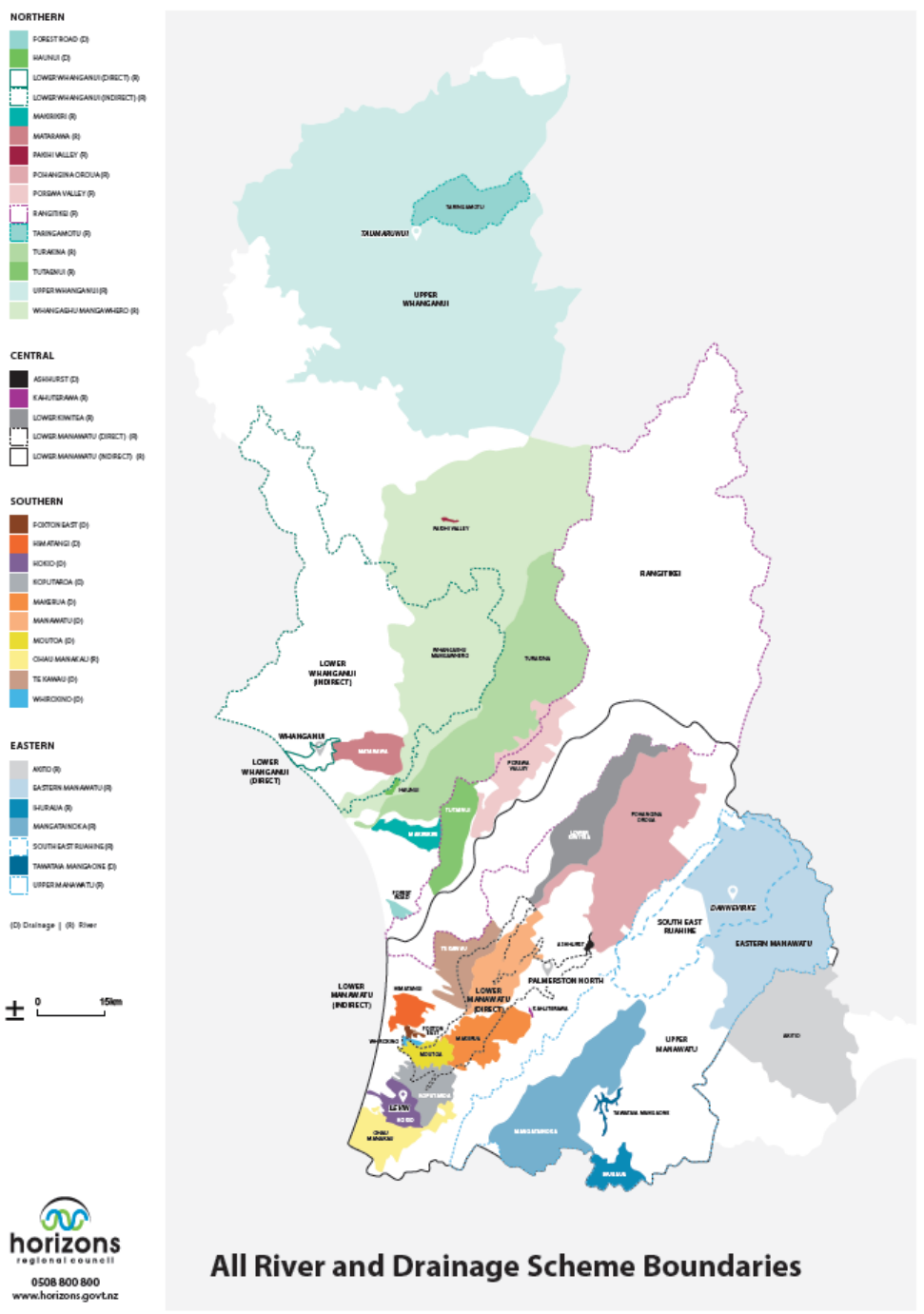




2020-21 Annual Plan Consultation
River Management Activity Group
TE KAWAU DRAINAGE SCHEME

Horizons River Management

- 32 staff with a current operating budget of \$11.8M
- 34 River and drainage schemes
- Providing protection/benefit to 10 urban areas and 75,000 hectares of rural land





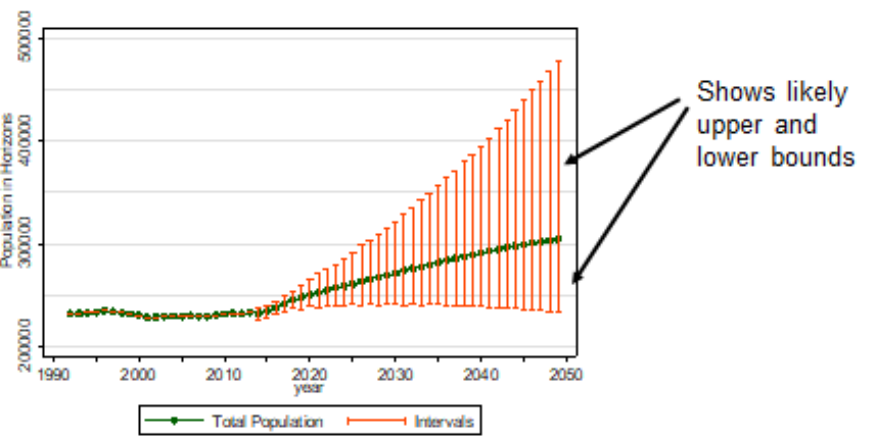
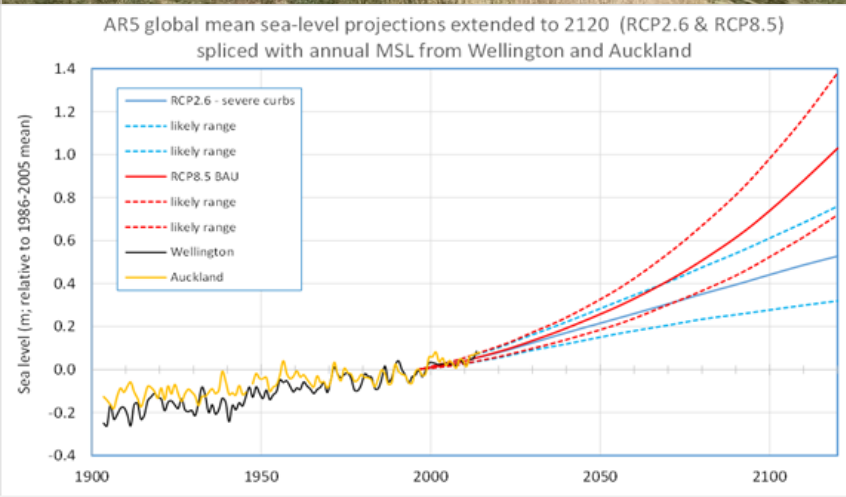
- 1,270km of river channel
- 1,100km of drain
- 23 pump stations with a total discharge capacity of 43m³/s
- 53 detention dams that store 4.3 million cubic metres of floodwater
- 500km of stopbanks



