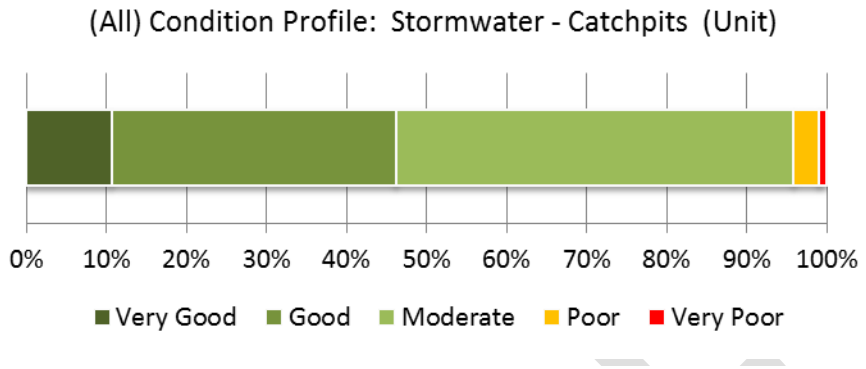
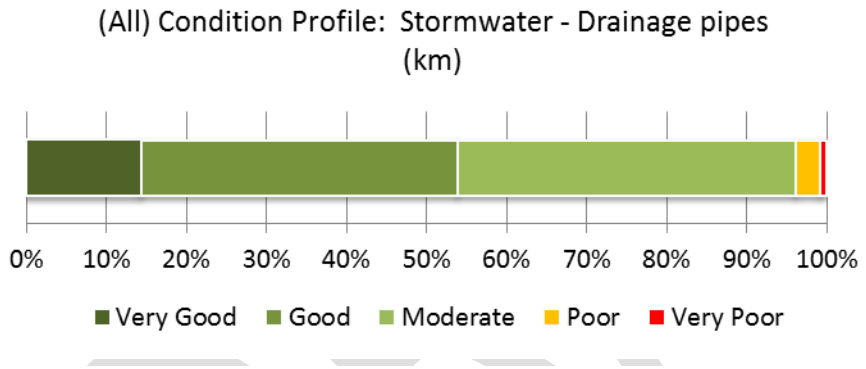
Stormwater ACMP Summary

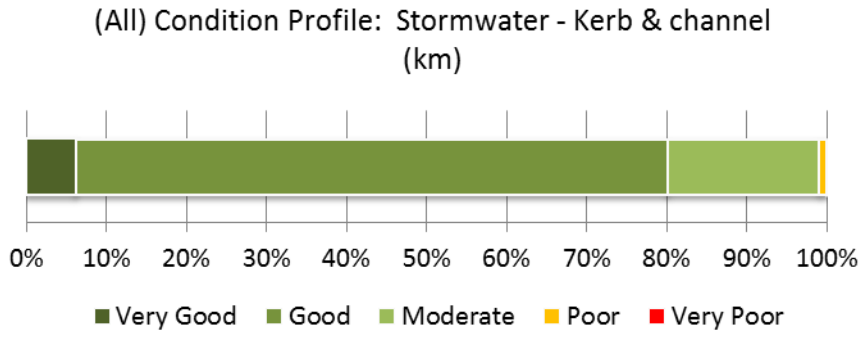
Network overview

Catch pits	75,481	Kerb & Channel channel	12,000 km
Manholes	5,298	Minor culverts	210 km
Soakholes	2,397		

Condition profile







Asset data status	Catch pit	Manholes	Soak holes	Kerb and channel	Minor Culvert
Age	Reliable	Moderate	Reliable	Reliable	Moderate
Condition	Moderate	Moderate	Moderate	Uncertain	Uncertain

The stormwater asset is currently undergoing a data improvement programme. The results of which will greatly improve database records

Stormwater ACMP Summary

Levels of service

Outcome:	Maintenance	
LOS statement:	Assets are maintained in “moderate” or better condition	
Performance measure	Current Performance	Target Performance
Stormwater assets are maintained in a ‘moderate’ condition	96%	95%
Soakholes are maintained in ‘moderate’ condition	75%	95%

Outcome:	Quality	
Performance measure	Current Performance	Target Performance
Network is designed for a 1 in 100 year rainfall event	75%	Not less than 85%

Outcome:	Customer Service	
LOS statement:	Improve or maintain timelines for clearing of network blockages	
Performance measure	Current Performance	Target Performance
Number of service complaints for flooding in the same locations (as previous)	52%	95%
Service requests are responded to within standard timeframes	85%	90%

Strategic approach

Asset Maintenance is undertaken by the Auckland Council Stormwater unit under a service level agreement (SLA. The activities undertaken support the maintance strategy as listed;

- customer focus
- integrated planning and programming
- simple and consistent approach
- good governance.

