Appendix 1 - Assessment against Schedule 2 - Six yearly targets

Issue 1 Assets

Issue 1. Assets -	Objectives, Outcomes and Six yearly targets	Status	Discussion	Proposed changes to targets
ISSUE	I1 The ability of the stormwater network to cost effectively meet the needs of current their interaction with private networks and natural systems.	rent and future gene	rations and achieve and maintain healthy receiving environments, is dependent on the desig	n, quality, maintenance and renewal of built assets and
Objectives	Safe Communities: Risk to our communities, including people, property and infrastructure is reduced - ensure that risk to people and property is managed to levels that have been established in consultation with the communities where it is above these levels.			
			stal water values are maintained and enhanced and communities are connected with them r, restoring te mauri o te wai and enhancing our community's connection with, its waterways	
Outcomes	O1.1 Manage existing public stormwater assets to meet agreed levels of service.	Met / ongoing	This is a part of the ongoing stormwater programme of works for Healthy Waters, including delivering capital works projects as well as operation and maintenance activities.	No change
	O1.2 Manage erosion effects caused by discharges from the public stormwater infrastructure.	Met / ongoing	Healthy Waters have ongoing programmes to address long term erosion and also more short term mitigation activities by maintenance teams.	No change
	O1.3 Improve existing assets by taking the opportunities from redevelopment where they arise.	Met / ongoing	Work such as the Urban Contaminant Reduction Programme looks at opportunities to improve existing assets from redevelopment. HW planning teams are also involved in brownfield developments where council has an opportunity to influence design.	No change
Six Year Target <u>s</u>	Year Targets Council Stormwater Infrastructure Performance Standards (all DC)			
	a) Survey 95% of critical assets every 5 years (AMP)	In progress / minor amendment	A new target of "Survey 95% of critical assets by 2026" has come into place into CCTV contracts as of July 2022, as this is a more measurable KPI. As of the end of FY21 the remaining percentage of critical assets needed CCTV inspection was 52%. Note that progress was impacted by Covid-19 lockdowns. The CCTV inspection to complete this 52% in next five years is programmed as follows: Year Percentage of critical assets programmed to be completed FY 22 4% FY 23 10% FY 24 12% FY 25 13%	Proposed change: a) Survey 95% of critical assets by 2026
	b) Grade 4 critical assets will be repaired or renewed within 5 years (2015 -2045 AMP) c) Grade 5 highly critical assets will be repaired or renewed within 24 months of identification (AMP)	Target to be amended Target to be amended	 FY 26 Amendments to these targets are recommended as a result of: improvements in understanding the risk of failure of such assets since the consent was issued—i.e. they do not deteriorate as quickly as anticipated and so do not pose a high risk of immediate failure; the risk can also be managed by increased condition monitoring, the difficulty for renewals to occur within 24 months due to delays associated with consenting as well as a competitive infrastructure delivery market. response to grade 5 assets has also been modified, focusing on the most urgent needs For instance, a new asset safety improvement programme has now come into place to address safety risks. 	renewed within 10 years Proposed change: c) 90% of Grade 5 critical assets will be repaired or renewed within 5 years
	d) Number of blockages in the stormwater network per 100km will be less than 20 per annum (AMP)	Target met	Year Actual 2021/22 6.17 2020/21 2.94 2019/20 5.32	No change

