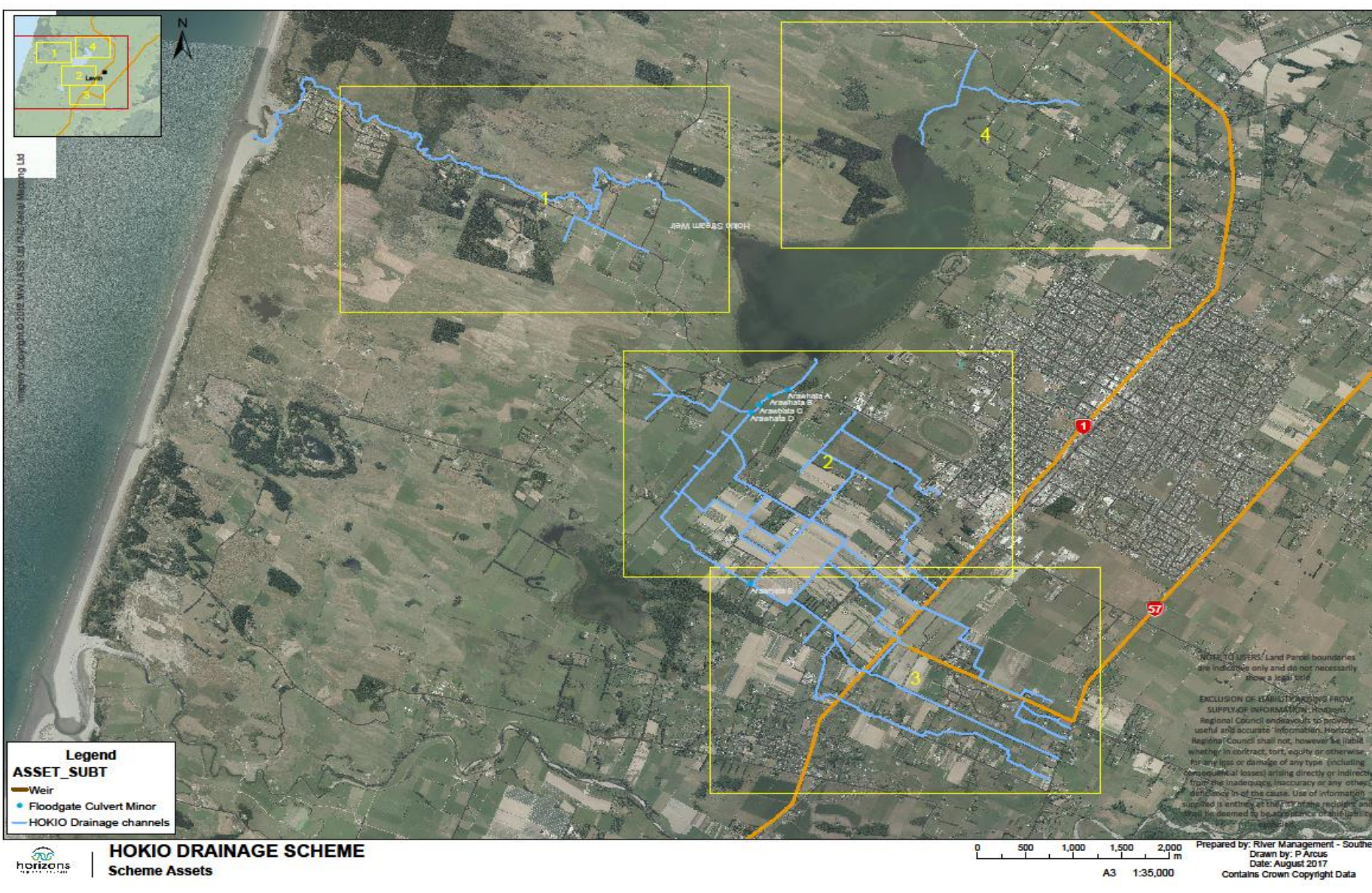




2020-2021 Annual Plan Consultation
River Management Activity Group
HOKIO DRAINAGE SCHEME

Hokio Drainage Scheme



Scheme Facts

- Scheme Assets.
 - 4 floodgated culverts
 - 45 km of drainage channels
 - 1 weir
- Total Asset Value: \$444,926.
- Scheme Area 6,100ha.
- Majority of the catchment discharges directly in to Lake Horowhenua.
- Predominantly servicing dairy and horticultural land.

HOKIO DRAINAGE SCHEME

Strategic Direction

The focus of the Scheme over the next 3 years is to continue reduce the frequency of uncontrolled overland flows by improving the Scheme's drainage network.

Aim

To reduce damage caused by uncontrolled overland flows to land and crops as well as reducing the sediment discharge into Lake Horowhenua.

