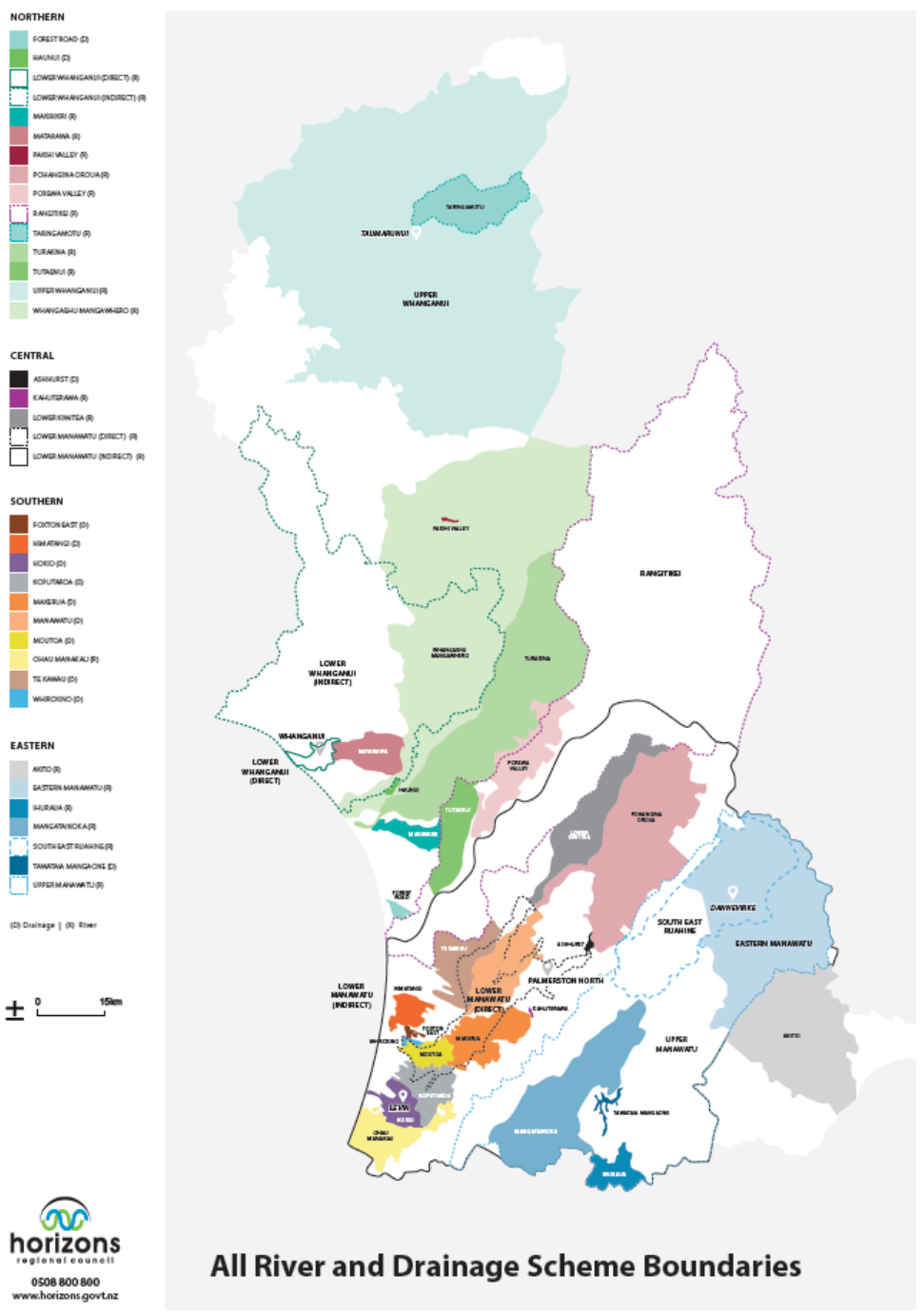




2020-2021 Annual Plan Consultation
River Management Activity Group
MOUTOA-WHIROKINO DRAINAGE SCHEME

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





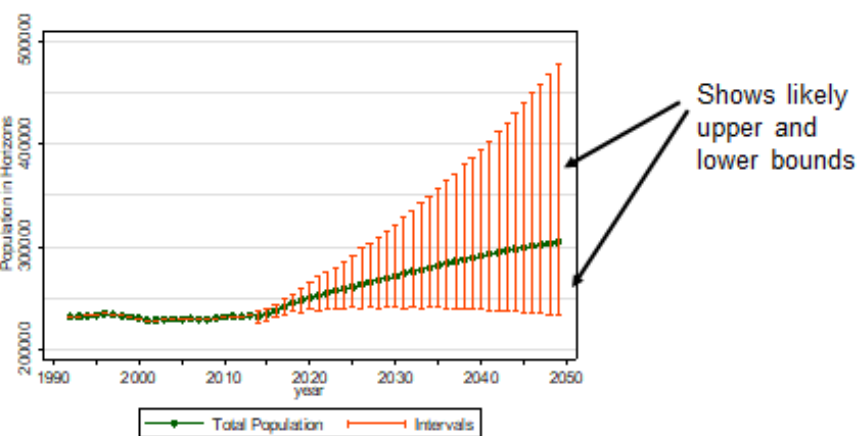
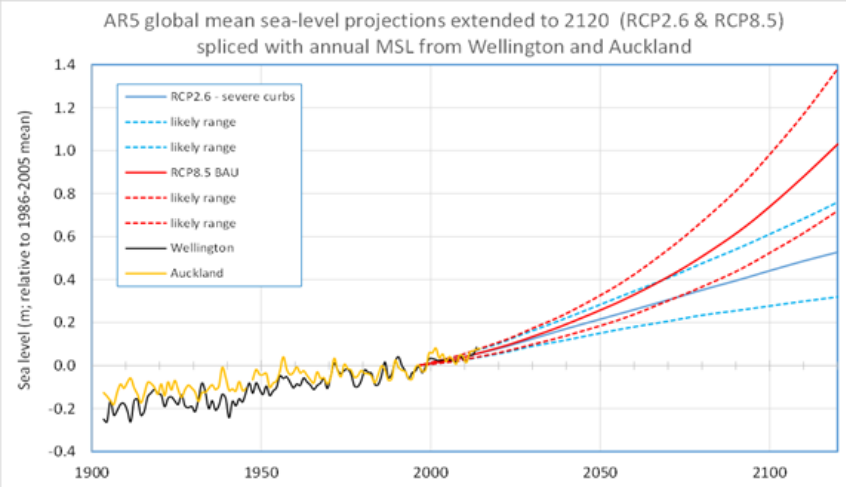
- 1,270km of river channel
- 1,100km of drain
- 23 pump stations with a total discharge capacity of 43m³/s
- 53 detention dams that store 4.3 million cubic metres of floodwater
- 500km of stopbanks



Significant river management issues for the Region

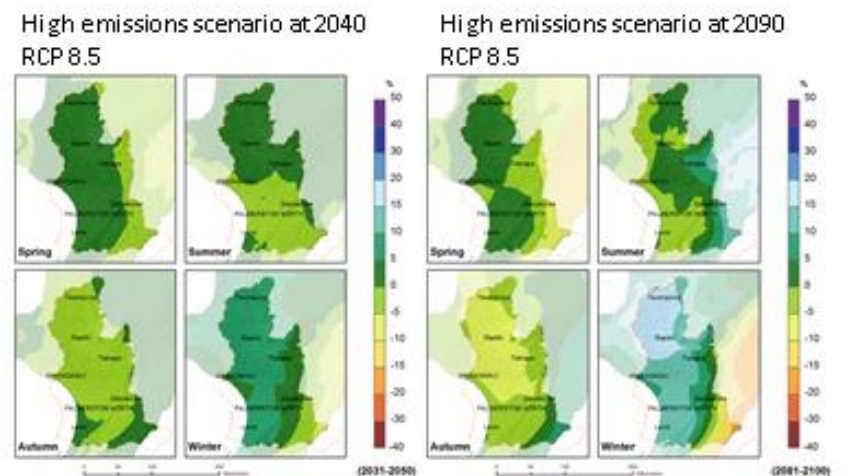
- Operational reliability
- Sediment build-up reducing flood protection standards

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



- Urban growth
- Climate change

Moutoa-Whirokino Drainage Scheme



Scheme Facts

- Scheme Assets.
 - 16 floodgated culverts
 - 77 km of drainage channels
 - 6 Pump stations
 - 1 Spillway
- Total Asset Value: \$6,971,878.
- Scheme Area 5,100ha.
- Predominantly servicing dairy, horticultural land and an increasing number of lifestyle blocks.
- The Moutoa Floodway flows through the centre of the scheme.