Issue 1. Assets -	Objectives, Outcomes and Six yearly targets	Status	Discussion	Proposed changes to targets
	e) The number of complaints received about the performance of the stormwater network per 1000 properties connected to Auckland Council's stormwater network will be less than 3 per 1000 (LTP)	Target met	Year Actual 2021/22 1.57 2020/21 0.86 2019/20 0.8	No change
	f) Stormwater manholes that pop open in flood events are made safe within two hours: 100% (LTP)	In progress / minor amendment	The variety in rainfall and the significant storm events of June 2020 caused a relative increase in the number of complaints received, highlighting the increased risk posed to Auckland as climate change drives increased drought and more intense rainfall events. Year	Proposed change: f) Stormwater manholes that pop open in flood events are made safe within three hours: 90%
	Identified Reviews and Management Improvements for Managing the Council's public stormwater infrastructure g) Review vesting processes to ensure that assets from proposed development meet the requirements of AUP, NDC and Stormwater Code of Practice - measured by annual audit of a sample of vested assets. Process improvements as identified through the audit	In progress	Vesting processes are constantly being reviewed by Healthy Waters' developments and operations teams as part of an ongoing improvement process, this includes ongoing collaboration between Healthy Waters and Council's Development Engineering teams. Piped networks are generally reliant on CCTV to be inspected as part of EPA certification. Whereas maintenance heavy assets such as raingardens and stormwater ponds are inspected by operation teams, and issues identified such as poor quality vested assets, are fed back into process improvement.	No change
	h) Implement identified stormwater asset management improvement measures (ongoing Business as Usual (BAU))	Not met – further work required	Tracking of improvement measures identified is not formally taking place.	No change
	i) Complete asset and risk assessment of public coastal (completed) and stream outfalls (WA programme) - 2017/18 watercourse assessments completed (Figure 9.5)	Target met / minor amendment	Coastal outfalls have been assessed. Stream outfalls are assessed as part of rolling programme for Watercourse Assessments. Refer section 2.2 of the report Change target to reflect assessment on ongoing basis and remove reference to figure.	Proposed change i) Continue asset and risk assessment of public coastal and stream outfalls (Watercourse Assessment programme)
	j) Complete condition and risk assessments of large public stormwater dams (completed by 2023)	Target met	Public stormwater dams criticality risks have been assessed. Ongoing 'Dams programme' continue with HW operational teams to maintain the assets in good condition. Further assessments are being undertaken to evaluate against the new Building (Dam Safety) Regulations 2022.	No change
	k) Ongoing review of criticality strategies and assessments for all asset types. Renewal strategy has been completed; critical flood risk asset monitoring strategy in place. Improvements implemented as identified (BAU)	In progress	Reviews of Condition Monitoring Framework 2015 and Asset Renewal Strategy 2016 started but not completed.	No change
	I) Review complaints to identify potential issues and renewals (BAU, three yearly reporting of summary statistics from issues register)	In progress	Issues raised from complaints and requests for service are captured and these feed into the capital works pipeline as appropriate.	No change
	Collaboration with Stakeholders m) Regularly engage with other infrastructure providers on collaborative redevelopment opportunities (Co)	Target met	This target is similar to target (m) of 'Collaborative Outcomes' section, see comment below.	No change

Issue 1. Assets - Objectives, Outcomes and Six yearly targets		Discussion	Proposed changes to targets
n) Implementation and review of the Stormwater Code of Practice and Bylaw (IC)	Target met	Bylaw A statutory review of the Stormwater Bylaw was undertaken in July 2020 as required under the LGA. Since the NDC was granted in 2019, the review was an opportunity to review the linkage between the NDC and the Bylaw. The Bylaw is seen as one of the key tools to assist with the implementation of the NDC, especially when interacting with third parties that we sought to meet NDC requirements. Following the review, the Stormwater Bylaw amended the bylaw to improve its efficiency and effectiveness using the special consultative procedure as required by the LGA. The amendments were adopted by the Governing Body on 28 April 2022, and commenced on 30 May 2022. Code of Practice The Stormwater Code of Practice was updated to version 3.0 in January 2022 and supersedes the November 2015 edition. The summarised changes include: • new section and references to the Network Discharge Consent (NDC) • addressing non-complying designs where the situations where minimum standards are not achievable or alternative designs are more viable • updated values of Manning's roughness coefficients • freeboard requirements were updated to include coastal storm inundation areas • requirements around minimum pipe sizes and connections to public systems were updated • amended section on connection to the public stormwater system to align with revised pipe ownership rules and associated operational requirements.	No Change
		Healthy Waters is currently looking at incorporating the climate change scenario RCP8.5 that was adopted by the Tāruke-ā-Tāwhiri: Auckland's Climate Plan into the next version of the Stormwater Code of Practice. It is anticipated that this will happen in the 2022-23 financial year.	