Scheme Design Criteria

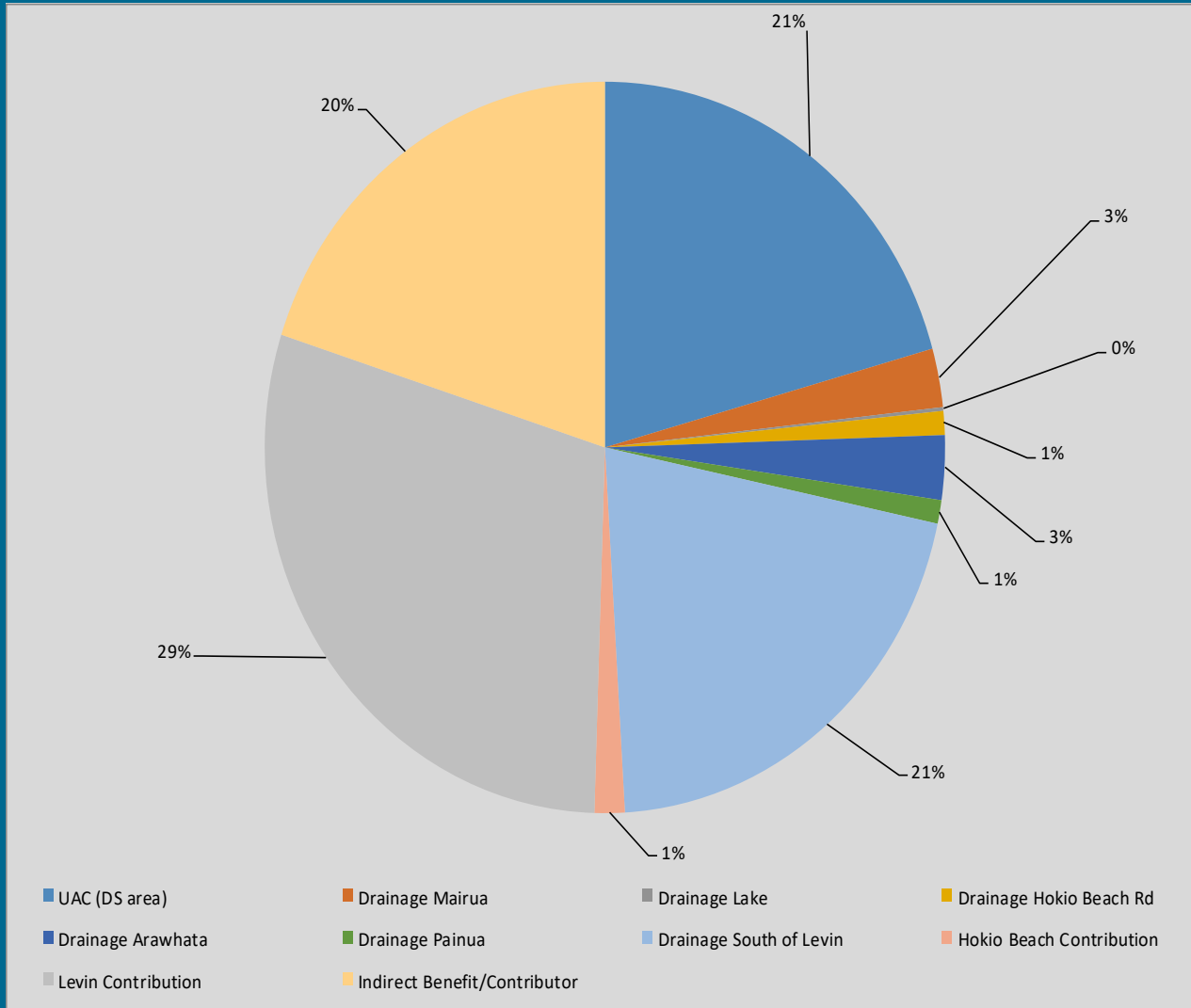
- Drainage Channels:
 - Design is based on a 2-5 year rainfall event.
 - Drain full drainage coefficient of 25mm/day.
- Culverts:
 - Designed based on drain full plus 30%.
 - Designed for a 50mm head loss over the culvert

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. 80% of scheme cost.
- General Rates – uniformed rate levied over all properties in the Horizons Region. 20% of the scheme cost.
- Other income – Revenue from lease land, forestry blocks, scheme reserves, etc. held by the scheme. This is used to reduce the level of the targeted rate



Hokio Drainage Scheme Rating Map

EXCLUSION OF LIABILITY ARISING FROM SUPPLY OF INFORMATION

Horizons Regional Council endeavours to provide useful and accurate information. Horizons Regional Council shall not, however be liable whether in contract, tort, equity or otherwise, for any loss or damage of any type (including consequential losses) arising directly or indirectly from the inadequacy, inaccuracy or any other deficiency in information supplied irrespective of the cause. Use of information supplied in entirety at the risk of the recipient and shall be deemed to be acceptance of this liability exclusion.

Supplied by Horizons Regional Council.
Drawn by C White, February 2009

Projection: New Zealand Map Grid

Contains Crown Copyright Information.

Land parcels (Jan-2009) supplied by Land Information NZ.
Parcel boundaries are approximate only and are subject to survey.

Legend

Drainage and UAC

- DA
- DH
- DL
- DM
- DP
- DS and AC



Meters
0 250 500

Plan No.

4766



Map of Council of Horizons Regional Council and the information contained herein is for information only. It does not constitute a contract. It is subject to change without notice.

Hokio Drainage Scheme Rating Map

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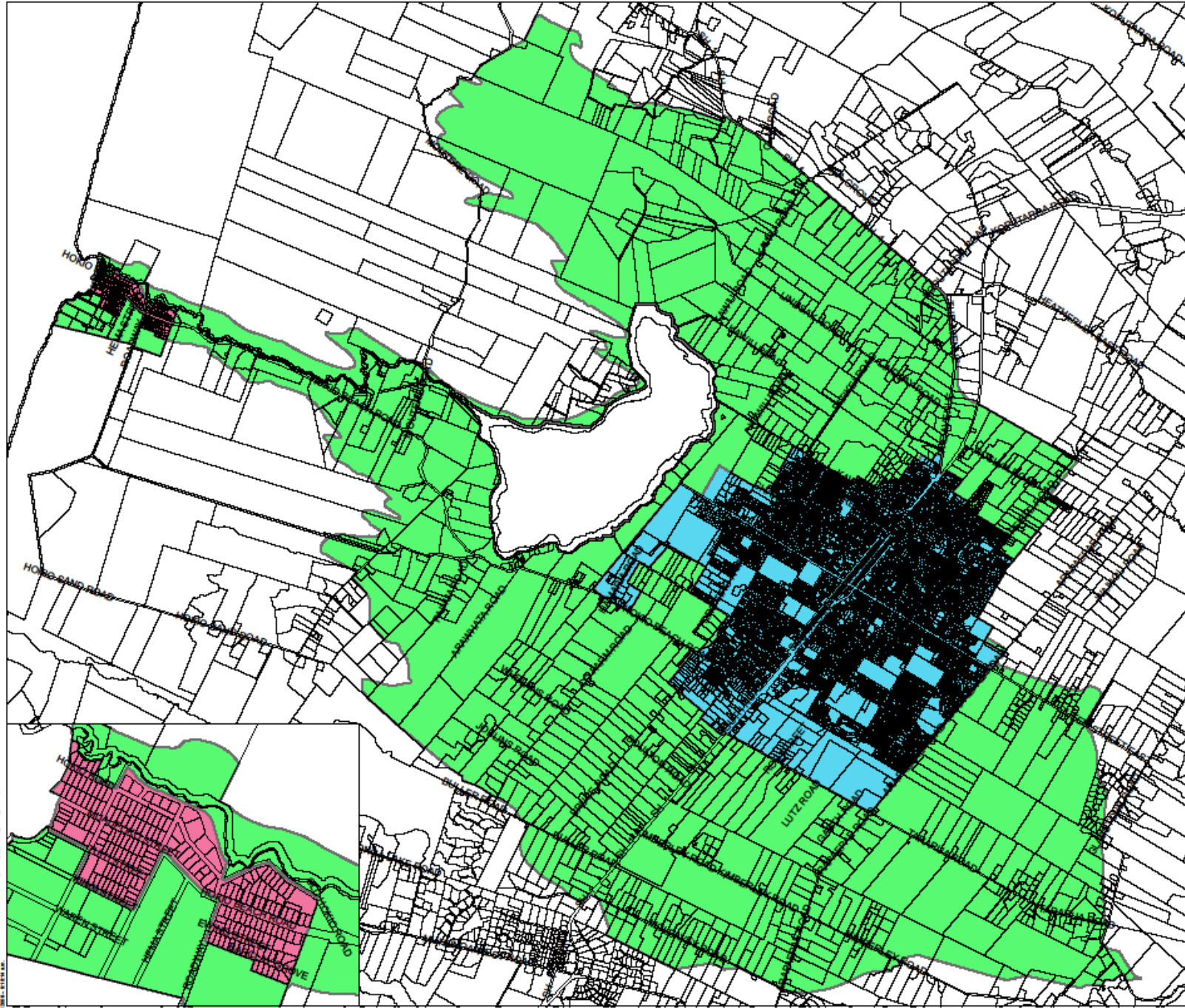
Legend

