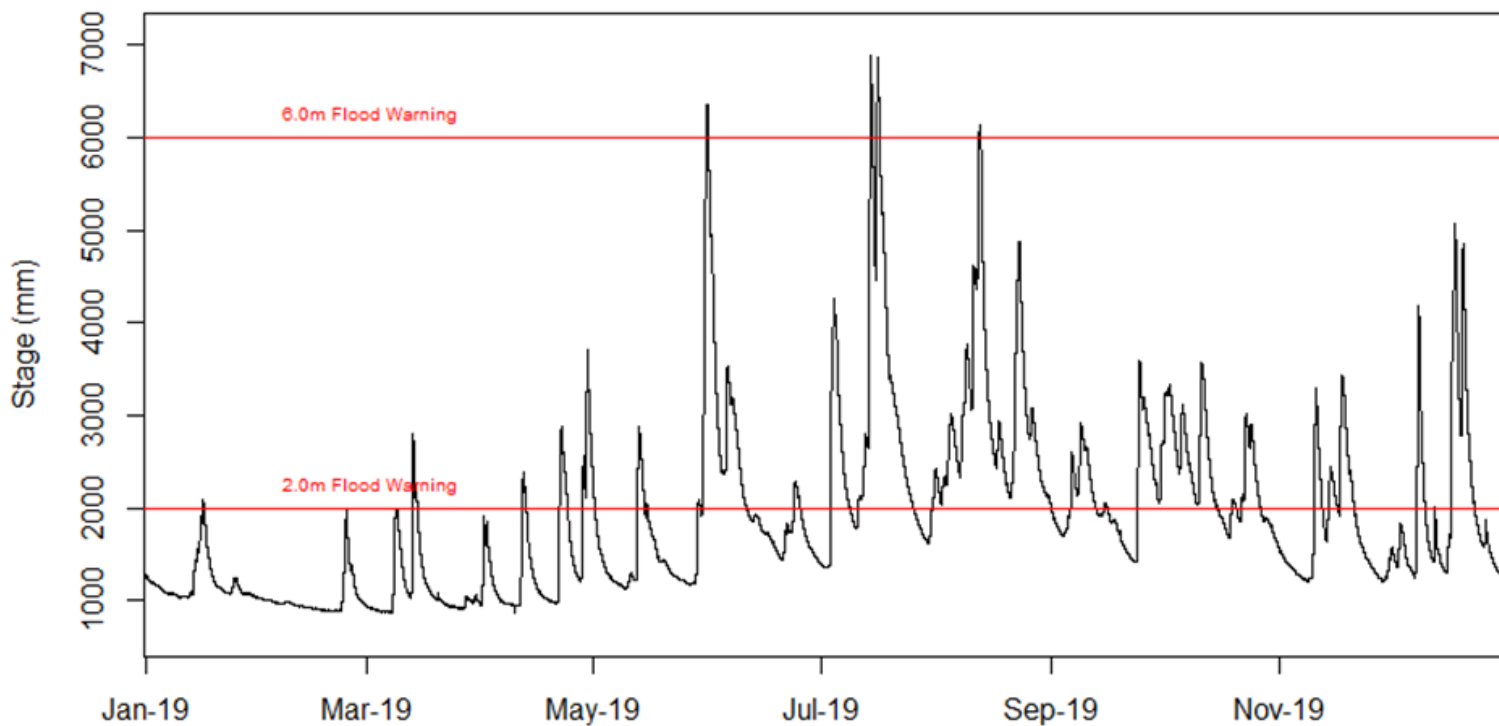
Targeted Rates – differential targeted rates levied on properties directly benefiting from or causing the need for the work.

General Rates – uniformed rate levied over all properties in the Horizons Region.

Contribution from Whanganui District Council

WHANGANUI AT PIPIRIKI

Whanganui at Pipiriki



Annual maximum stage for the past decade

Year	Stage	Flow	Date
2009	6.781	1401.532	2009-07-24 09:15:00
2010	8.814	2026.446	2010-09-07 04:45:00
2011	10.388	2536.519	2011-01-24 02:00:00
2012	10.458	2559.553	2012-07-16 21:15:00
2013	14.711	3939.739	2013-10-15 16:45:00
2014	8.596	2002.406	2014-08-03 14:00:00
2015	15.697	4258.378	2015-06-20 22:30:00
2016	7.572	1688.771	2016-07-24 08:30:00
2017	9.735	2359.465	2017-04-05 14:45:00
2018	10.728	2673.316	2018-03-08 14:15:00
2019	6.877	1477.151	2019-07-14 23:35:00

Lower Whanganui River Scheme Assets

Scheme Facts

Scheme Assets.