Issue 2 Growth

Issue 2 Growtl	h - Objectives, Outcomes and Six yearly targets	Status	Discussion	Proposed changes to targets
ISSUE	I2 The way the region grows and develops, and our ability to address existing	ng adverse effects,	will determine the quality and health of our freshwater and marine environment.	1
Objective	Support Growth: Growth through water sensitive development and provision development is undertaken in a way that meets the needs of our communities and		er infrastructure is enabled - new and re-developed areas are supported by effective storn ances natural water systems.	nwater management and good quality infrastructure and
Outcomes	O2.1 Align stormwater infrastructure planning and provision to development and intensification priorities.	Ongoing	This is undertaken where possible. Development and intensification are frequently occurring outside of identified strategic areas.	No change is proposed for this review. However, future changes to the outcomes may include the below outcomes which are currently included
	O2.2 Integrate water sensitive design into new and major re-development. This can include promoting source control, at source treatment, bioretention, detention and attenuation, and protection and enhancement of streams.	Ongoing	The review of SMPs has found that many proposed SMPs do not utilise water sensitive design or only refer to it in passing. See section 2.3	within Healthy Waters Performance framework in order to ensure alignment between department strategy. Outcome 1.2 Development is promoted in a way that does not have adverse effects on stormwater conveyance, ecosystem health or public health. Outcome 1.3 New and re-developed areas are supported by infrastructure that is fit for purpose and of acceptable quality.
	O2.3 Enable effective land use and stormwater management planning and co- operation between developers and infrastructure providers.	Ongoing	Processes are in place however review and improvement are recommended	
	O2.4 Establish clear standards and processes for the planning, and development of good quality public stormwater infrastructure, particularly in terms of minimising operational and renewal costs, as well as minimising community, environmental and cultural effects.	Ongoing	Processes are in place however review and improvement are recommended	
	Q2.5 Develop a coordinated process for management of stormwater approvals including NDC approvals, Stormwater Bylaw, AUP and Engineering Plan Approvals.	Ongoing	Processes are in place however review and improvement are recommended	These should be considered as part of the next review.

Issue 2 Growth	- Objectives, Outcomes and Six yearly targets	Status	Discussion Proposed changes to targets
	Q2.6 Develop, in conjunction with industry, a practice note or engineering guideline for stormwater management requirements in a Brownfield development.	In progress	Not yet published. Several practice notes in relation to brownfield development are currently in progress. This includes: Updates to the SMP template/guidance a guidance note on water quality requirements for brownfield redevelopments
			a practice note on pipe capacity and connections in brownfields areas
Six Year Target <u>s</u>	a) Input into stormwater management plans, including those prepared by developers, in response to all high priority growth areas during structure planning and consenting processes	Target met	Stormwater Management Plans (SMP) are the key tool that the NDC uses for managing the effects of growth. As of 1 September 2022, 198 SMPs have been received for review. 71 have been formally
			adopted into Schedule 10 of the NDC, a further 22 provisional approvals have been granted and those SMPs will be adopted once the plan change or resource consents have been granted. The locations and extents of approved SMPs are publicly available on Auckland Council's
			GeoMaps GIS viewer, which includes links to summaries of the stormwater management required by each SMP. SMPs are reviewed by Healthy Waters as part of Plan Change applications for new
			greenfield urbanisation and at the time of Resource Consent application for other developments. Healthy Waters provides input into both of these processes as the Network Operator, as the Consent Holder of the NDC and as technical experts in stormwater management. SMPs must meet the requirements set out in Schedule 4 and be consistent with Schedule 2 before they can be adopted.
	b) 95% of formal enquires to stormwater development are responded to within	In progress	Some improvements are needed to the SMP review process. See section 2.3.4 and 2.3.19. Requests for information received by Healthy Waters: No change
	5 working days (AMP)	in progress	Year Actual 2021/22 2464
			2020/21 2583 2019/20 2091
			Healthy Waters team responds in accordance with the department service level agreement that the initial response of contact back the customer will be within 5 days. This initial contact is undertaken by the team member who is monitoring the email inbox and who allocates the request to the appropriate person within the department to respond directly back to the customer.
			SAP only tracks date the RFI is marked complete rather than initial response therefore this target is not specifically reported. Approximately 70% of enquiries are completed within 5 days and the average time to completion is 10 days. This reflects that a range of enquires are received, some of which are for the simple provision of information and some of which need going investigation or discussion with the customer.
	c) At least 95% of annual capital works programme to enable growth is delivered (AMP)	Target met	No change
	(/		Year Budget Actual % 2021/22 \$17.8m \$31.0m 174%
			2020/21 \$13.6m \$21.5m 158%
			2019/20 \$28m \$34.6m 123%
	d) >\$100,000 of other Council departments or CCOs growth projects are	Target met	Budget and actual spend based on capex project primary driver of 'growth' No change
	supported by the HW capital investment each year (AMP)	raiget met	Year Actual
			2021/22 \$2.3m 2020/21 \$4m
			2019/20 \$9.2m
4	1		