- Industrial and Urban
- IN
 - UH
 - UL



Plan No.

4766

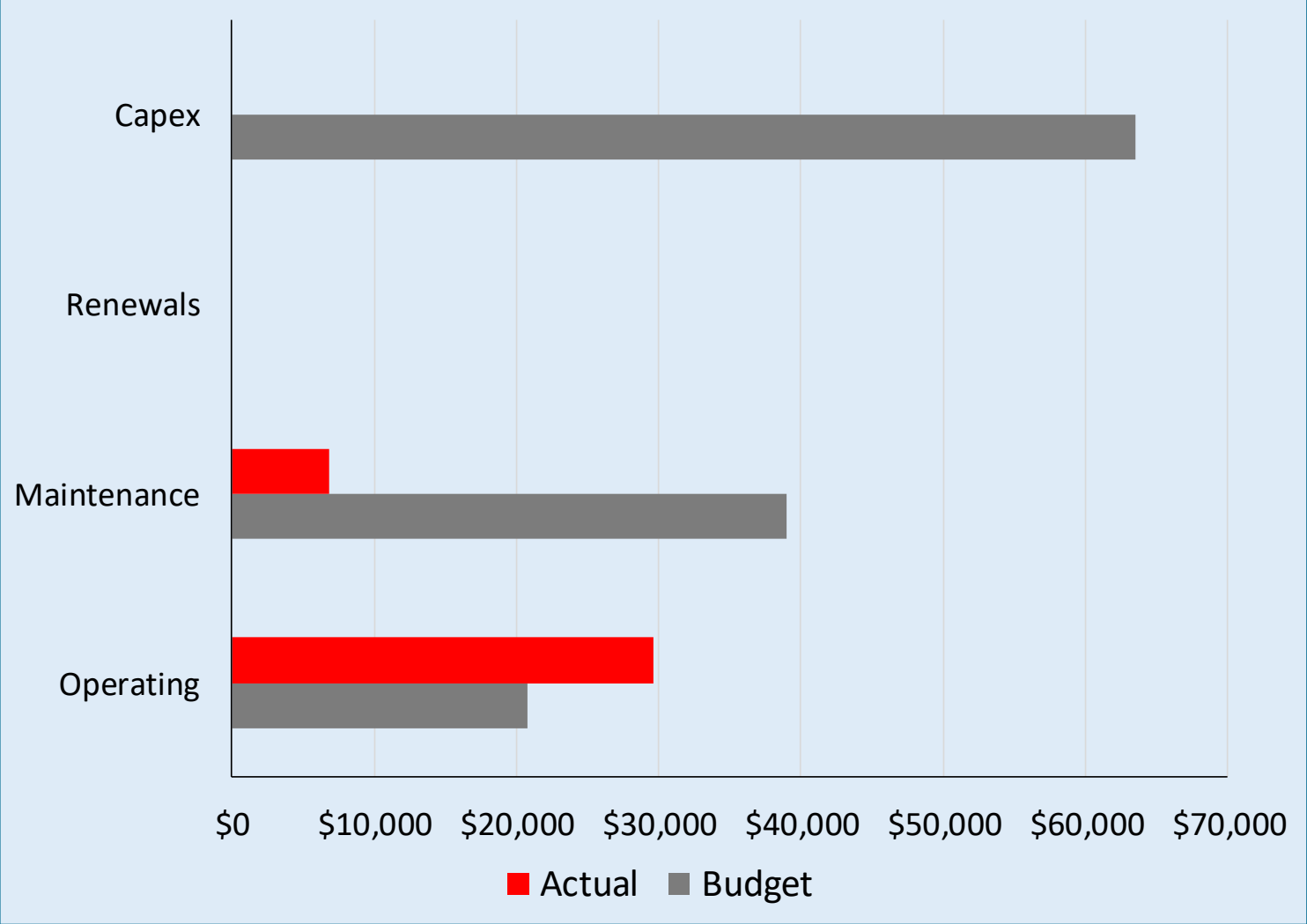


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Key Activities and Issues: 2019-20