Significant river management issues for the Region

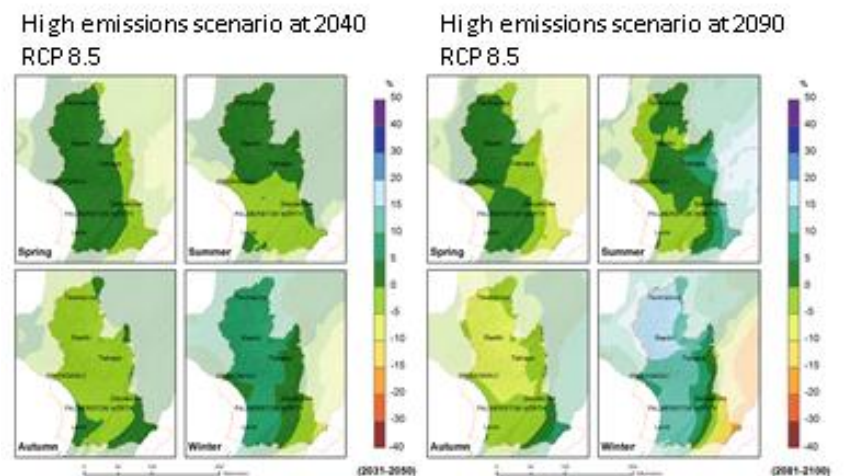
- Operational reliability
- Sediment build-up reducing flood protection standards
- Urban growth
- Climate change

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



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

Horizons rainfall projections



TE KAWAU DRAINAGE SCHEME

Strategic Direction

Review the current configuration of the scheme to ensure that the scheme is providing a consistent level of service to all of the scheme ratepayers.

Aim

Maintain the existing network of drainage channels and flood protection and review the remaining life of the scheme major assets.

Scheme Design Criteria

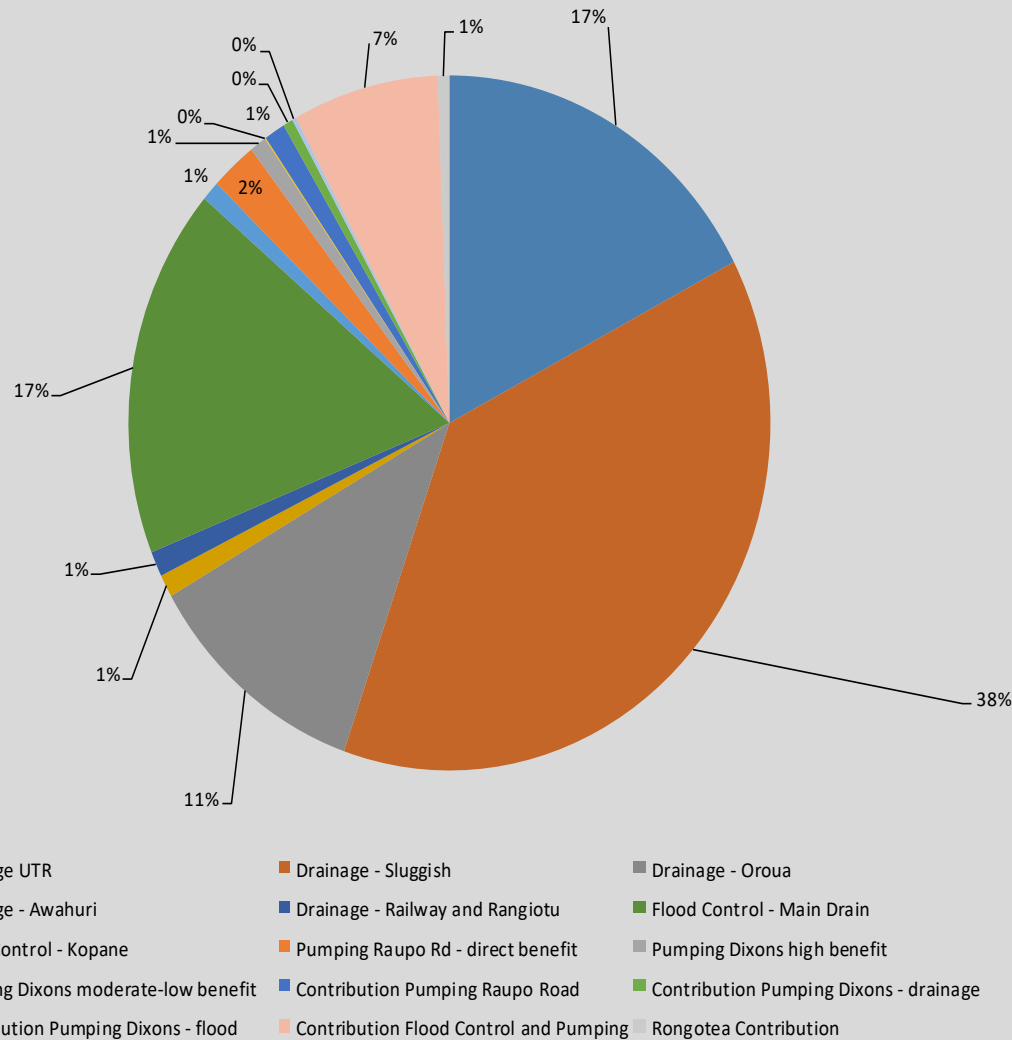
- Drainage Channels:
 - Design is based on a 3-5 year rainfall event.
 - Drain full drainage coefficient of 25mm/day.
- Culverts:
 - Designed based on drain full plus 30%.
 - Designed for a 50mm head loss over the culvert.