Issue 2 Growth -	Objectives, Outcomes and Six yearly targets	Status	Discussion	Proposed changes to targets
	Identified Reviews and Management Improvements for Managing the Council's public stormwater infrastructure e) Provide updated guidance on the criteria for assets to be vested to Council and connections following approval of the NDC within one year of the granting of consent (DC)	Target met	The requirements of the NDC for third parties to connect to the network and be authorised by the NDC were published on the Auckland Design manual immediately following the commencement of the NDC. Additionally the template for preparing a SMP is also available on the Auckland Design Manual. https://www.aucklanddesignmanual.co.nz/regulations/technical-guidance/ndc#/regulations/technical-guidance/ndc/guidance/design-and-connection-req https://www.aucklanddesignmanual.co.nz/regulations/technical-guidance/ndc#/regulations/technical-guidance/ndc/guidance/plans-and-templates Practice note from the resource Consent Department around the relationship between the NDC and the resource consent process https://content.aucklanddesignmanual.co.nz/regulations/practice-notes/Documents/RC-3-3-24-Stormwater-NDC-Process-for-RC.pdf The need for clarifications and additional guidance on the SMP approval process and other NDC related guidance was reinforced through industry engagmeent. Further interpretation and guidance is currently in progress includes:. • Updates to the SMP Template/guidance • a guidance note on water quality requirements for brownfield redevelopments • a practice note on pipe capacity and connections in brownfields areas Reword target to reflect ongoing need for updates to guidance material in addition to that	Proposed change e) Provide and update guidance on the criteria for assets to be vested to Council and connections
	f) Facilitate stream rehabilitation through identification of opportunities for offsetting through growth (initial list of offsetting projects completed, ongoing update as new opportunities arise) (IC)	Target met	already provided. Healthy Waters have set up a Biodiversity Offset Bank with agreement of Regulatory Services for facilitating stream rehabilitation offsets through developments across the Auckland Region. Some offset projects have been approved to be part of the Biodiversity Offset Bank. Programme is ongoing and investigation and consenting of further offset sites is underway.	No change
	Collaboration with Stakeholders g) Assist in the implementation of stormwater management/land use requirements under the AUP, including advocating for water sensitive design in new growth / major intensification areas (IC)	Target met	Healthy Waters provides input into private plan changes and Resource Consent applications as the Network Operator, as the Consent Holder of the NDC and as technical experts in stormwater management. Healthy Waters provides input into Council lead Plan Change and Plan review processes. For Council led plan changes this includes input to the s35 AUP plan review, Plan Changes required for the NPS:UD and the NPS:FM, and for urbanisation of the Silverdale west industrial area. For private plan changes - Between October 2019 and June 2022 Healthy Waters has provided input into 35 notified Private plan changes, either as part of the s42a reporting team or as part of the Council submission on the plan Change and also 8 Notice of Requirements At all times Healthy Waters advocates for high quality water sensitive design and stormwater management in accordance with Schedule 4.	No change
	h) Implementation and review of the Stormwater Code of Practice and Bylaw (IC)	Target met	This target is the same as target (n) in the Assets section. See comments above.	No change
	i) Assist in development and implementation of guidance on Water Sensitive Design; including Guideline GD04 (IC)	Target met	Healthy Waters is involved in Water Sensitive Design including GD04 work. Implementation of water sensitive design within the department and across wider council and Auckland could be improved.	No change

Issue 3 Flooding

Issue 3	3. Flooding	g - Objectives, Outcomes and Six yearly targets	Status	Discussion	Proposed changes to targets
Issue		13 A large number of buildings (residential and commercial) and critical infrastruct	ure are at risk of floo	ding and the problem will increase if past land use and development practices continue.	