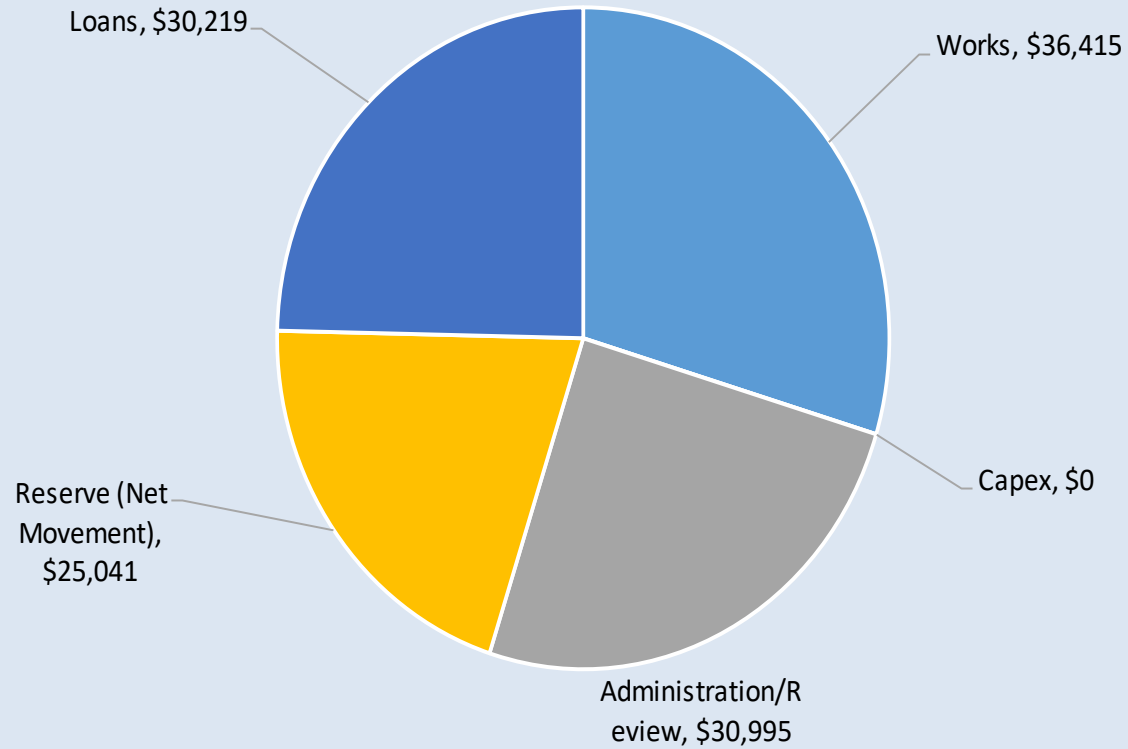
- **Scheme Expenditure**
 - Expenditure is on track to come in within the approved budget.
- **Works Activity**
 - Drain maintenance Continuing.
 - Minor maintenance work being undertaken to sediment trap.
- **Upgrades**
 - While the initial upgrade program has finished there are still demands to improve drain conditions and re-alignments.
- **Investigations**
 - Tonkin and Taylor have been engaged to review the drainage network of the Arawhata and to look at option to improve the network and reduce the amount of sediment being carried through the network to the lake.