MOUTOA-WHIROKINO DRAINAGE SCHEME

Strategic Direction

The focus of the Scheme over the next 3 years to review the current configuration of the scheme to ensure on going reliability of the assets.

Aim

Maintain the existing network of drainage channels and pump stations and review the remaining life of the scheme major assets.

Scheme Design Criteria

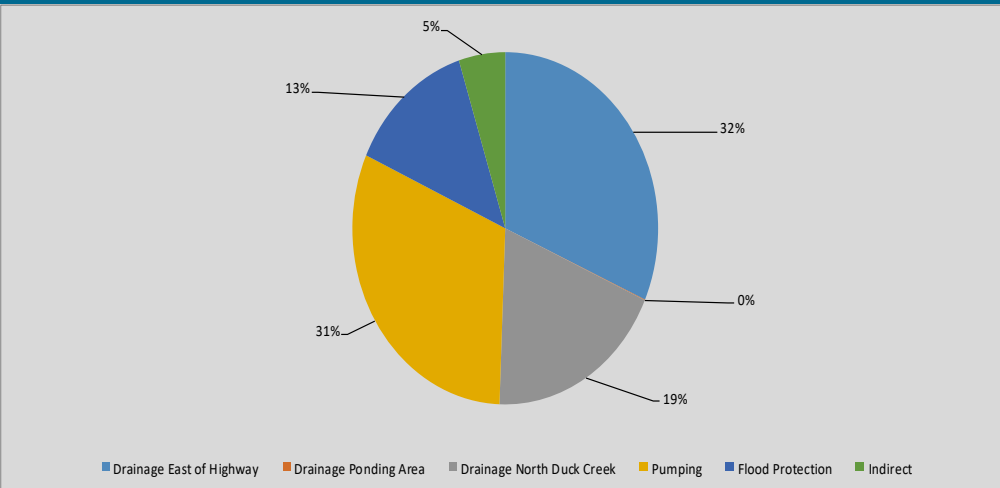
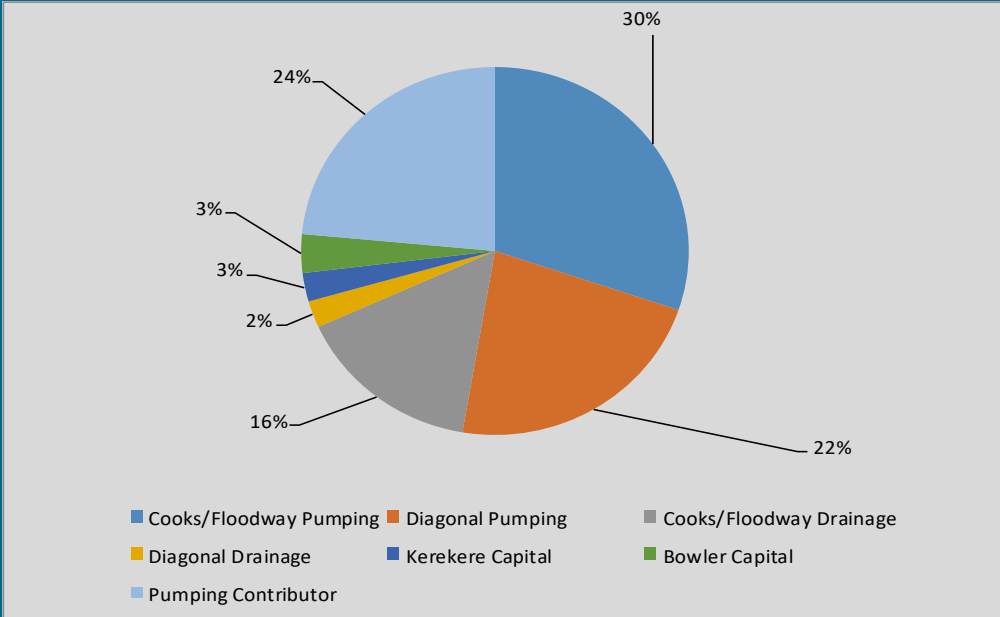
- Drainage Channels:
 - Design is based on a 2-5 year rainfall event.
 - Drain full drainage coefficient of 25mm/day.
- Culverts:
 - Designed based on drain full plus 30%.
 - Designed for a 50mm head loss over the culvert.

MOUTOA-WHIROKINO DRAINAGE SCHEME

Scheme Design Criteria Continued

- Pumping
 - Designed for 20mm/day discharge in the Cooks and Diagonal area.
 - Designed for 15mm/day discharge in the Bowler, Kerekere and Pleuger area.
 - Designed for 15mm/day discharge in the Whirokino Area