TE KAWAU DRAINAGE SCHEME

Scheme Design Criteria Continued

- Stopbanks:
 - Main Drain stopbanks are designed for a 3-4 year event before over topping of spillway is likely to occur.
- Pumping
 - Pumping Co-efficient:
 - Raupo Road = 12.4mm/ha/day
 - Dixons (Local Flows) = 52mm/ha/day
 - Dixons (spill over from No.6) = 4.2mm/ha/day

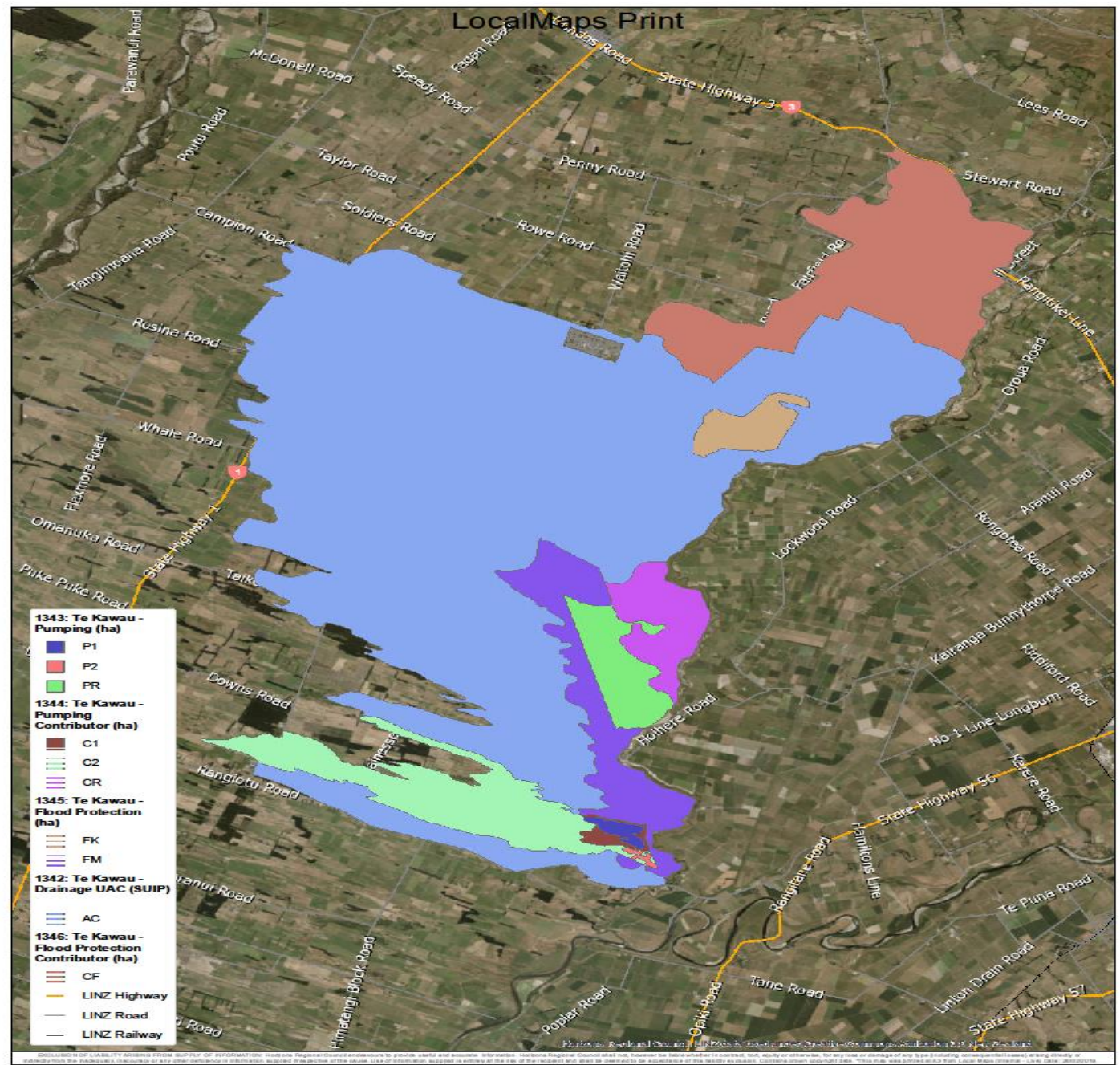
Scheme Funding



Funding Policy

The Schemes funding comes from three revenue sources:

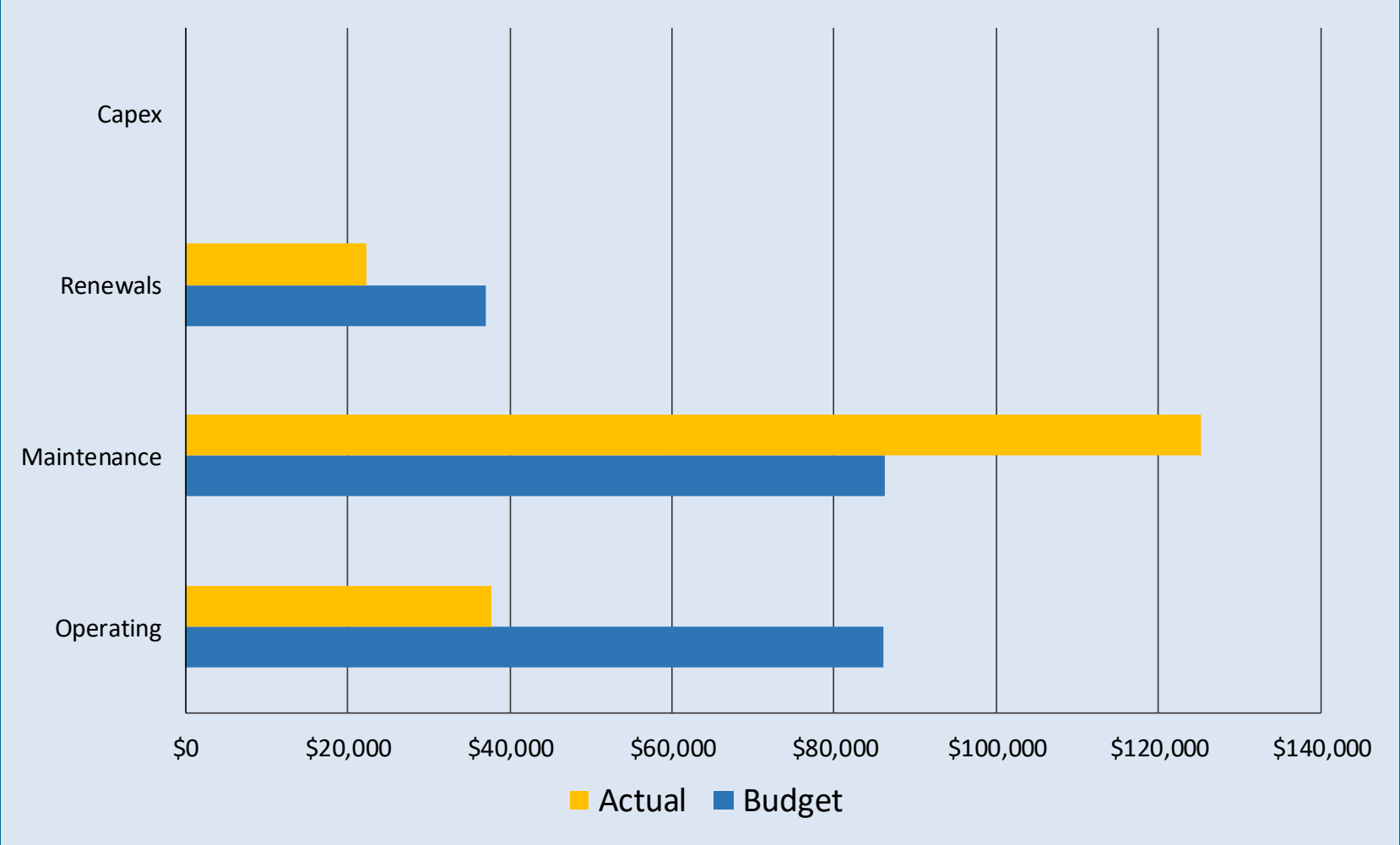
- Targeted Rates – differential targeted rates levied on properties directly benefiting from or causing the need for the work. 80% of scheme cost.
- General Rates – uniformed rate levied over all properties in the Horizons Region. 20% of the scheme cost.
- Other income – Revenue from lease land, forestry blocks, scheme reserves, etc. held by the scheme. This is used to reduce the level of the targeted rate



Key Activities and Issues: 2019-2020

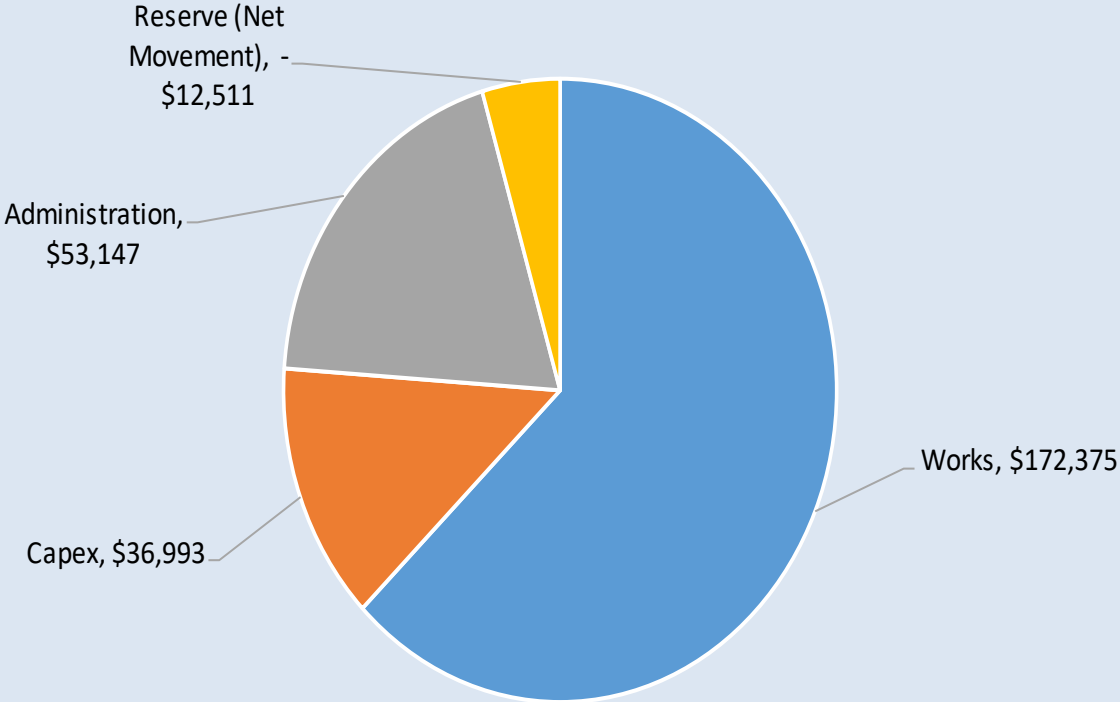
- **Scheme Expenditure**
 - Expenditure is on track to be within the original budget.
- **Works Activity**
 - Drain maintenance program is currently being prepared and work will hopefully be underway by mid March.
 - A review performance of the Sluggish Main Drain between Main Drain Road and Leen Road is currently underway.