- 14 floodwalls
- 4km of stopbanks
- 9500 tons rock lining
- 7000 tons concrete riprap
- 16 floodgated culverts
- 4 portable flood barriers

Total Asset Replacement Value:
\$6,563,400.39 (July 2019).
Excl. North Mole and South Spit Structures

Catchment Area 25,400 sq km.

2% AEP Standard



LOWER WHANGANUI SCHEME

Asset Map 2020



A3 1:30,000

Prepared by: River Management - Northern
Drawn by: Melissa Churchouse
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NOTE TO USERS: The boundary lines shown on this map are approximate and do not necessarily show legal boundaries.

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Key Activities and Issues: 2019-20

Scheme Expenditure

Expenditure is on track to finish year within budget.

Works Activity

Maintain Plantings.

Resurface Balgownie stopbank over ramp downstream of sailing club.

Investigate design options for Kowhai Park egress gate.

Design, consenting and planning of North Mole/South Spit strengthen.

Anzac Parade Retreat – advance study on retreat/resilience options.

Monthly floodgate inspections.

Stopbank Maintenance.

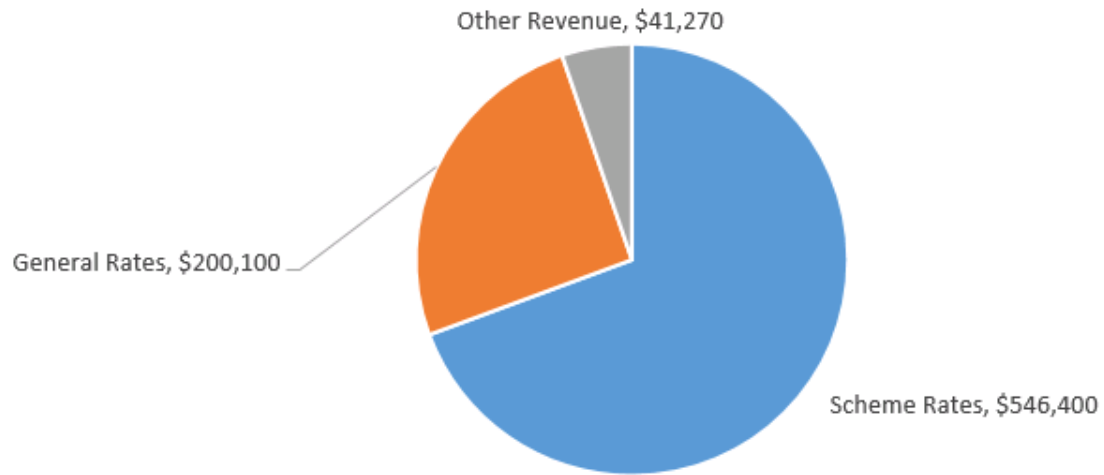
Flood response training.

Timber floodwall repair.

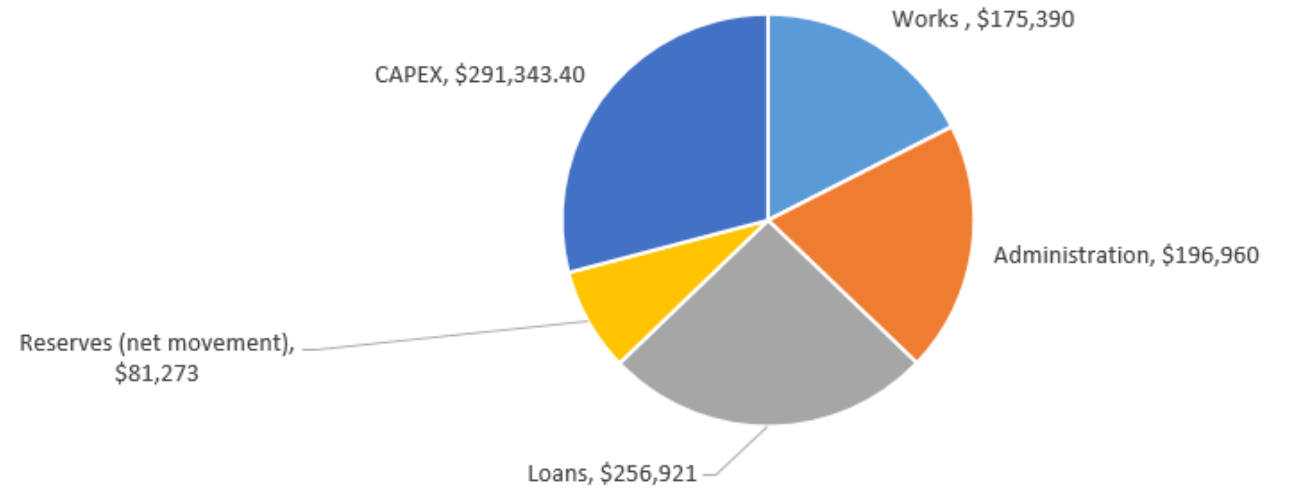
Consent application process.