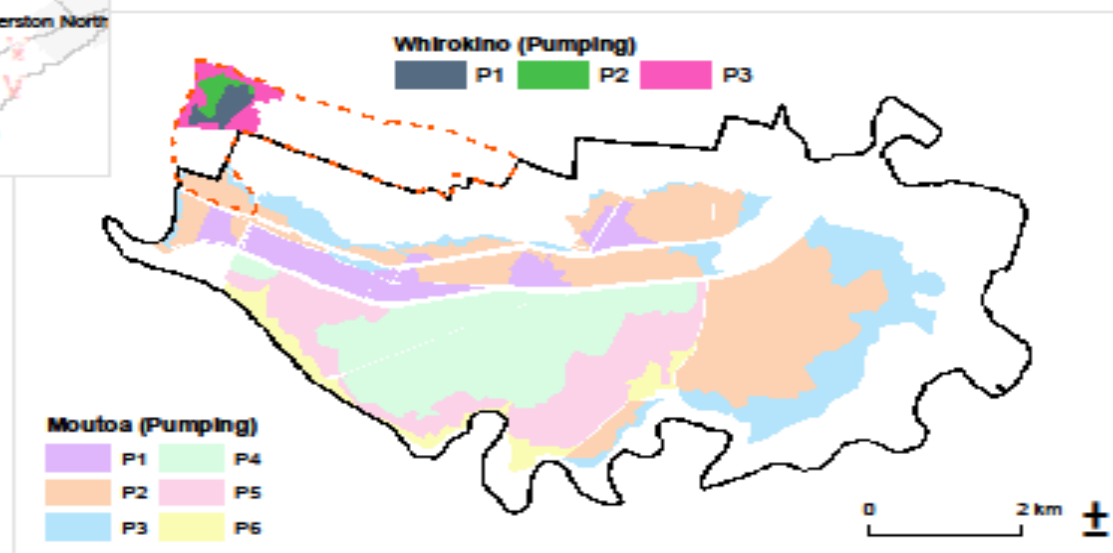
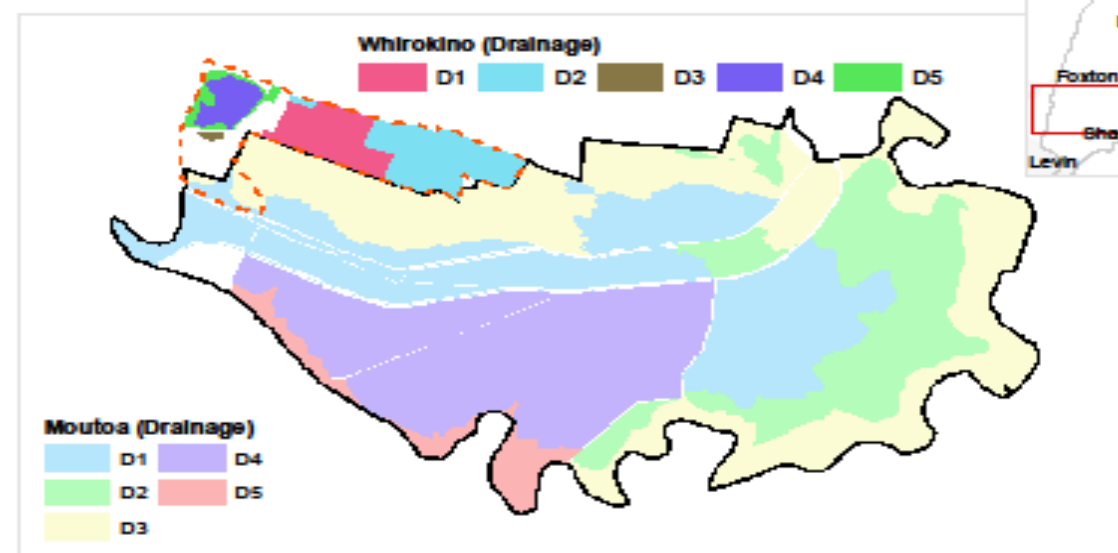
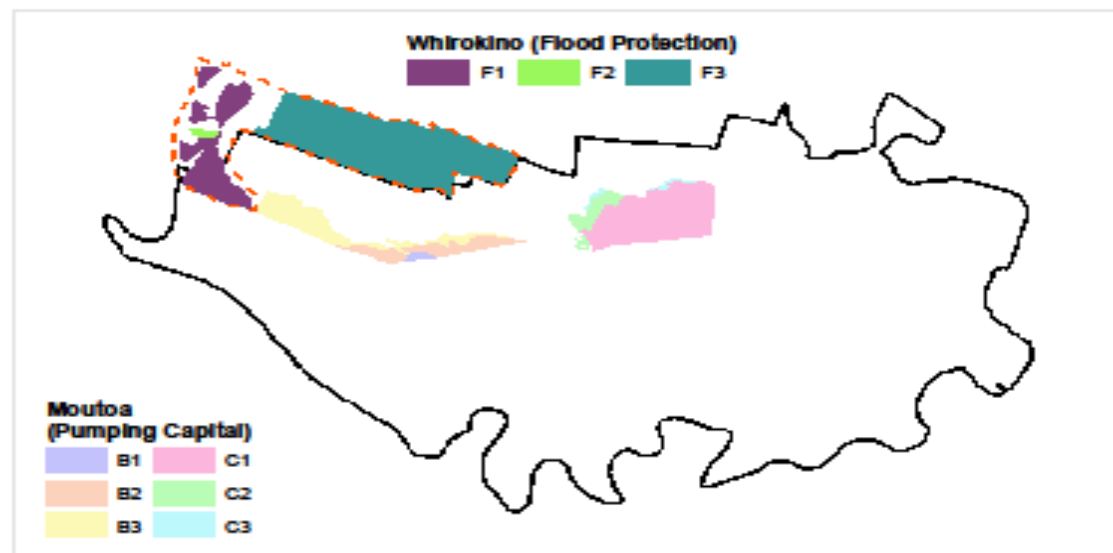
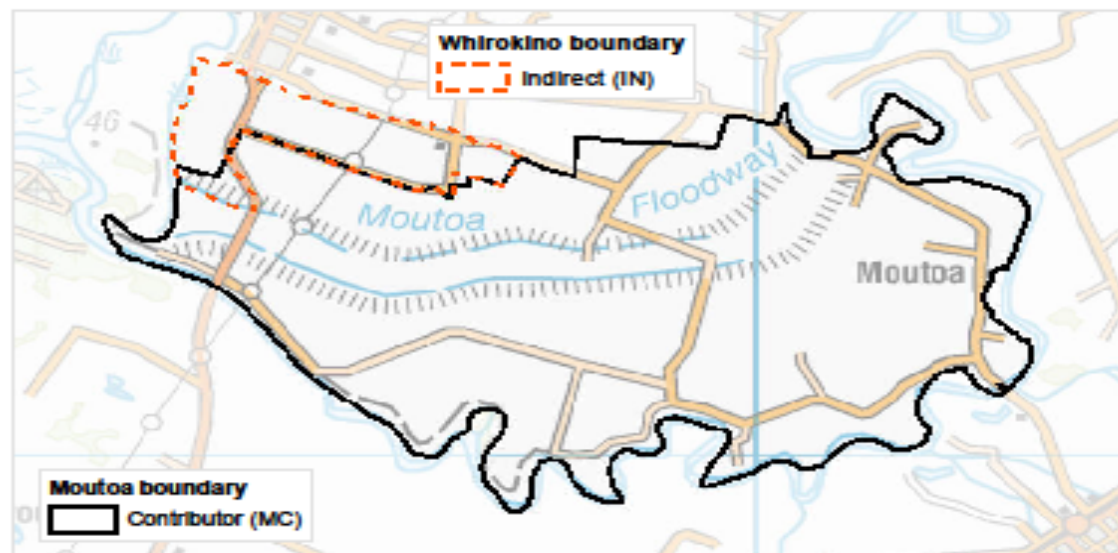
Scheme Funding



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



To be used in conjunction with the disclaimer at www.horizons.govt.nz

Key Activities and Issues: 2019-20

- **Scheme Expenditure**
 - Expenditure is on track to stay within the original budget although it will be tight.
 - Power cost continue to be high due to the increased pumping again in the early part of the year.
 - The wet start to the year saw staff kept busy cleaning weed of the screens at the pump station.
- **Works Activity**
 - Drain maintenance programs are currently being prepared and work should commence in early April.
 - The large Pleuger has been pulled after the electrical inspections found that the pump had earthed
 - New cradle is being built for the Pleuger.

Key Activities and Issues: 2019-20

- **Works Activity**

- The main power cable has been replaced going from the transformer to the pump shed.
- The footing and piping for a small submersible have been installed at Kerekere road and specifications and drawing are being prepared for the electrics.