Works Budget vs Actual: 2019-20

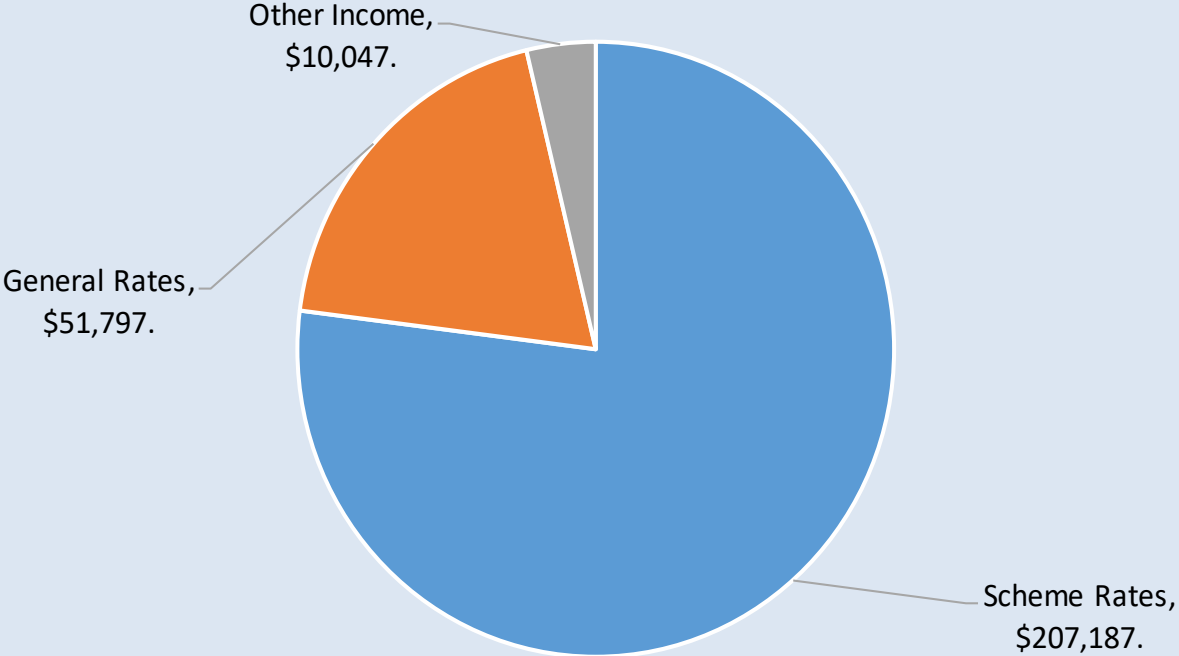


Income and Expenditure: 2019-2020

Operating Expenditure



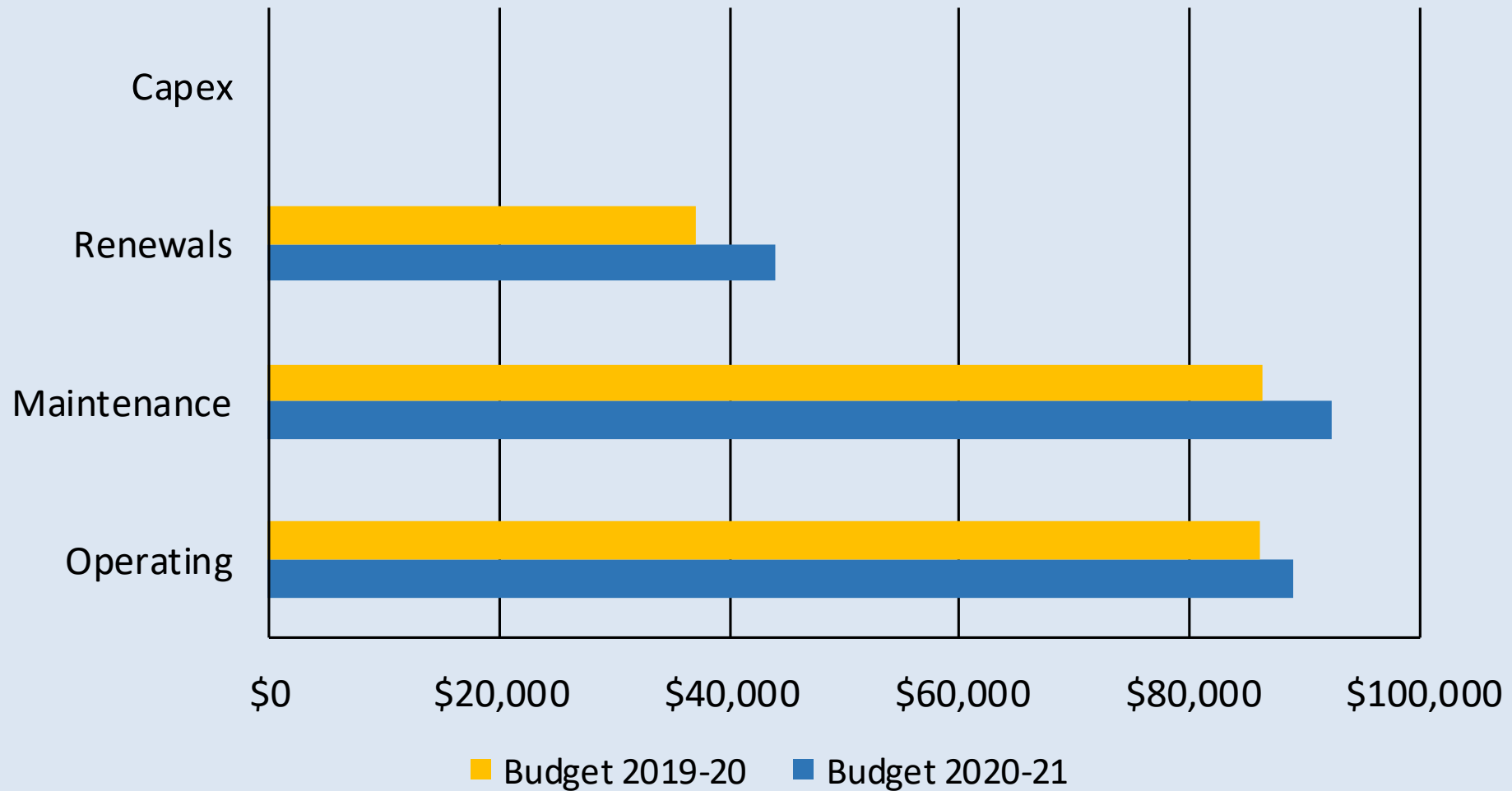
Income



Key Activities and Issues: 2020-21

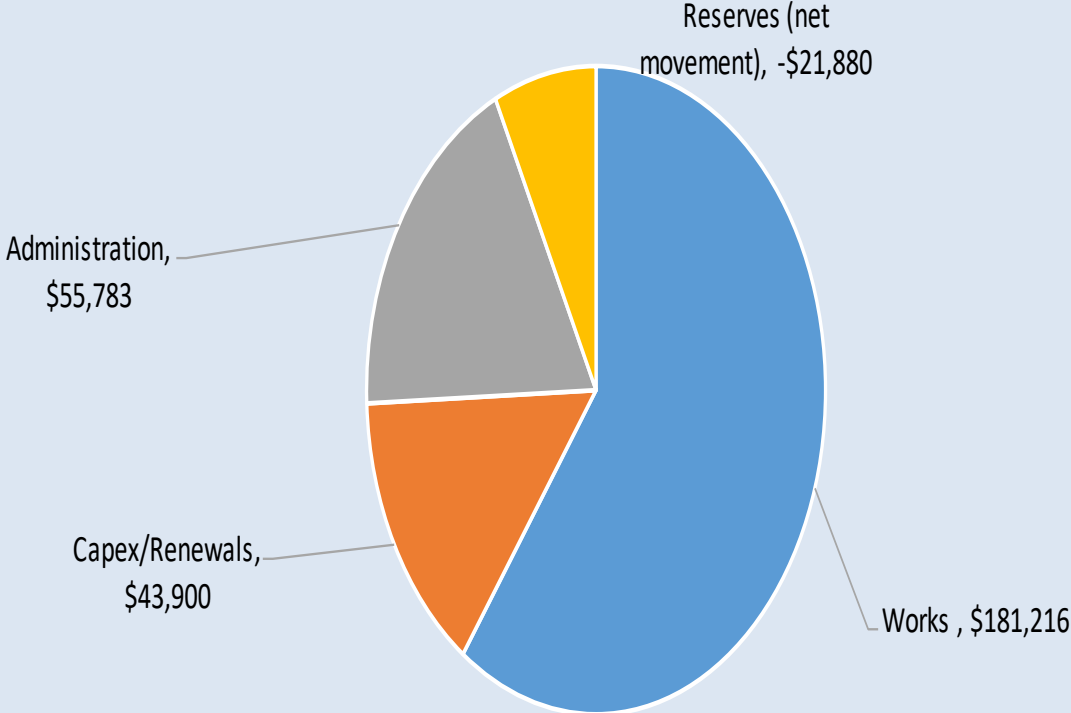
- **Scheme Budget**
 - \$8,841 increase in works expenditure
 - Scheme Rate increase of 4%. (\$7,184)
 - Draw down on Emergency \$10k.
 - On Track with LTP budget expectations
- **Works Activity**
 - On going maintenance of scheme assets.
- **Review/Audit**
 - Review of floodgates and Pump stations and development of O&M Manuals starting 2022-23.