Income and Expenditure 2019-20

Income



Expenditure





Key Activities and Issues: 2020-21

Scheme Budget

Works budget remain unchanged

\$37,994 contribution to the Emergency Reserve Fund

Scheme Rate increase of 19%

Works Activity

Routine maintenance work undertaken.

Priority is being given to securing resource consent.

Progressing Anzac Parade retreat policy

Awaiting approval from Provincial Growth Fund for funding regarding work on the North

Mole/South Spit strengthening.

Investigating CBD flood risk mitigation

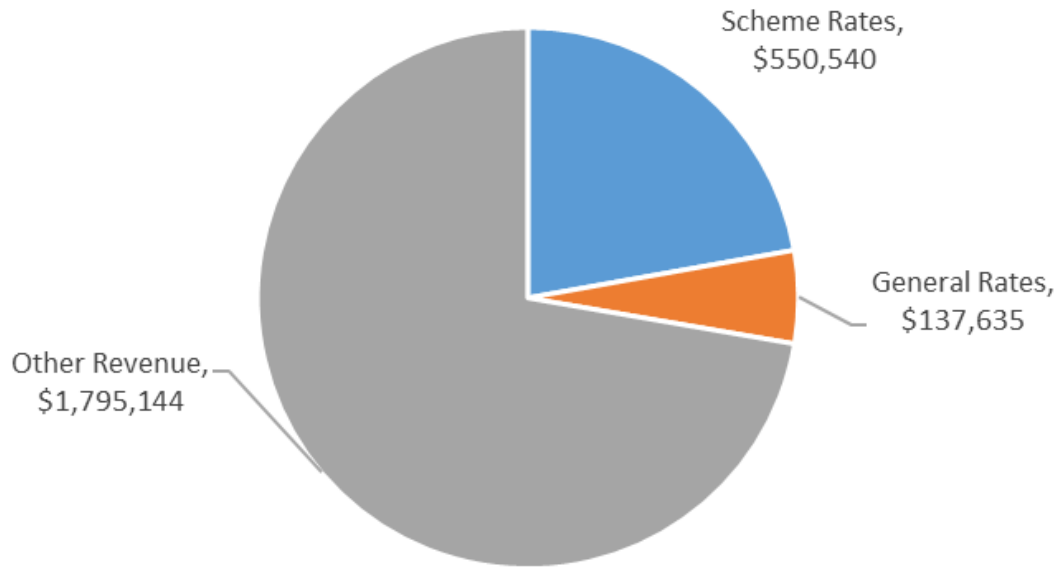
Replacing the need for WIPPs



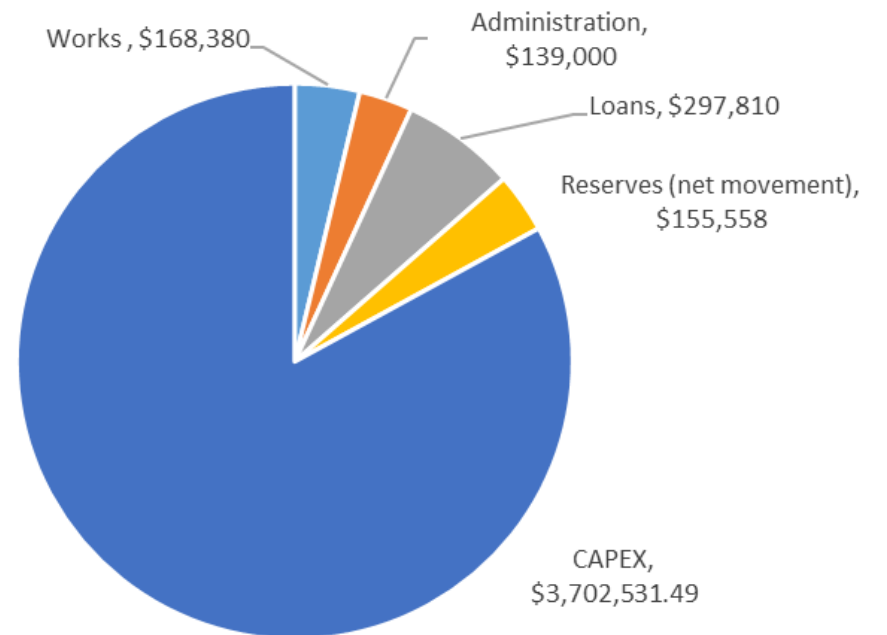
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Income and Expenditure: 2020-21