Works Budget vs Actual: 2019-20

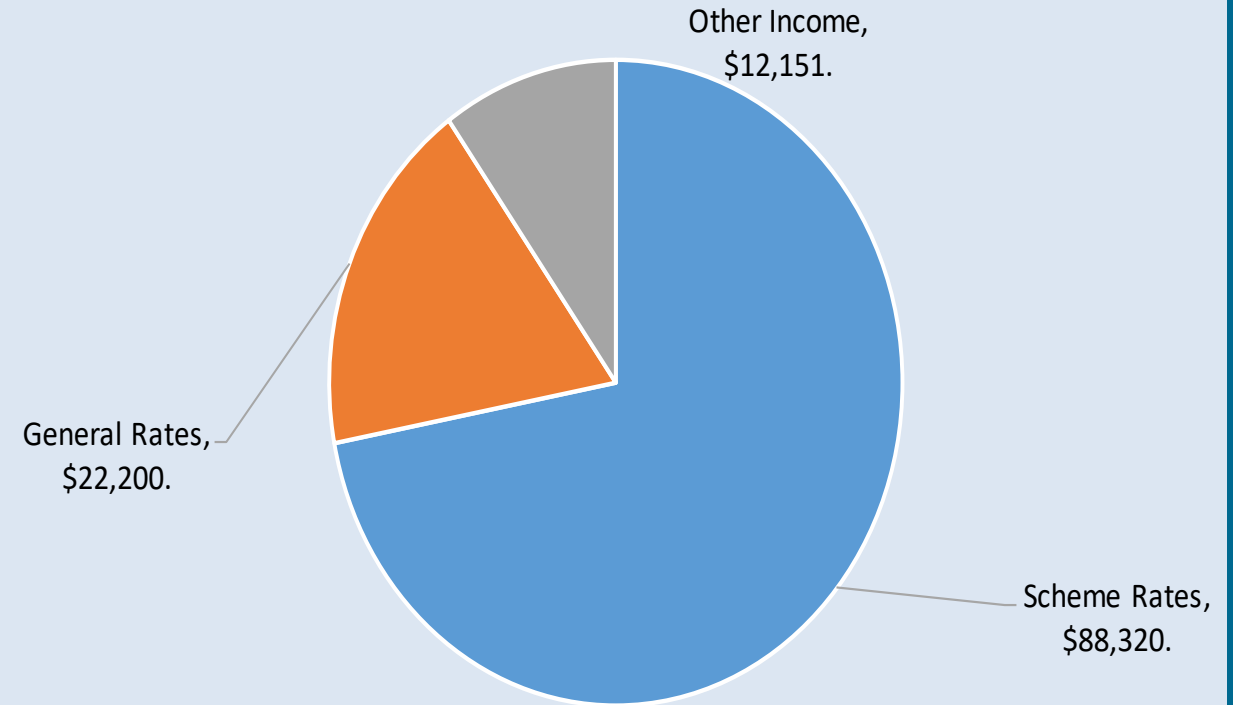


Income and Expenditure: 2019-20

Operating Expenditure