Issue 3. Floodin	g - Objectives, Outcomes and Six yearly targets	Status	Discussion	Proposed changes to targets
Objective	Safe Communities: Risk to our communities, including people, property and infrarisk where it is above these levels.	structure is reduced	- ensure that risk to people and property is managed to levels that have been established in co	nsultation with the community, and reduce existing flood
Outcomes	O3.1 Avoid the increase of existing flooding or creation of new flooding of habitable floors as a result of urban development and intensification.	Ongoing	Some infrastructure projects underway to reduce flood impacts on people and property in existing urban areas. Ongoing work to understand the hazard presented by flood risk and what, if any, level of service can be articulated to be met for different communities.	No change is proposed for this review.
	O3.2 Reduce existing flood risk by taking the opportunities from redevelopment where they arise.	Ongoing	Focus in redevelopment areas is not to increase flood risk not to to reduce existing existing flood risk. Some Healthy Waters infrastructure projects are for flood management purposes.	
	O3.3 Manage existing flood risk to meet levels of service agreed to keep people and property safe from significant harm from flooding, and minimise disruption to critical social and physical infrastructure connections across the city.	Ongoing	No defined level of service and work needs to be done to describe what level of service means in this context and	
	O3.4 Improved community understanding of, and resilience to, flood hazards.	In progress	Work is underway on various flood risk communications initiatives	
Six Year Targets	Council Stormwater Infrastructure Performance Standard (all DC) a) Council flood hazard GIS layer is maintained so that it is current and publicly available; reviewed on a two-yearly basis	Target met	There are three different flood hazard related layers – floodplains, overland flow paths, and flood prone areas on the Geomaps GIS viewer. Floodplains are updated as models are updated, on a catchment by catchment rolling basis. All new information to upload to Geomaps undergoes review prior to being made public.	No change.
	b) The number of flooding events and the associated number of habitable floors affected: less than 1 per 1000 properties in Auckland per annum (LTP)	Target to be amended	Mandatory national performance measure, however the Department of Internal Affairs (DIA) agrees that the council can't accurately report on these measures due to how the public report flooding to the Fire Service.	No change at this time Changes to be made following Three Water reform.
			Amendments recommended to reflect the need for bettering understanding and measuring of hazard to people from flood events and mitigating the most significant flood effects. Healthy Waters understands that this is currently being assessed as part of the Three Waters reforms. Therefore recommend that target reviewed as the Three Waters reforms are progressed.	
	c) Proportion of habitable floors protected from flooding in a 1 in 10-year storm: > 99% (AMP)	Target to be amended	It is not currently possible to report on this measure regionwide. Flood levels are surveyed on a catchment-by-catchment basis for building footprints within the floodplain, and compared to predicted flood levels. However this measure is only available currently on a catchment-by-catchment basis and based on a high degree of extrapolation with respect to habitable floor levels.	No change at this time Changes to be made following Three Water reform.
			Amendments recommended to reflect the need for bettering understanding and measuring of hazard to people from flood events and mitigating the most significant flood effects. Healthy Waters understands that this is currently being assessed as part of the Three Waters reforms. Therefore recommend that target reviewed as the Three Waters reforms are progressed.	
	d) Total habitable floors protected from flooding in a 1 in 100-year storm: > 97.5% (AMP)	Target to be amended	As for c) above.	No change at this time Changes to be made following Three Water reform.
	e) Median response time to attend a flooding event, measured from the time that Auckland Council receives notification to the time that service personnel reach site: < 2 hours (LTP)	Target to be amended	As for b) above. Requests for service are tracked through SAP.	No change at this time Changes to be made following Three Water reform.
	f) Major flood protection and control structures are maintained, repaired and renewed to a safe operating standard	Target to be amended	Mandatory national measure and definition - however there are no such structures in Auckland. This target is recommended to be deleted as it is not relevant to NDCin Auckland (it will still be included in LTP as required by the DIA)	Proposed change: Remove target
	Identified Reviews and Management Improvements for Managing the Council's public stormwater infrastructure	Target met	This target is the same as target (e) in the Growth section. See comments above.	No Change
	g) Provide updated guidance on the criteria for assets to be vested to Council following approval of the NDC (as above, within one year of the granting of consent) (DC)			
	h) Flood resilience strategies are in place for habitable floors that are found to be unfeasible to protect from flooding within 10 years: >50% (IC) (AMP)	In progress	Work is underway on various flood risk communications initiatives as well as understanding properties most at risk.	No change.
	Collaboration with stakeholders- i) Work with Civil Defence in identifying areas of flooding that pose a risk to life, as well as to critical infrastructure (Co)	Target met	Healthy Waters have an ongoing relationship with Auckland Emergency Management (Civil Defence) on sharing information such as rainfall data and flooding requests, and working collaboratively during emergencies such as the recent drought and west Auckland flooding events.	No change.