Works Budget 2019-2020 vs 2020-21

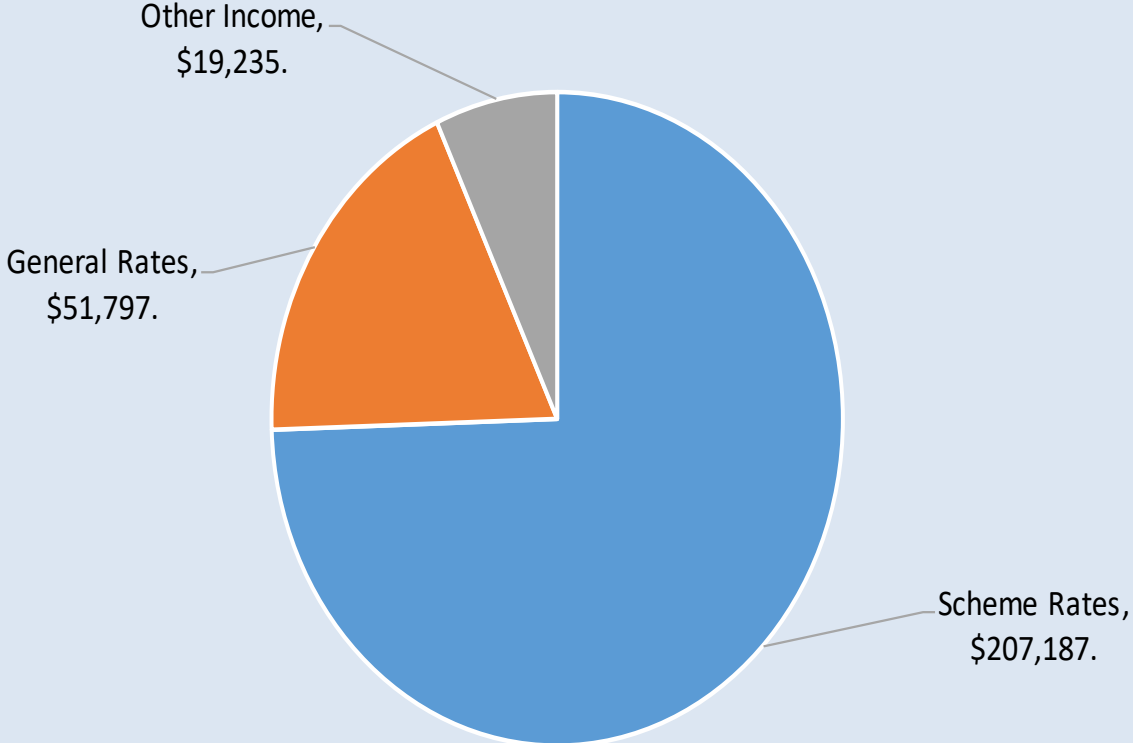


Income and Expenditure 2020-21

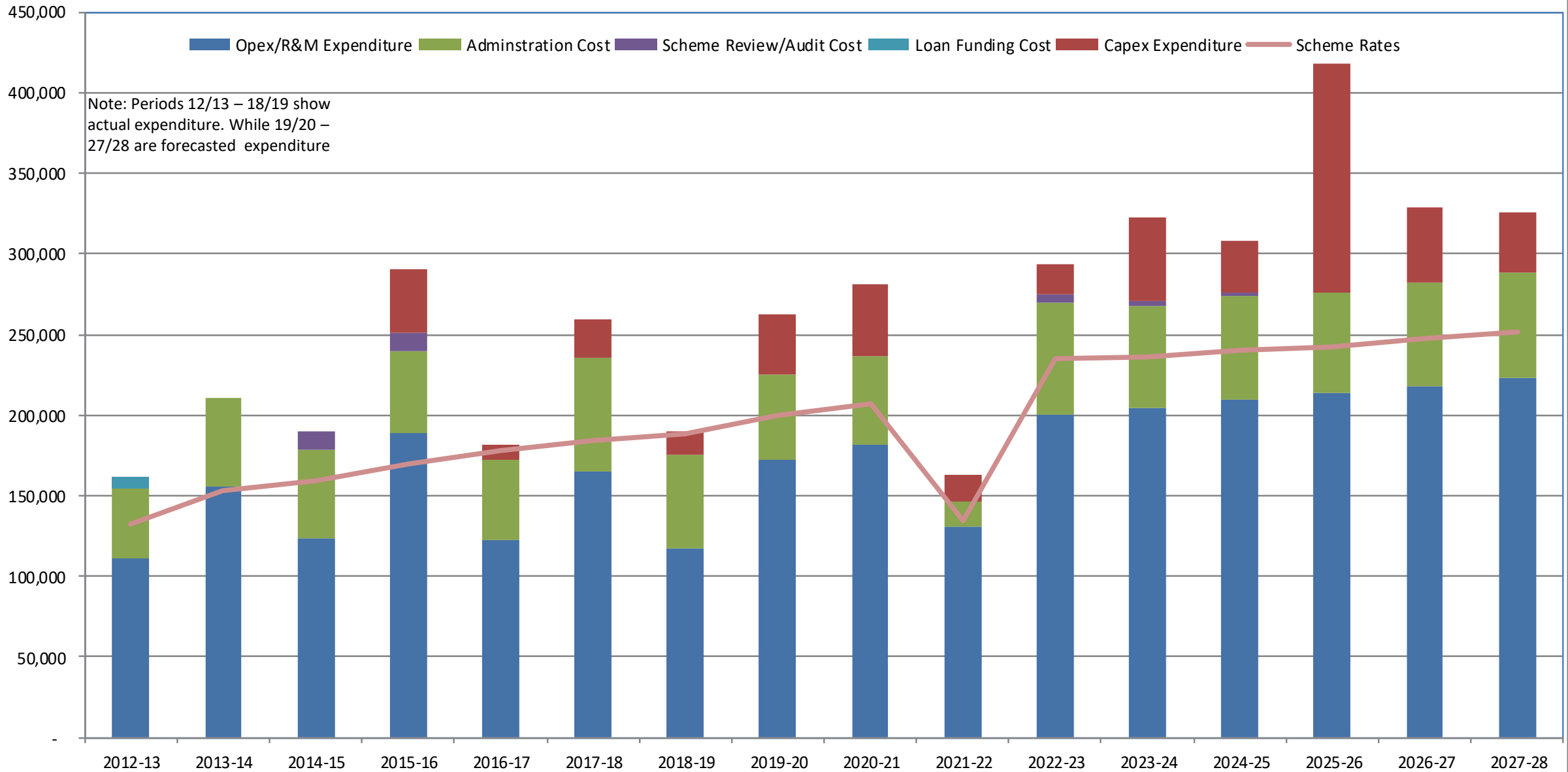
Operating Expenditure



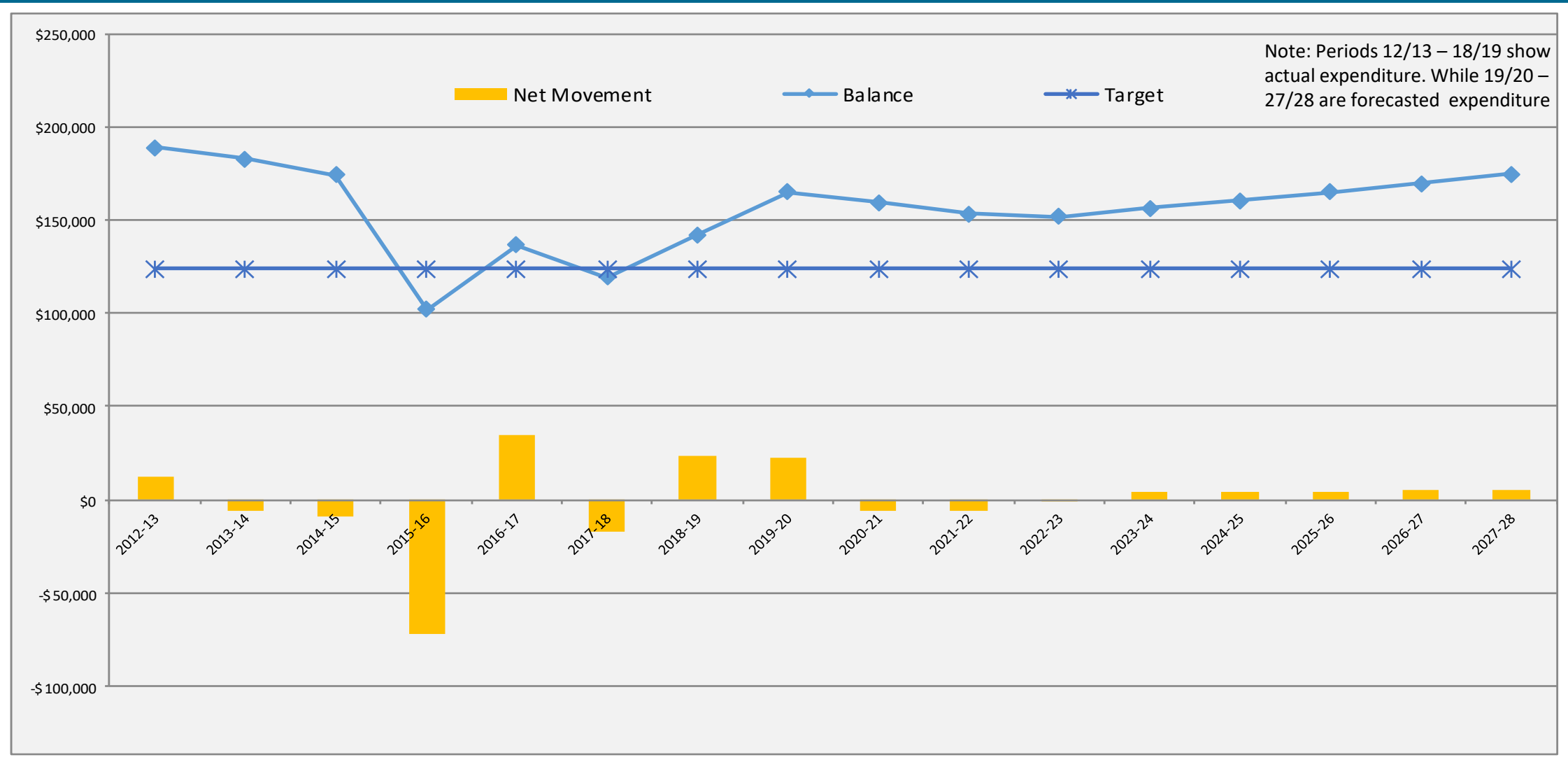
Income



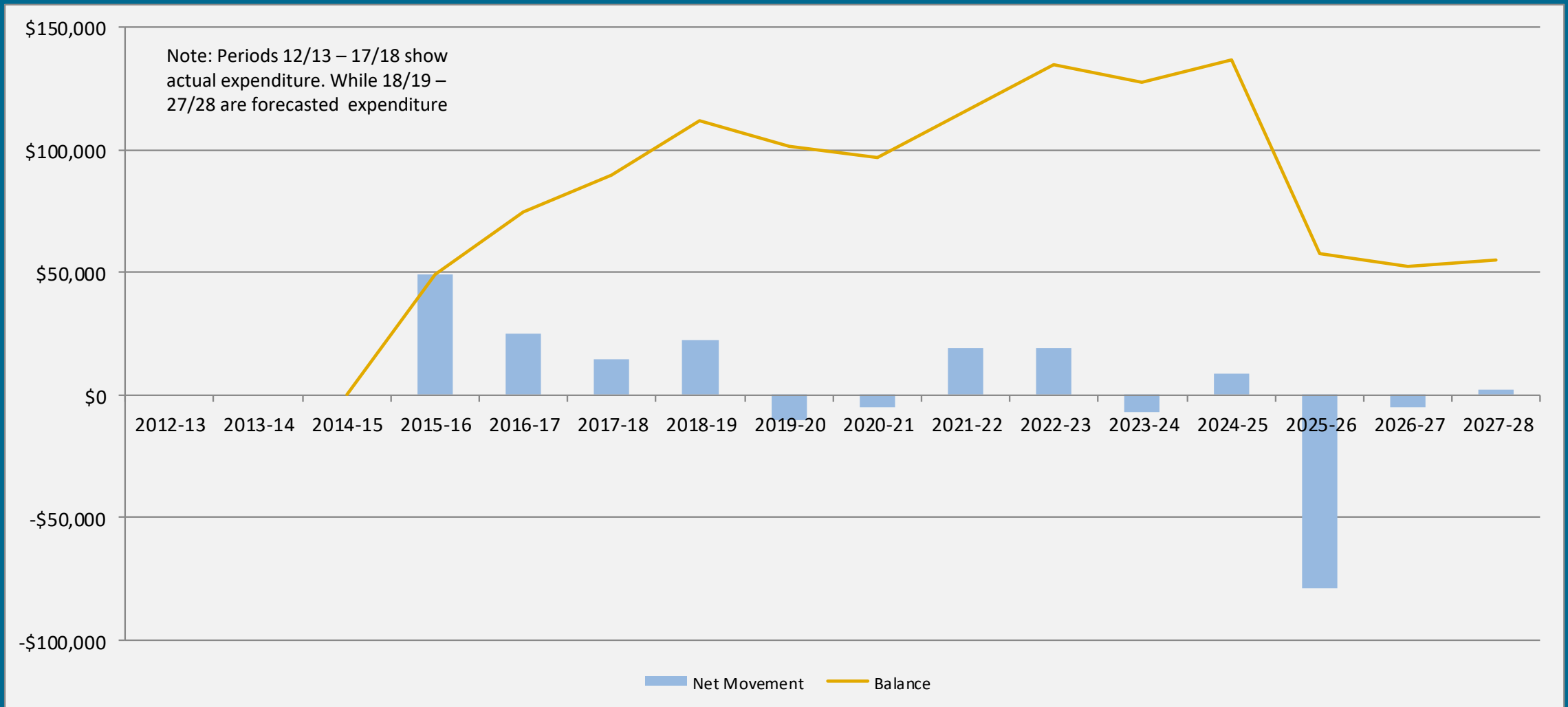
Te Kawau Drainage Scheme



Emergency Reserve Balance



Renewal Reserve Balance



Issues Arising from 2019 Catchment Community Meetings

Issues	Action Required	Who	Comment
Drain Access	The need to inform landowners regarding the access to scheme drains for maintenance	john	Hope to have newsletter out before the end of the financial year
HRC powers in regards to drain maintenance	Investigate what powers HRC have to undertake the work on a individuals property	Ramon/ David cotton	council lawyers investigated
Drain Maintenance	<ul style="list-style-type: none"> Gum trees along main drain at Tiakorea bridge need to come out Johnson drain at Leen road needs to be machine cleaned 	Emily	Completed

The End