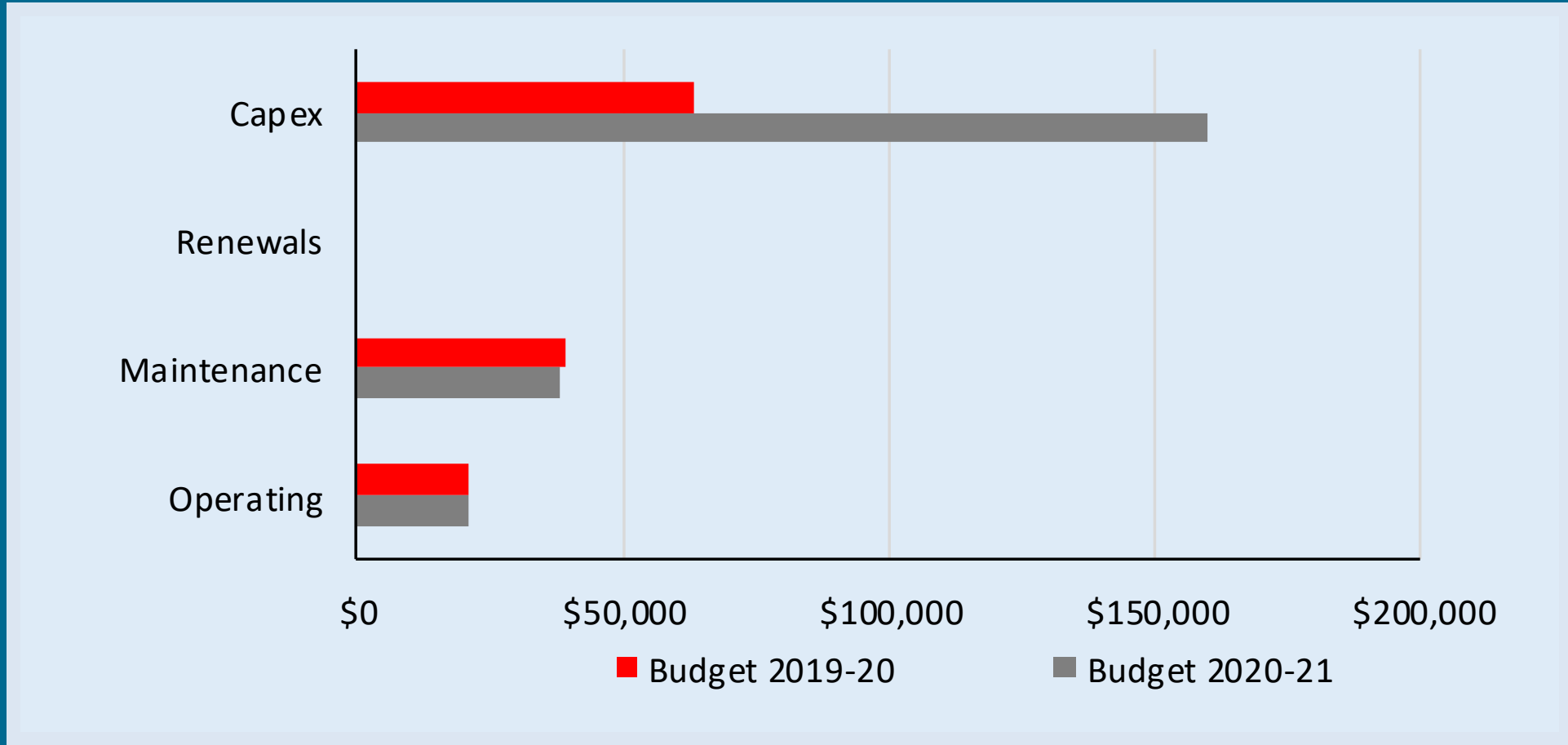
Income



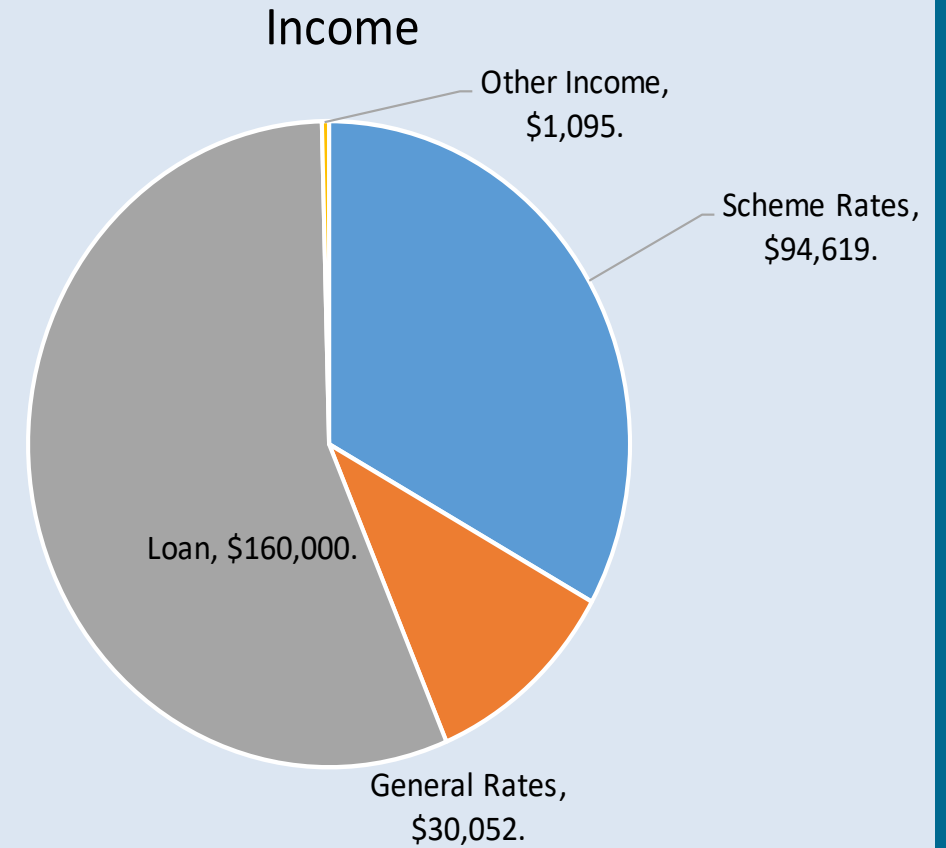
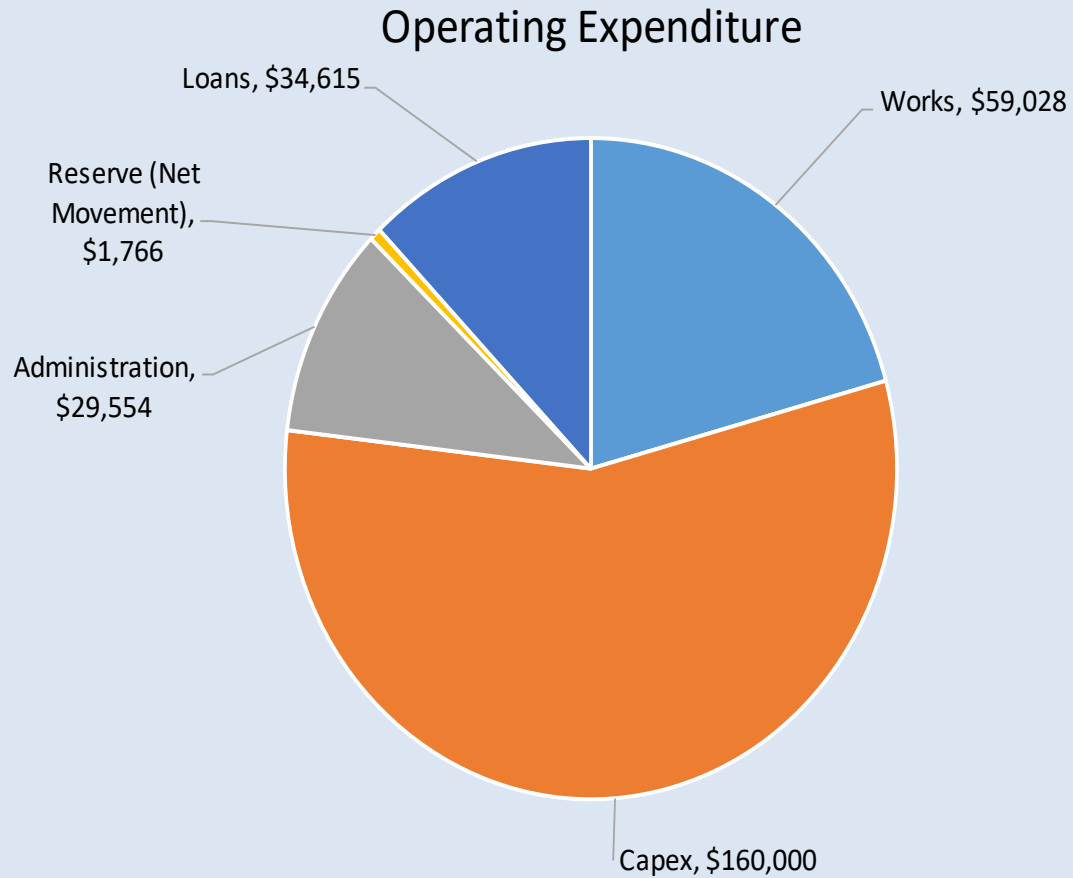
Key Activities and Issues: 2020-21