Issue 3. Flooding - Objectives, Outcomes and Six yearly targets	Status	Discussion	Proposed changes to targets
j) Assist in the implementation of stormwater management/land use requirements under Unitary Plan, including protection of floodplains and overland flowpaths to prevent flooding from new development (IC)	In progress	Significant effort into National Policy Statement for Urban Development Plan change to include bespoke provisions for stormwater in Mt Eden and identify flooding as a qualifying matter and where should not be up zoned. Ongoing work to strengthen the AUP to prevent flooding from new development which is anticipated to result in future plan changes.	No change.
k) Implementation and review of the Stormwater Code of Practice and Bylaw (IC)	Target met	This target is the same as target (n) in the Assets section. See comments above.	No change
I) Assist in development and implementation of guidance on Water Sensitive Design, including Guideline GD04 (IC)	Target met	This target is the same as target (i) in the Growth section. See comments above.	No change
m) Regularly engage with Local Boards regarding local flooding issues (Co)	Further work required	Healthy Waters regularly engage with Local Boards on flooding projects and programmes that have an impact in their local board area. If there are significant flooding issues that have been raised with the local board from the public, it would often be addressed to Healthy Waters for assistance. For example, various local boards provided input into the Stormwater Bylaw 2015 amendments hearing about how their local area flooded during the March 2022 flooding event.	No change
		However Local Board engagement as part of this review identified that this communication needs to be improved.	
n) Regularly engage with other infrastructure providers on redevelopment opportunities and identification of critical infrastructure (Co)	In progress	This target is similar to target (m) on the asset section. Refer to comments above.	No change

Issue 4 Stream Health

Issue 4. Strean	n Health - Objectives, Outcomes and Six yearly targets	Status	Discussion	Proposed changes to targets
Issue	14 Urbanisation and poor stormwater management adversely affects Auckland's ur and on the mauri of freshwater and Maori customary uses of freshwater resources		n cause a loss of aquatic habitat and biodiversity, resulting in biological degradation and impac	ts on ecological functioning of streams, on the community
Objective			stal water values are maintained and enhanced and communities are connected with them – uff, restoring te mauri of te wai and enhancing our community's connection with, its waterways.	tilise streams, aquifers and harbours as integral natural
Outcome	O4.1 Maintain, operate and develop Council's current and future public stormwater network to minimise and reduce adverse effects on streams, groundwater and coastal systems.	Ongoing	Business as usual processes and operations in place including strategy, planning, design & delivery, consenting and operation teams to ensure the network is well operated. Operation and Maintenance Plan, Asset Management Plan, Capital Projects for enhancement of streams, amongst other programmes contribute for this outcome.	No change
	O4.2 Enhance urban streams and waterways by working collaboratively with key stakeholders such as mana whenua, Local Boards, community groups and the development community to take opportunities where they arise.	Ongoing	Programmes with community in place for enhancement of streams. Some examples of other programmes include closing the gap (working with compliance) and Industrial Pollution Prevention Programme (working with local boards)	No change
	O4.3 Areas of significant indigenous biodiversity value in terrestrial, freshwater, and coastal marine areas are protected from the adverse effects of subdivision, use and development.	Ongoing	This is undertaken where possible. However, development and intensification are managed by other council departments including planning and regulatory. Healthy Waters provides technical input where possible.	No change is proposed for this review. However, recommended for review and change in future, because it is out of Healthy Waters current direct control and the scope of Healthy Waters responsibilities in relation to streams is likely to change following three waters reform.
Six Year Targets	Council Stormwater Infrastructure Performance Standards			
	a) Number of fish passage barriers mitigated: average 10 per year (DC)	In progress	Fish Passage Improvement Programme is ongoing (reshaped and restarted in 2022/2023). Budget restrictions due to Covid delayed the programme in the past three years since the NDC was granted.	No change