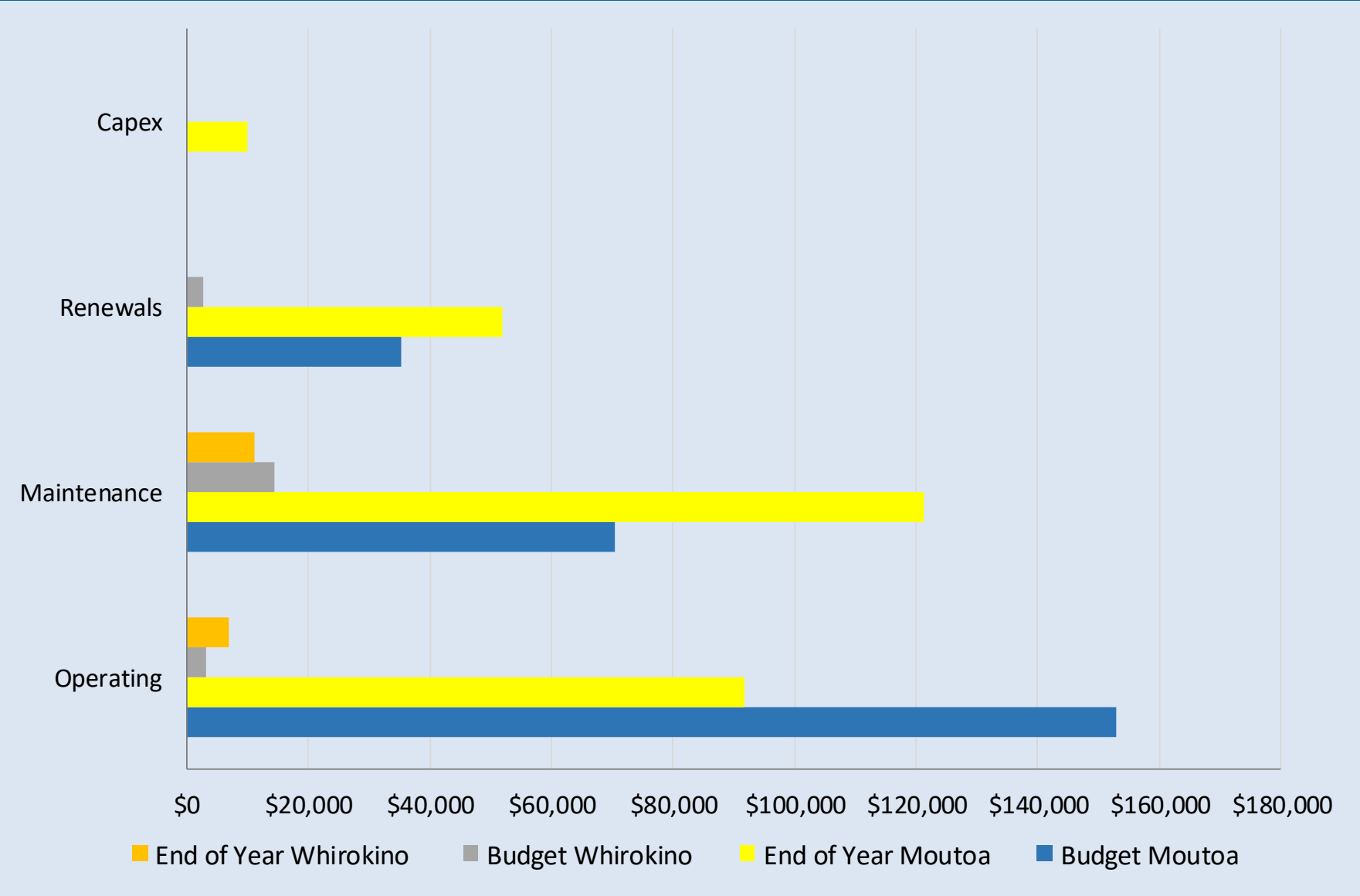


Main drain weed



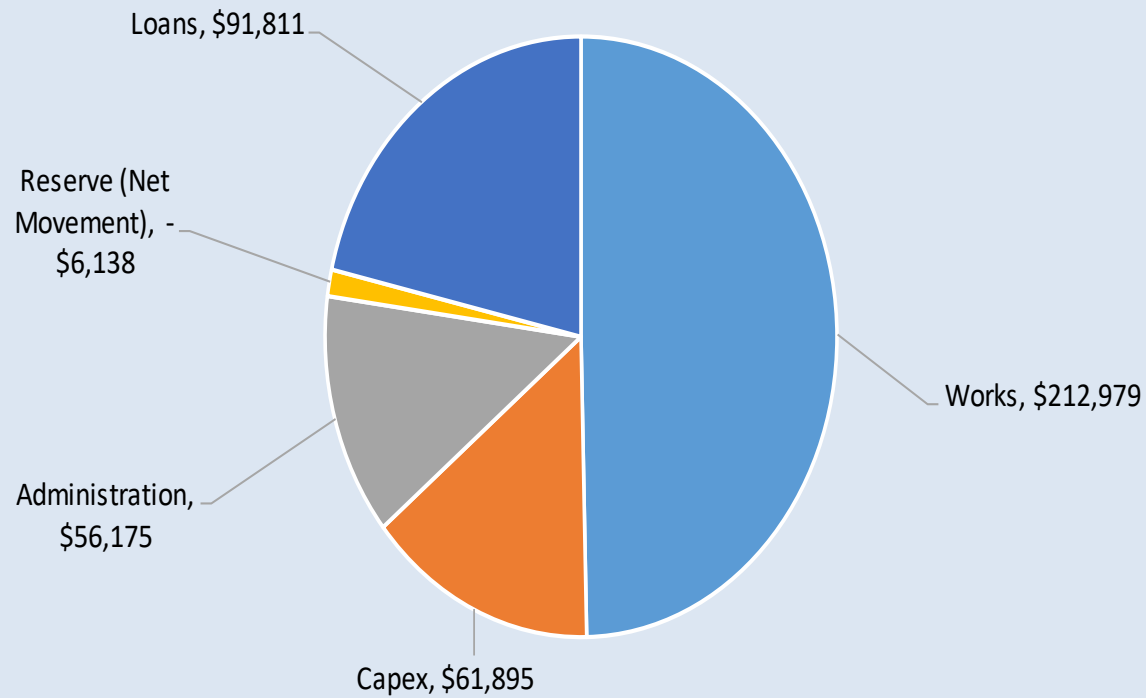
Pleuger Pump

Works Budget vs Actual: 2019-20

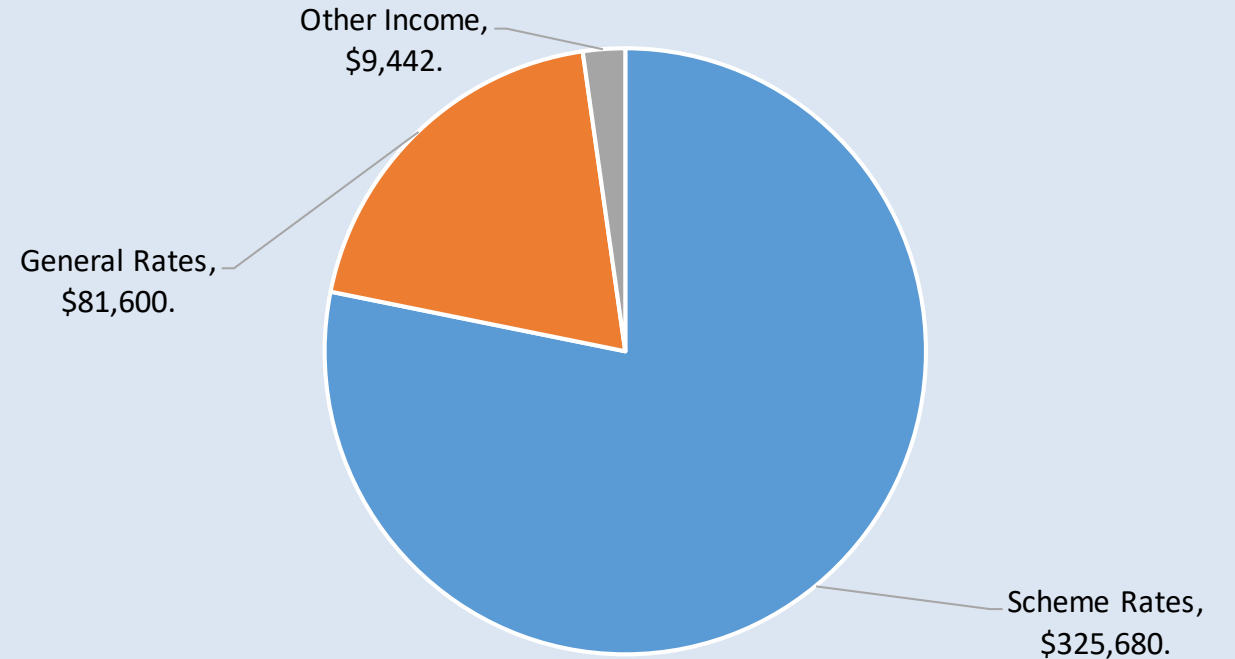


Moutoa Income and Expenditure: 2019-20

Operating Expenditure

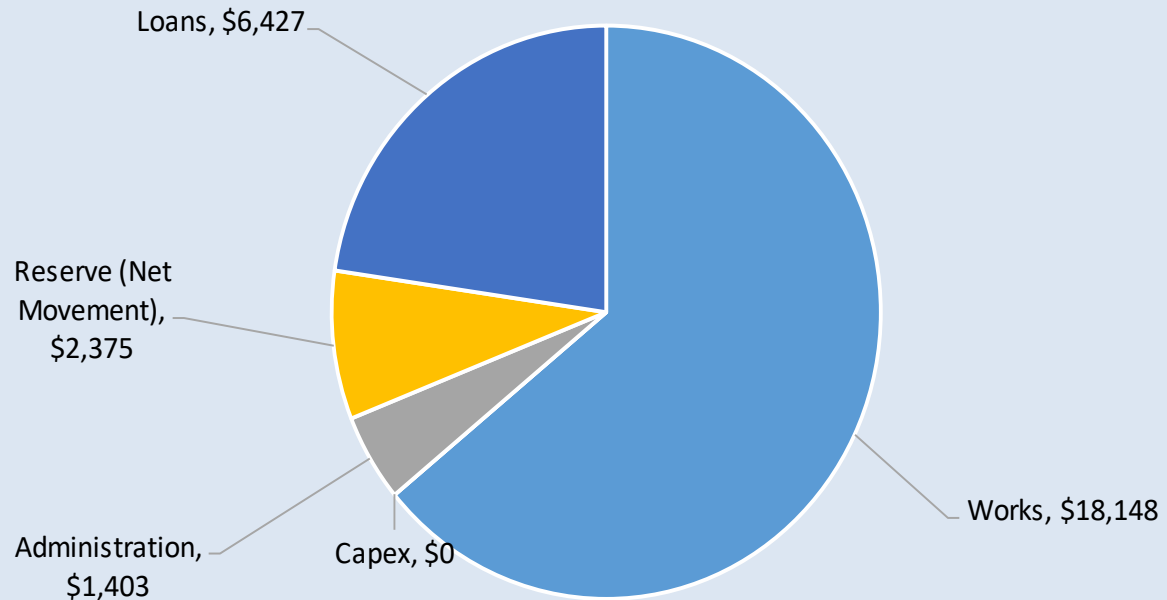


Income

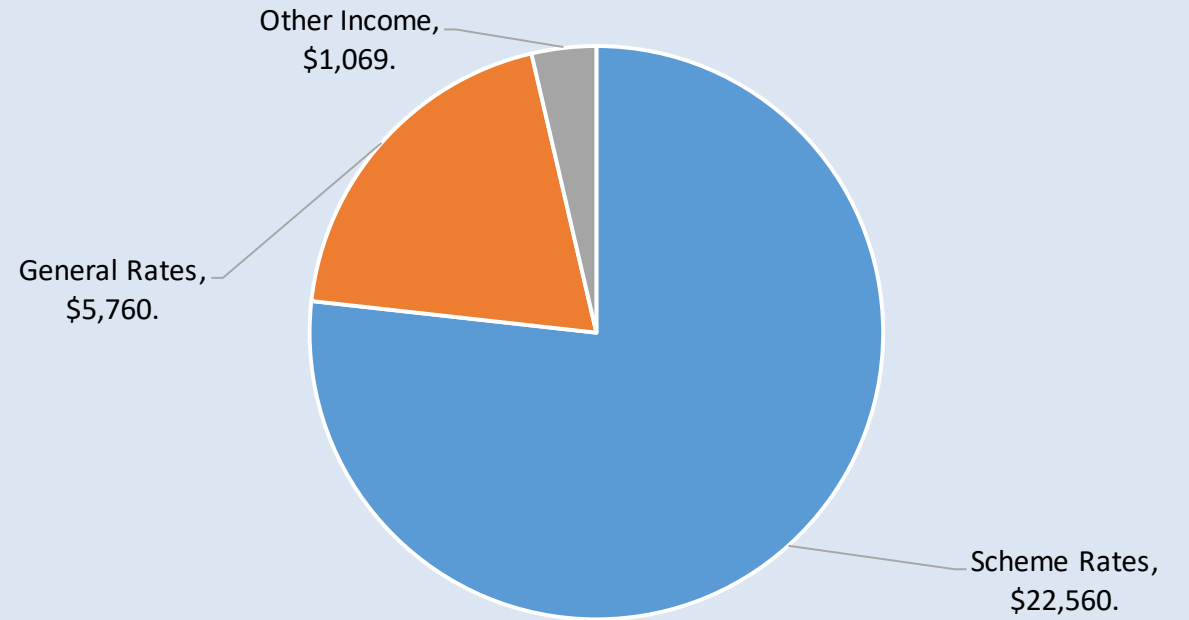


Whirokino Income and Expenditure: 2019-20

Operating Expenditure



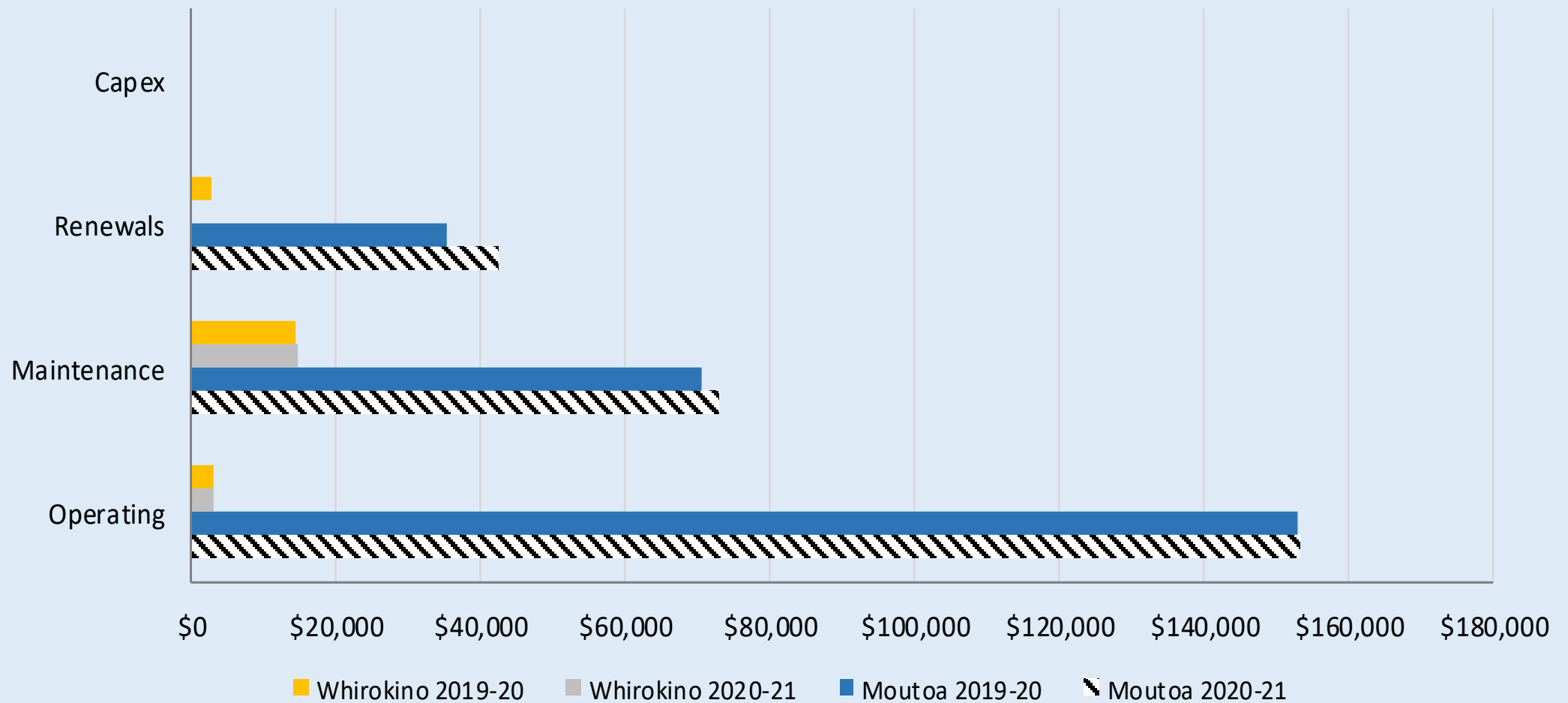
Income