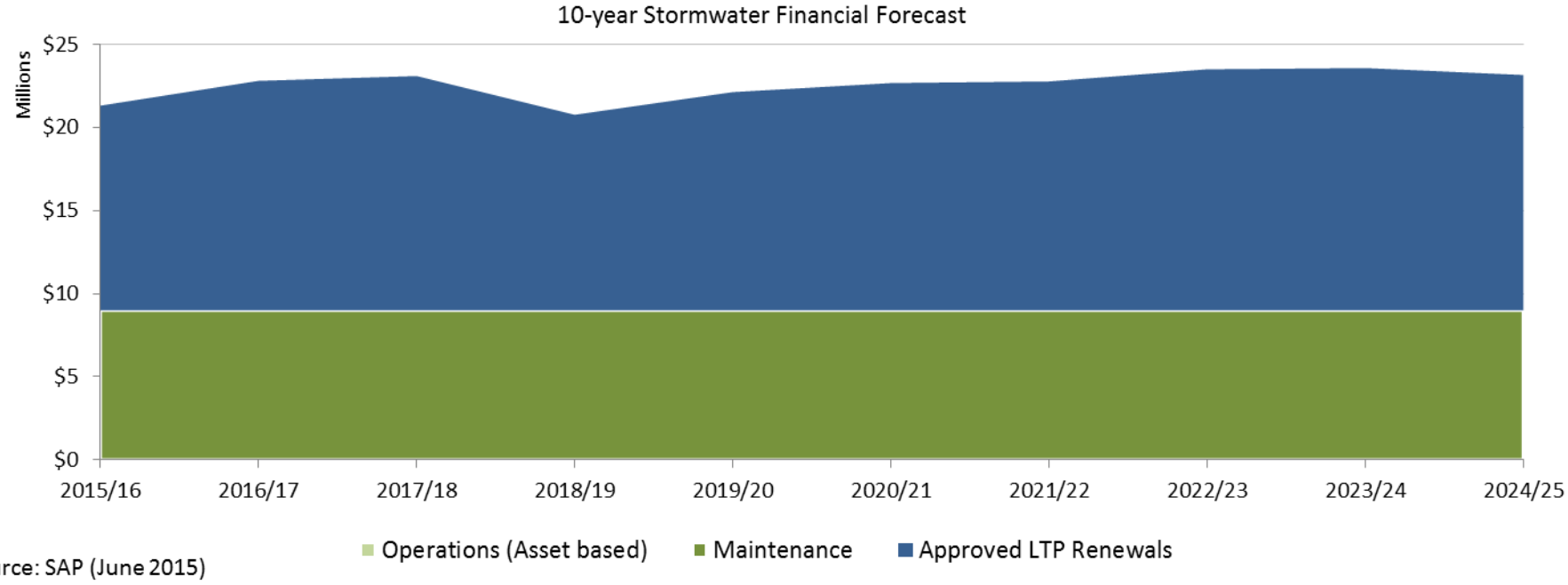
AT Renewal Stretgies for stormwater categorised as;

- Pro-active strategies: contractors carry out pro-active interventions on assets that are in poor condition.
- Reactive strategies: short-term solutions where an asset is badly damaged by a weather event, earthquake etc.
- Preventative strategies: preventative maintenance measures can be used where a gradually deteriorating assets.
- Predictive strategies: By predicting asset deterioration rates, for example using asset condition, future renewal needs can be estimated. The outputs of these predictive models still need to be validated through field testing.

Stormwater ACMP Summary

Renewal and Maintenance Costs ($M)

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	10-year total
Approved LTP Renewals (uninflated)		$12.3	$13.8	$14.1	$11.8	$13.1	$13.7	$13.8	$14.5	$14.6	$14.2	$135.8
Renewal Investment Needs (uninflated)	$13.0	$8.5	$14.8	$21.1	$26.4	$30.5	$33.6	$35.8	$37.4	$38.4	$39.1	$285.6
Renewal shortfall		$3.8	-$1.0	-$7.0	-$14.6	-$17.4	-$19.9	-$22.1	-$22.9	-$23.9	-$24.9	-$149.8
Maintenance		$9.0	$9.0	$9.0	$9.0	$9.0	$9.0	$9.0	$9.0	$9.0	$9.0	$90.0
Operations (Asset based)	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Consequential OPEX shorfall		$0.2	$0.4	$0.6	$0.7	$0.9	$1.1	$1.3	$1.5	$1.8	$2.0	$10.5
Depreciation	$36.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0



Source: SAP (June 2015)

Stormwater ACMP Summary

Consequences if asset needs cannot be afforded

The Stormwater asset is integral to the efficient and safe operation of the transport network.

Failure to maintain the asset, will result in;

- Increased flooding,
- early failure of road pavement,
- customer complaints,
- increased environmental and pavement damage from slips
- Water ingress into private property.

Key issues

Key issues	Recommendations
Long term costs of not funding the maintenance of Environmental Treatment devices appropriately i.e. Rain gardens and Stormwater Quality Ponds	Maintenance activities for environmental devices must be correctly calculated and funded appropriately to ensure correct useful life is achieved
Poor knowledge of renewal costs for environmental treatment devices	More research into rates of siltation and contamination for the devices. This would enable accurate knowledge of useful life of the asset in each circumstance.
Risk to road base due to inadequate removal of road stormwater	Identify flooding incidences. Monitor road-base condition and performance for signs of deterioration. Put in place improvement and renewal strategies to address stormwater deficiencies.