Issue 4. Stream	Health - Objectives, Outcomes and Six yearly targets	Status	Discussion	Proposed changes to targets				
	b) The ratio of the length of watercourse consented to be physically improved versus physically degraded in each year (kms Improved ÷ kms Degraded) 3 or more (LTP). (IC, Co, In)	Target to be amended	Although this matter is important to maintaining and enhancing stream health, this target is outside of Healthy Waters control to implement and has been removed from the LTP as a performance indicator. It is also unrelated to the diversion and discharge of stormwater. Target to be removed	Proposed change: Remove target				
	Identified Reviews and Management Improvements for Managing the Council's public stormwater infrastructure							
	c) Complete asset and risk assessment of public coastal (completed) and stream outfalls (WA programme) - 2017/18 watercourse assessments completed (Figure 9.5) (DC)	In progress	This target is the same as target (i) in the Assets section. See comments above Change target to reflect ongoing assessment	Proposed change c) Continue asset and risk assessment of public coastal and stream outfalls (Watercourse Assessment programme)				
	d) Complete a case study assessment of possible interventions on private streams, taking into account amongst other things ownership, liability and access issues within three years (DC)	Not met – further work required	A case study assessment has not been completed yet. One example that can assist shaping further study/assessment is the Hōteo Sediment Reduction Project, which trialled interventions using Geomorphically Effective Management Solutions (GEMS) to stabilise stream bank and reduce fine-grained sediments loads along a 12km stretch of the Kourawhero Stream in private land. To support the enhancement and protection of stream in private land, Auckland Council is currently working to support those who wish to restore their streams, for instance through the publication of Caring for Urban Stream guides as well as through Local Board and other funding projects. See recommendation Stream Health 3.	No change				
			However, this target is recommended for review or change in future, because it Healthy Waters responsibilities in relation to streams is likely to change following three waters reform.					
	e) Implement Healthy Waters' Green Infrastructure Policy for Healthy Waters' capital works projects (ongoing BAU) (DC)	In progress	This is implemented through Capital Upgrade and Rehabilitation Projects. Every project has a main driver (renewals, growth, flood prevention) and in addition opportunities to increase resilience and outcomes are identified as secondary drivers. The principles of this policy are embedded in Healthy Waters practices, all capital works considered green infrastructure solutions as part of project design, however, this specific document is not regularly being referred to. This and similar policies will likely change as a result of Three Waters reform. Review of the policy and the target should be deferred until that time.	No change				
	f) Incorporate the Mauri model[1] into Healthy Waters' capital delivery project assessments - model developed, ongoing implementation for all significant projects (DC, Co)	Target to be amended	See recommendation Stream Health 4 Mana whenua have advised that use of the Mauri model is not appropriate. A new model is under development, change to incorporate Maori Outcome framework and Maori Outcome specialist assessment and identification of opportunities in all Healthy Waters business case approvals. This is being developed in partnership with mana whenua.	Target to be reworded following further engagement.				
	g) Develop a region wide decision support system to prioritise interventions for contaminant management purposes (part of Council's implementation of the NPSFM) and implement projects to improve water quality outcomes where opportunities are identified (completed by 2021) (DC)	In progress	Target to be reworded following further engagement. This is part of the Freshwater Management Tool (FWMT) development. The FWMT stage 1, the baseline predicted water quality assessment, has been completed, peer-reviewed and reported. Stage 2 "scenario assessment" is currently in development.	No change				
	Collaboration with stakeholders							
	h) Work with internal and external stakeholders to identify potential collaboration projects for the enhancement of streams (Co)	Target met	Community Projects and WaiCare Programme identified in the Monitoring Strategy	No change				
	i) Facilitate stream rehabilitation through identification of opportunities for offsetting through growth (initial list of offsetting projects completed, ongoing update as new opportunities arise) (IC)	Target met	This target is the same as target (f) in the Growth section. See comments above.	No Change				
	j) Assess feasibility of Council-wide database on stream information (Co)	Target met	Permanent Stream layer on Geomaps. Ruru is a new platform for stream and environmental data.	No Change				
	k) Assist in the education and implementation of guidance on Water Sensitive Design; this includes protection of streams, provision of riparian buffers and protection of base flow and other stream enhancement measures (IC)	Target met	This target is similar to target (i) in the Growth section. See additional comments above.	No Change				