Key Activities and Issues: 2020-21

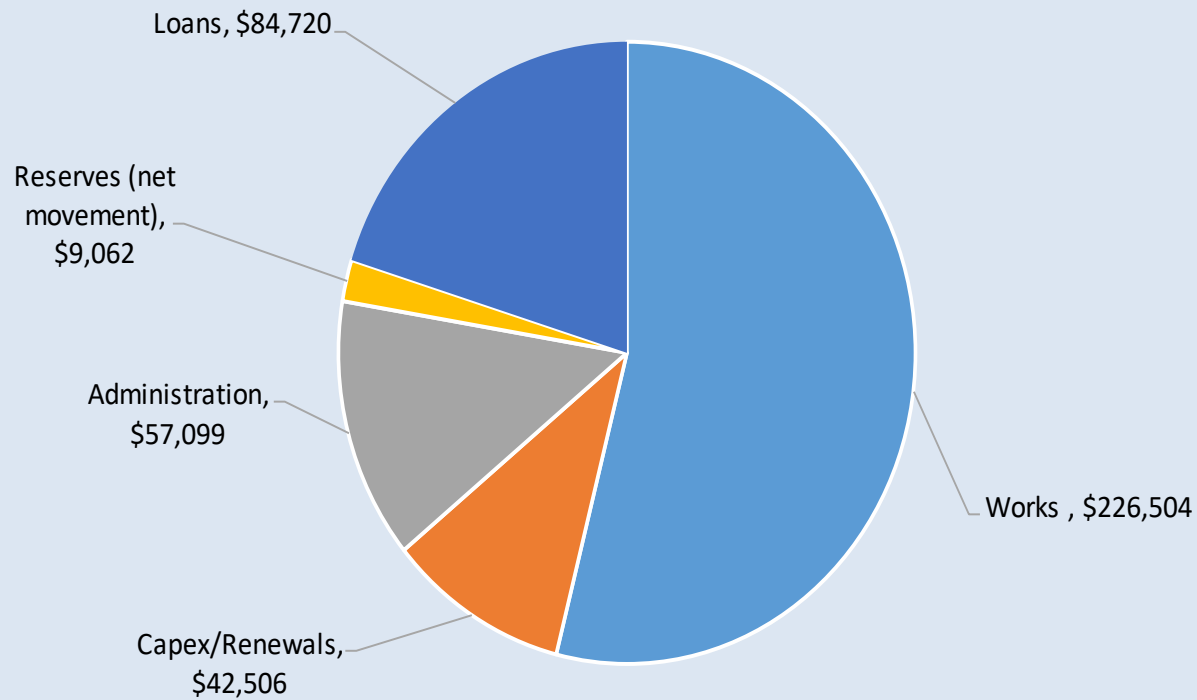
- **Scheme Budget (Whirokino)**
 - \$254 increase in works expenditure.
 - Scheme Rate increase of 0%.
 - \$1,000 withdrawn from Emergency Reserve Fund.
 - On track with LTP budget expectations
- **Scheme Budget (Moutoa)**
 - \$ 2,998 increase in works expenditure.
 - Scheme Rate increase of 2%. (\$6,049)
 - On track with LTP budget expectations
- **Works Activity**
 - Minor increase in Drain Maintenance Cost.