- **Scheme Budget**
 - Scheme Rate increase of 7%. (\$6,299)
 - \$160,000 loan drawdown for potential sediment control projects
- **Works Activity**
 - Increasing demand for drain maintenance.
 - On going demand for drainage improvements.
 - Sedimentation improvements within the Southern Drainage Network
- **Scheme Review/Audit**
 - A comprehensive review of the scheme classification is programmed for 2021-22.

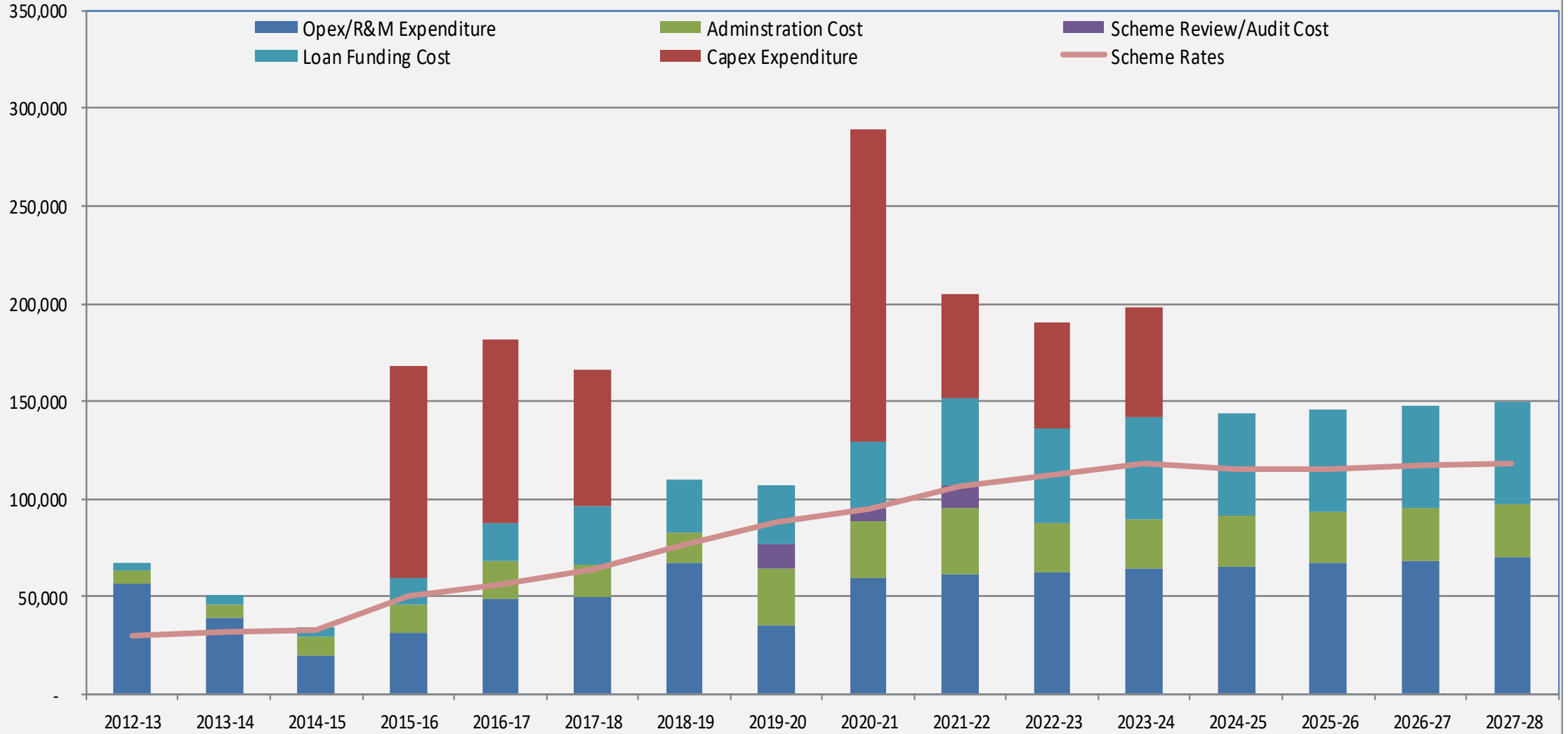
Works Budget 2019-20 vs 2020-21



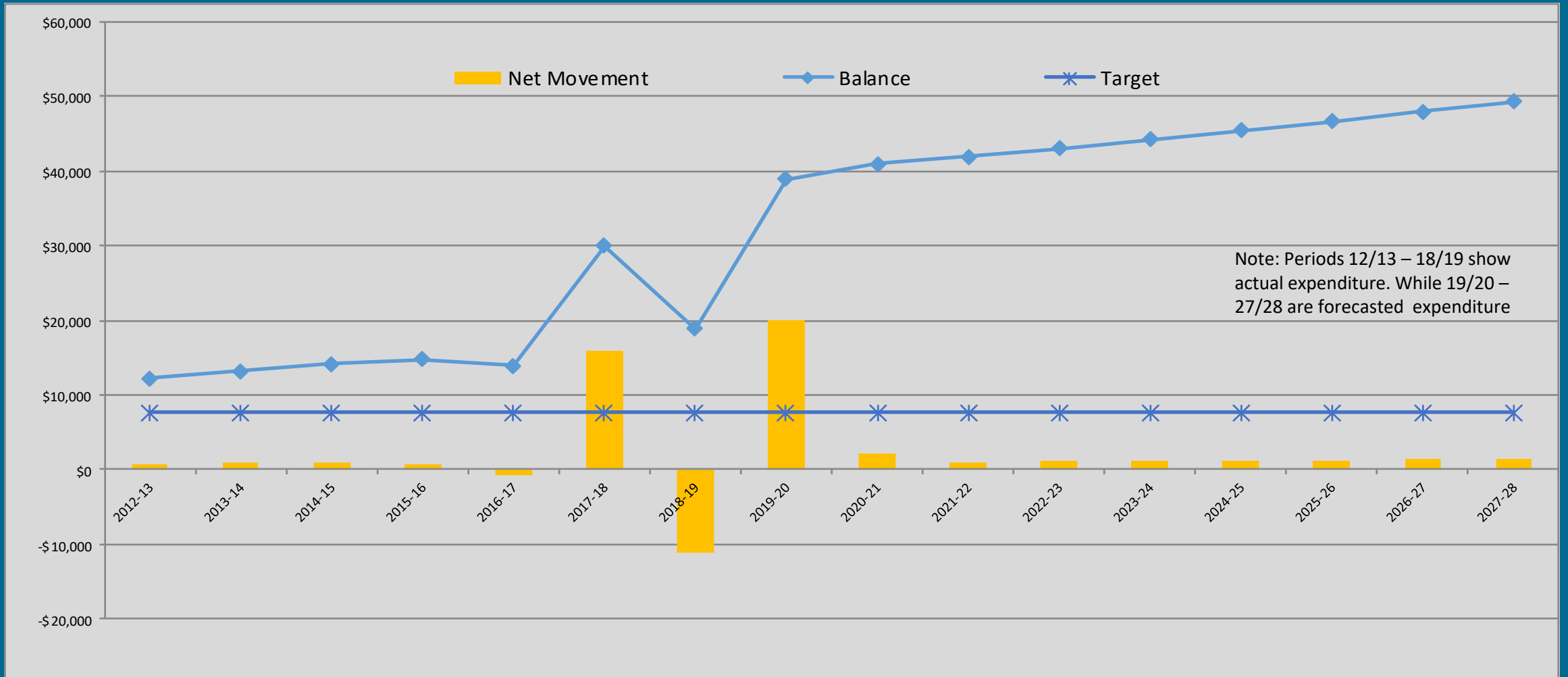
Income and Expenditure: 2019-20



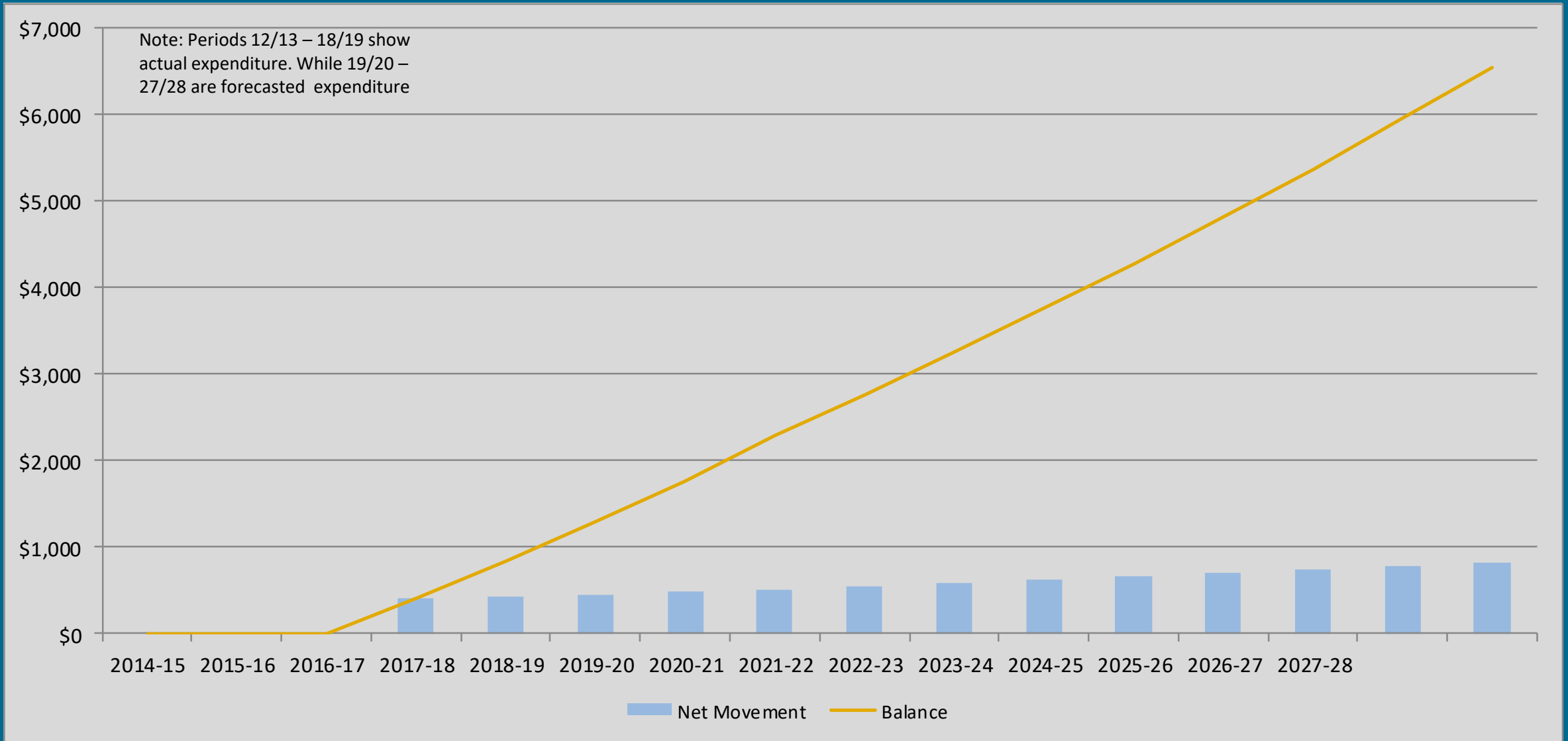
Hokio Catchment Scheme



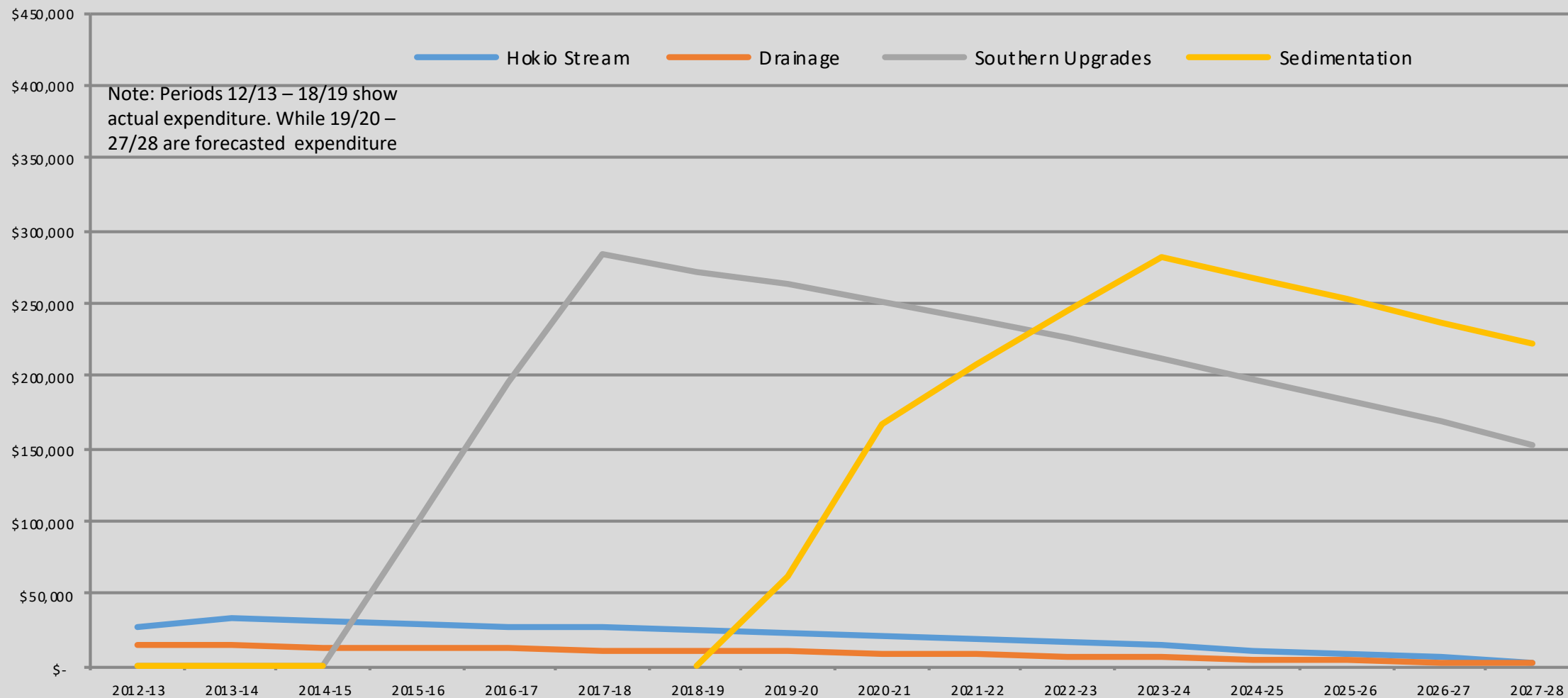
Emergency Reserve Balance



Renewal Reserve Balance



Loan Account Balances



Loan	Closing Balance 2019-20	Closing Balance 2020-21
Hokio Stream	\$21,490	\$19,353
Drainage	\$9,242	\$8,323
Southern Upgrade	\$254,009	\$240,945
Sedimentation	\$0	\$151,693

Issues	Action Required	Who	Comment
Distribution of presentations	The slides and black and white copies of the presentation unclear can we send a copy of the presentation to all those that have attended	John	Done
Lake Horowhenua	Horizons hold a meeting with all of the affected parties to discuss all of the issues affecting the lake	Ramon	
Environmental	What are the present environmental outcomes achieved from the improvements undertaken by the scheme	Natural Resources & Partnership	
Hokio Stream mouth	Wetland that was bulldozed in down at the mouth of the Hokio Scheme nothing has been done to repair the damage and Horizons is failing to arrange meeting to fix the issue	Natural Resources & Partnership	
Market gardens	HRC should be actively monitoring all of the market gardens to ensure that they all comply with the 5m between cultivated land and any water course.	Compliance	
Further information required	Vivienne Taueki and Christine Moriarty would like detailed environmental reports of the quality of the water being discharged into Lake Horowhenua	Natural Resources & Partnership	

The End