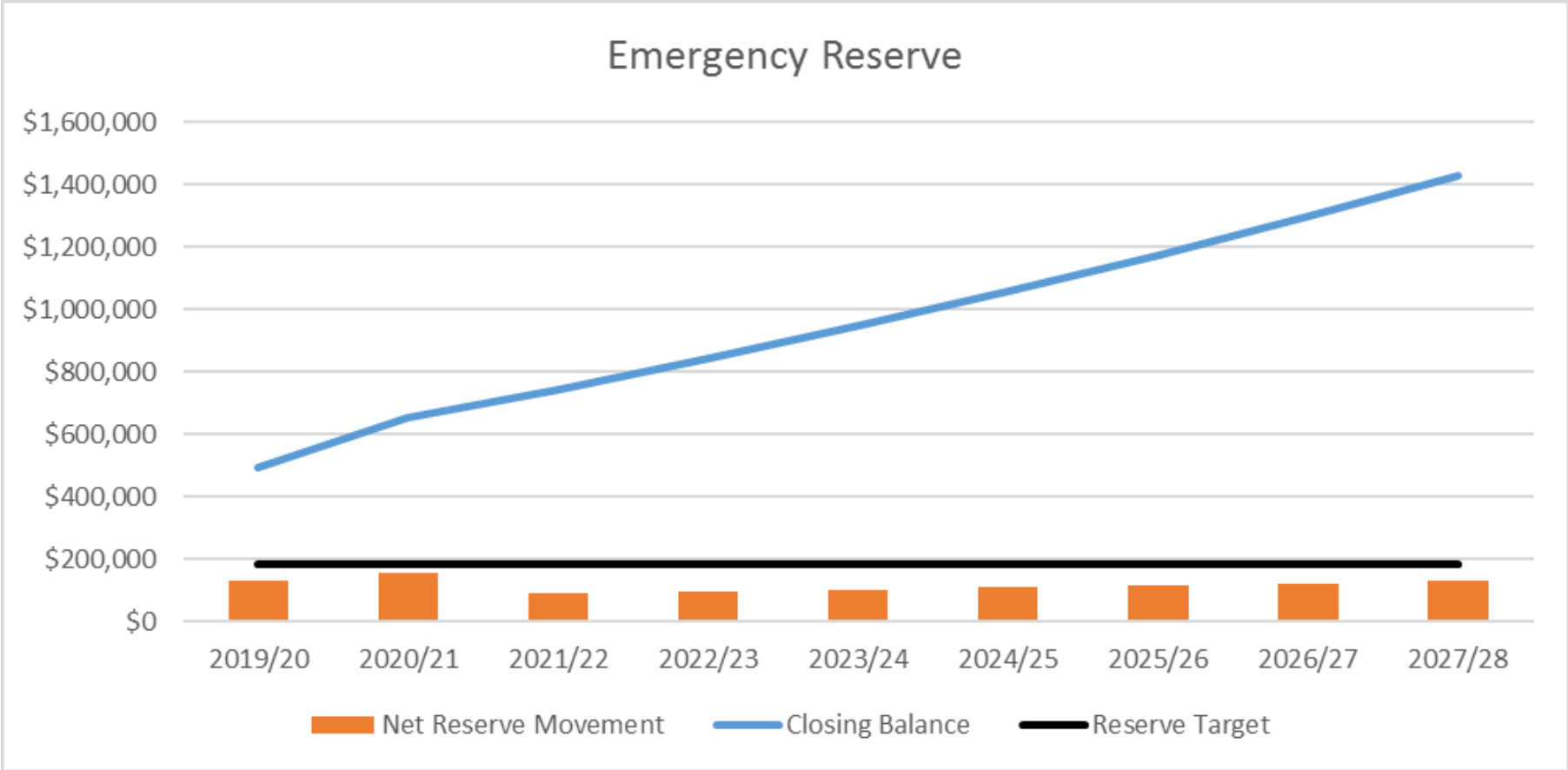
Income 2020/21



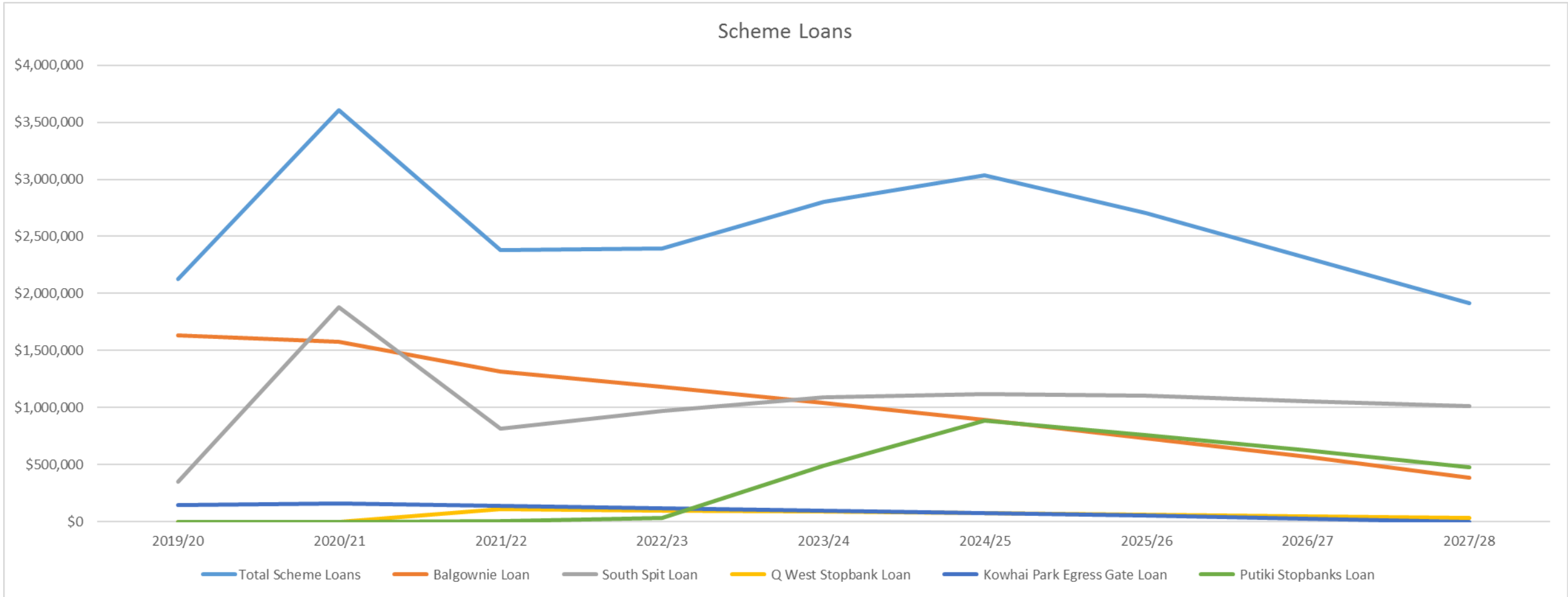
Expenditure 2020/21



Emergency Reserve Balance



Loan Account Balances



Issues Arising

Issue	Solution
Anzac Parade retreat.	Currently preparing a retreat policy.
What stage is the Putiki modelling at?	Timing for this information will be dependant on the final stopbank design.
Why can we not dredge?	Dredging provided a very short term solution as the river very quickly fills in the excavated void. Also very expensive.

The End



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REGIONAL COUNCIL



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or freephone Horizons on **0508 800 800**