Works Budget 2019-20 vs 2020-21

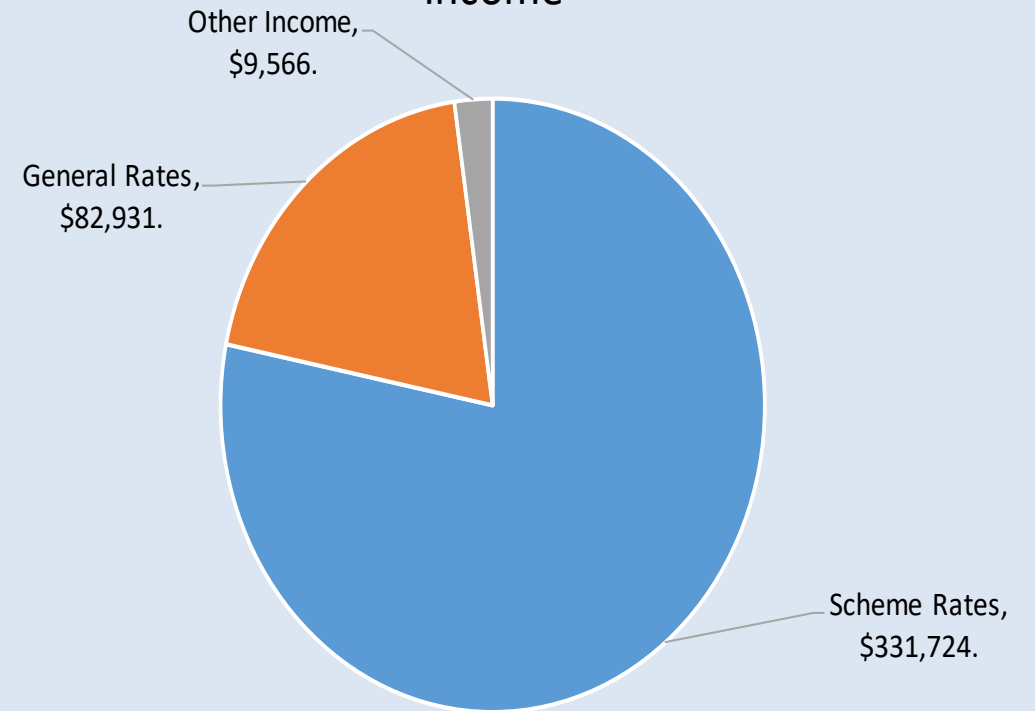


Moutoa Income and Expenditure 2020-21

Operating Expenditure

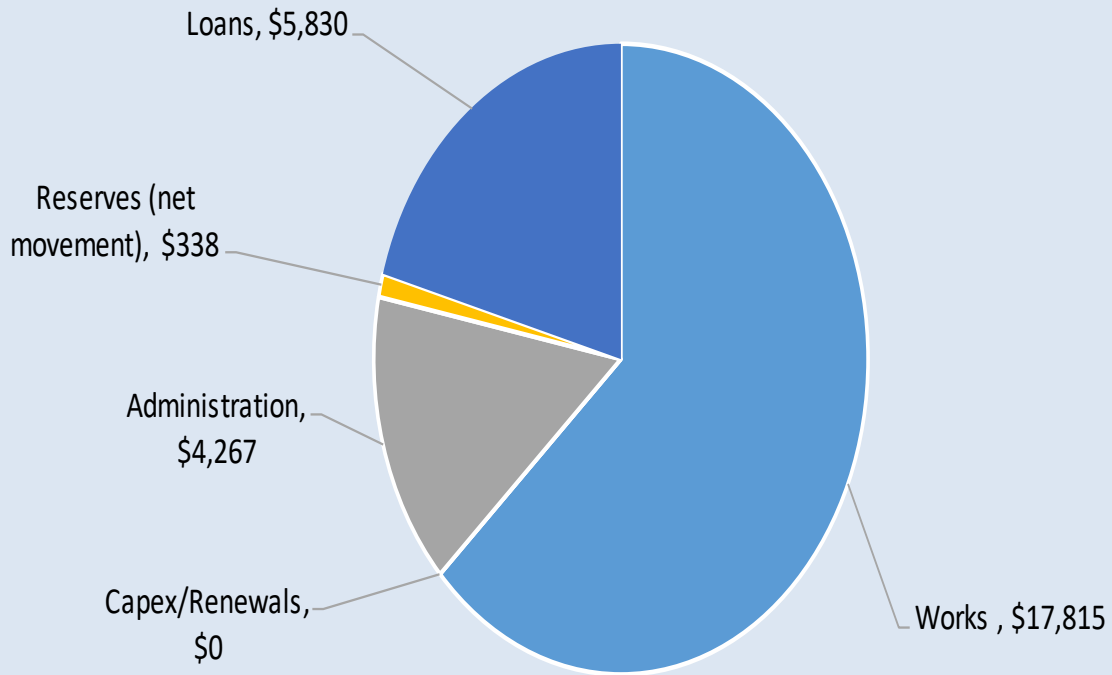


Income

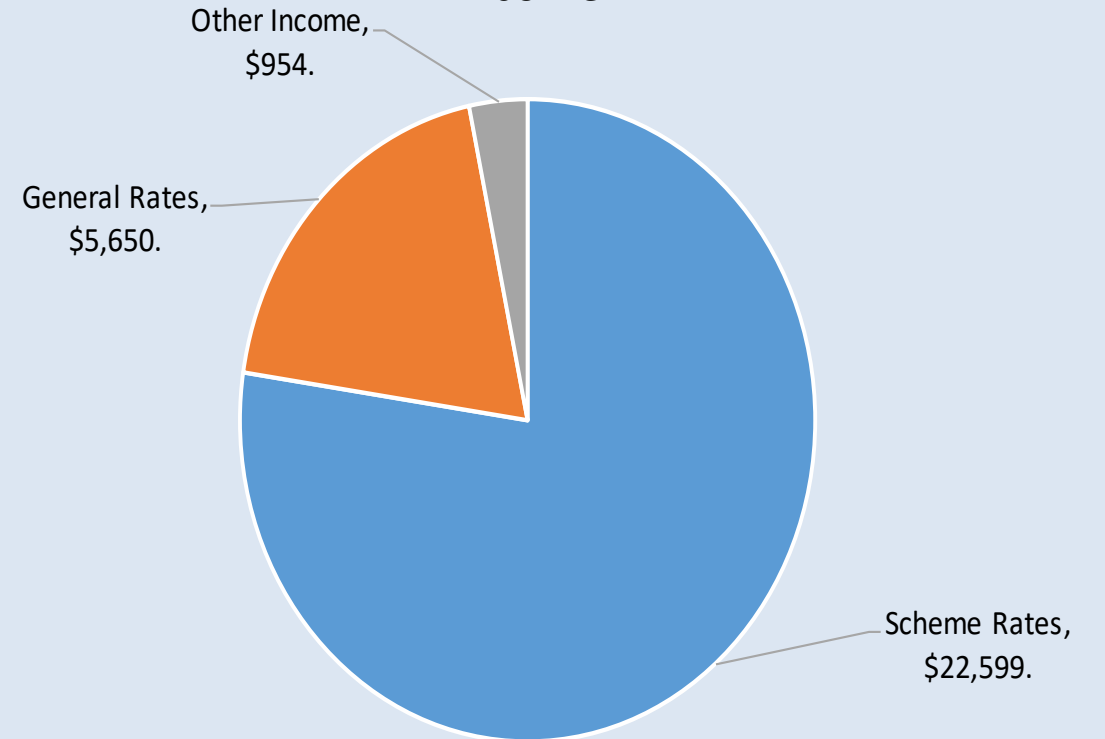


Whirokino Income and Expenditure 2020-21

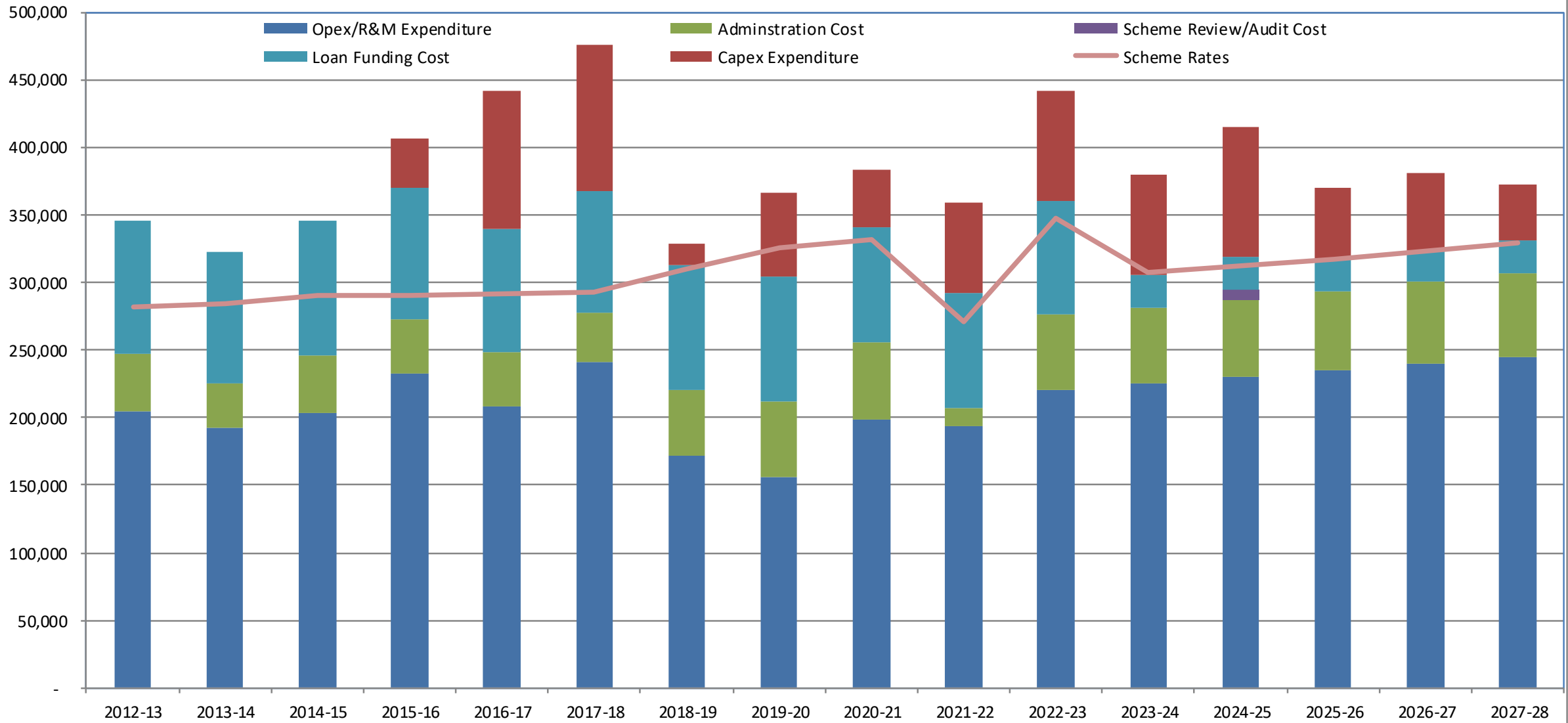
Operating Expenditure



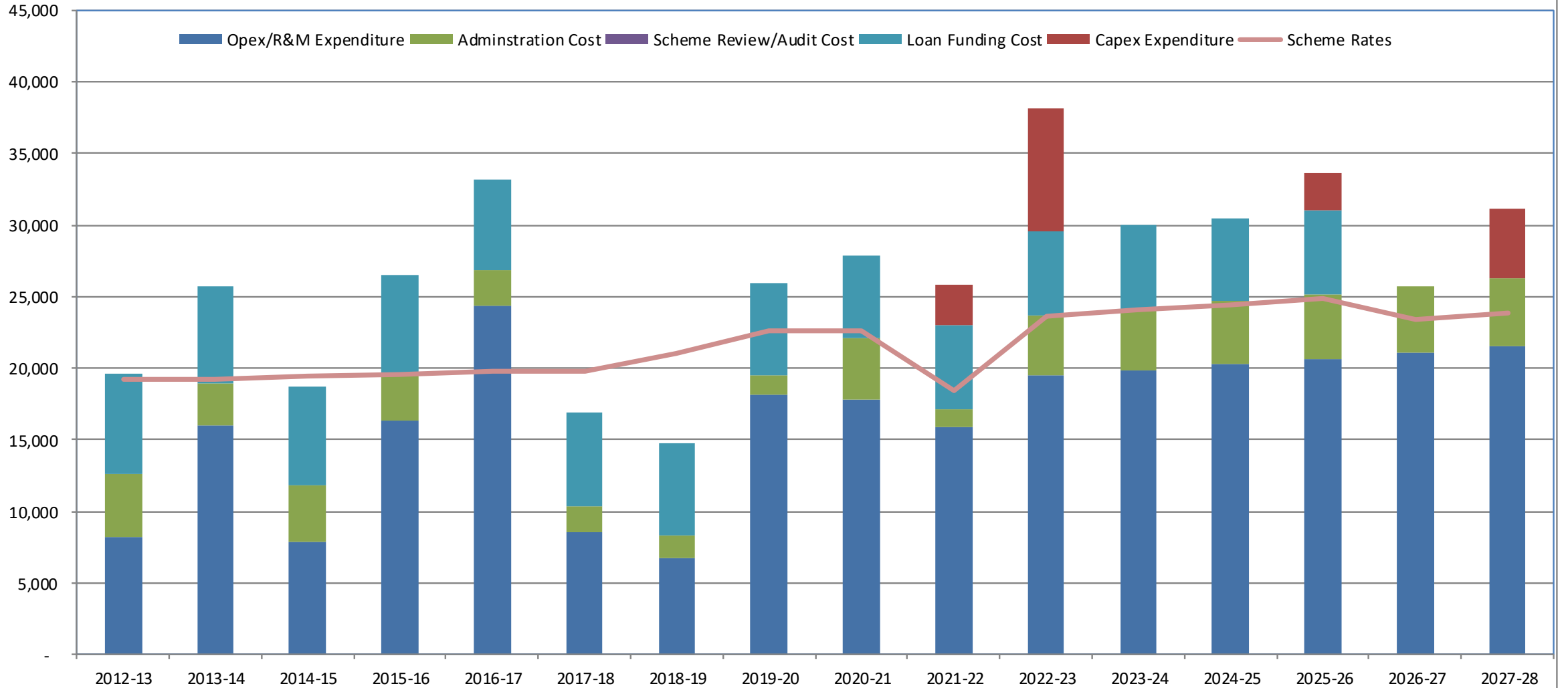
Income



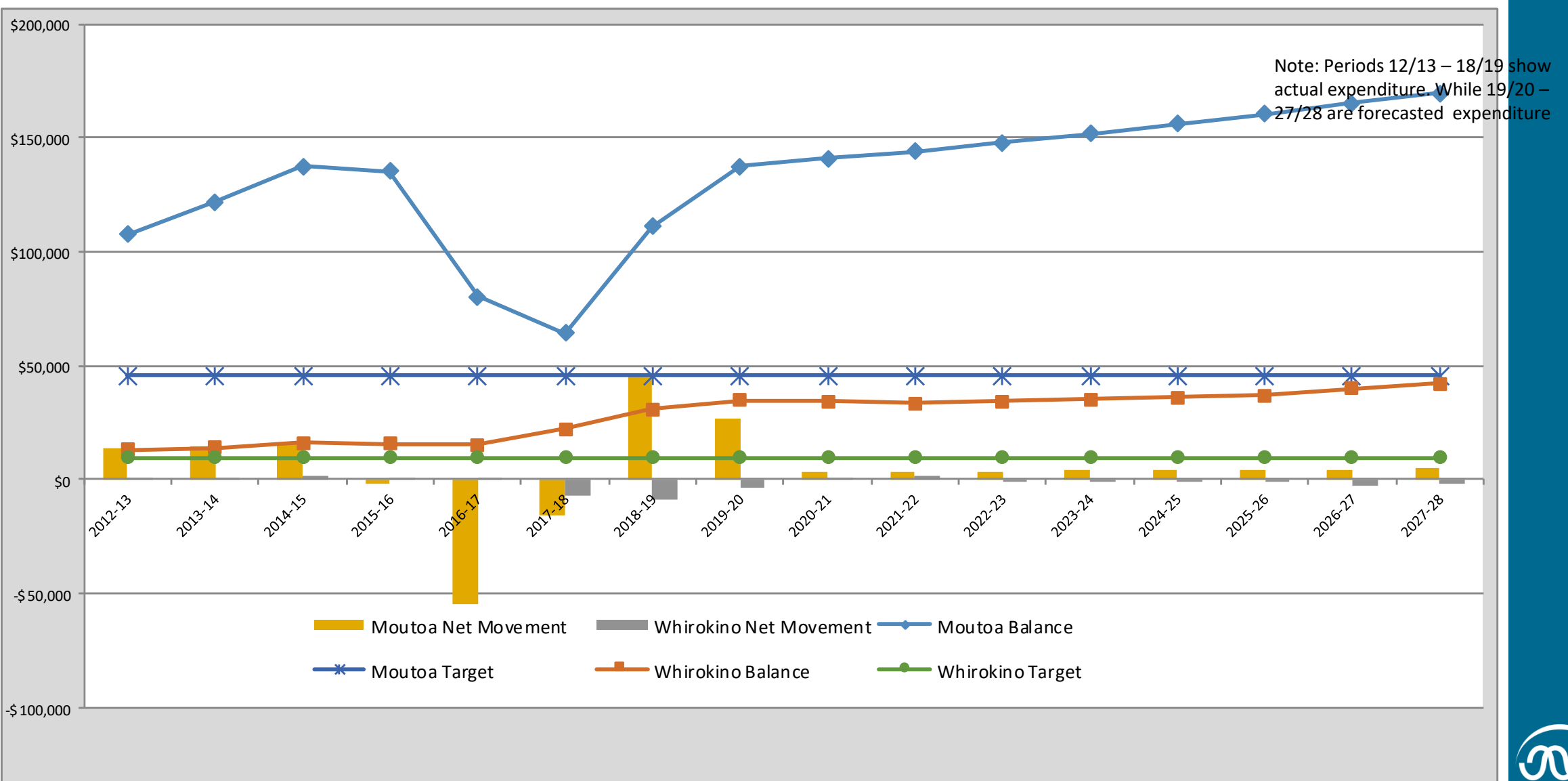
Moutoa Drainage Scheme



Whirokino Drainage Scheme

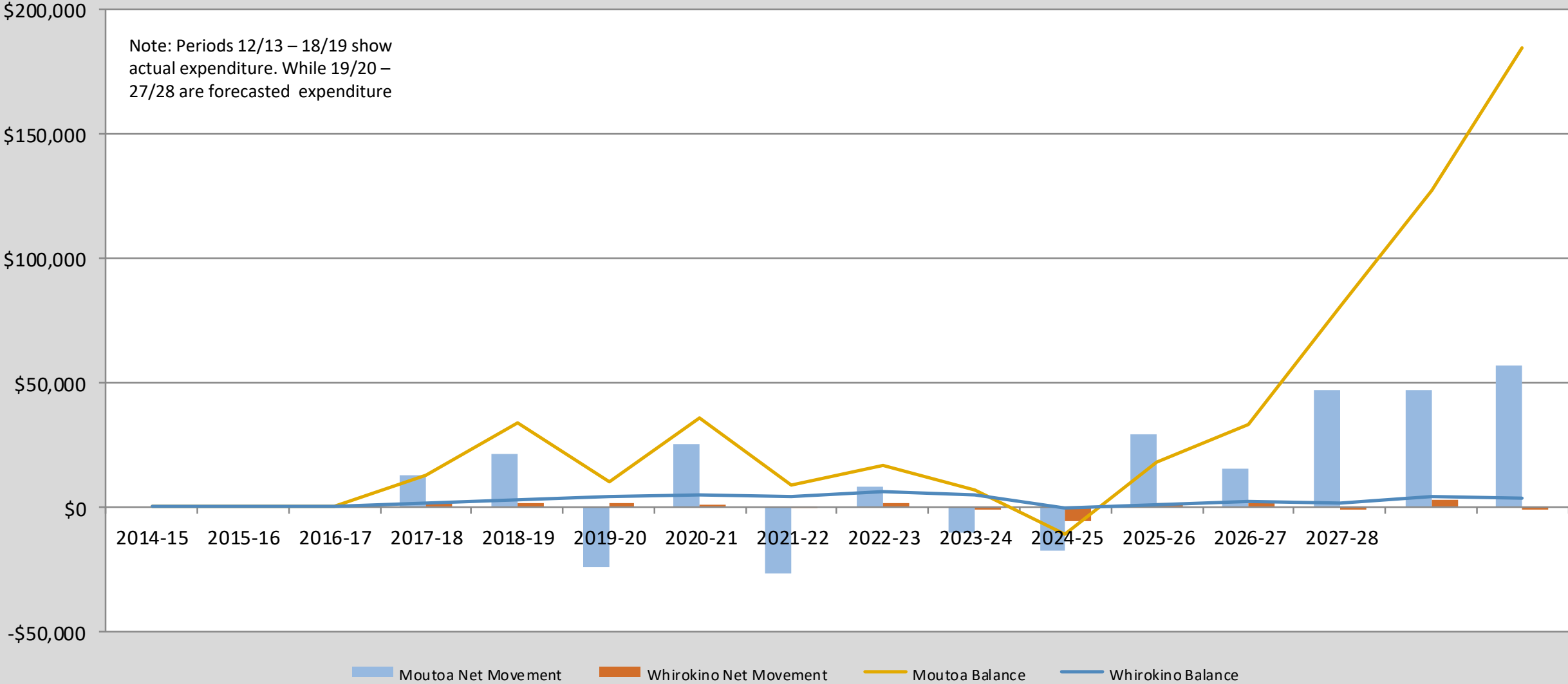


Emergency Reserve Balance



Renewal Reserve Balance

Note: Periods 12/13 – 18/19 show actual expenditure. While 19/20 – 27/28 are forecasted expenditure



Loan Account Balances



Issue Arising From 2019 Catchment Community Meeting

Issues	Action Required	Who	Comment
Lack of Consultation regarding Foxton East Scheme Upgrade	Look at better options to inform community	John	Meeting held on the 11 th March 2019 and newsletter to go out to community regarding upgrade.
Floodway culverts	CCTV	John	Majority have now been dewatered and inspected
Duck Creek	Investigate stability of bank upstream of state highway	Paul A	Paul has meet with Stan Cull to review situation.
Duck Creek Pumping	Investigate options to install temporary pumping at the end of the creek	John	To be discussed further as part of Foxton East Upgrade
Landcorp	Discussions to be held with Landcorp regarding organic proposal and the impact on scheme maintenance	Paul A	
Duck Creek	Review maintenance undertaken on Creek	Paul A	
Liaison Meeting	Look at options to include Foxton East scheme into Liaison Committee meetings	John	On Hold till outcome of proposed upgrade.

The End