Issue 4. Stream	Health - Objectives, Outcomes and Six yearly targets	Status	Discussion	Proposed changes to targets
	I) Engage with industry and Central Government on initiatives to consider the feasibility of, and where possible implement, source control of key stormwater contaminants.	Target met	Examples of initiatives include: Industry Pollution Prevention Programme (funded by Local Boards), initiative to reduce the release of plastics in the environment; Site Safe Programme (Healthy Waters collaborate with compliance and industry), aims to educate building contractors about making sure their building sites do not release contaminants such as sediment and building waste into the environment). Exterior Cleaning Industry Association (waterblasting, Healthy Waters is advising/assisting on development of code of practice)	No Change

Issue 5 Coastal Health

Issue 5 Coastal	Health - Objectives, Outcomes and Six yearly targets	Status	Discussion	Proposed changes to targets			
Issue	15 Stormwater contaminants, sourced from urban land use, stream erosion and transport activities, accumulate in low energy marine environments (such as estuaries and enclosed harbours) and in some areas, occur at levels that adversely affect marine life, community and Maori cultural values, and once diminished, affects Maori customary uses of coastal resources.						
Objective	Healthy and Connected Waterways that provide for te mauri o te wai: Stream, groundwater and coastal water values are maintained and enhanced and communities are connected with them - utilise streams, aquifers and harbours as integral natural components of Auckland's stormwater system while reducing the adverse effects of stormwater runoff, restoring te mauri o te wai and enhancing our community's connection with, its waterways.						
Outcomes	As for O4.1 above						
	As for O4.2 above						
	As for O4.3 above	As for O4.3 above					
Six Year Targets	Council Stormwater Infrastructure Performance Standards						
	a) Volume of contaminants removed from the stormwater network via Auckland Councils maintenance and renewal programmes: 5,000 tons per annum for catchpits (AMP) (DC) b) Volume of contaminants removed from the stormwater network via Auckland Councils maintenance and renewal programmes: 10,000 tons per annum from de-silting ponds and wetlands (AMP) (DC)	Not met – further work required Not met – further work required	Year	No change No Change			
			Deferred work from 2021/22 financial year is programmed for 2022/23 Financial Year				
	Identified Reviews and Management Improvements for Managing the Council's public stormwater infrastructure						
	c) Provide updated guidance on the criteria for assets to be vested to Council and connections following approval of the NDC within one year of the granting of consent (IC)	Target met	This target is the same as target (e) in the Growth section. See comments above.	Proposed change c) Provide and update guidance on the criteria for assets to be vested to Council and connections			
	d) As for Stream Health: Develop a region wide decision support system to prioritise interventions for contaminant management purposes (part of Council's implementation of the NPSFM) and implement projects to improve water quality outcomes where opportunities are identified (completed by 2021) (DC)	In progress	This target is the similar as target (g) in the Stream section. See comments above.	No Change			
	Collaboration with stakeholders						
	e) Work with mana whenua and other parties to identify areas of safe consumption of kaimoana/mahinga kai and other aspects of coastal health and values (NPSFM –part of watershed implementation plans) (Co)	Not met – further work required	Not currently being implemented. May be implemented as part of NPSFM engagement. To be incorporated into overall HW Maori Outcomes programme.	No Change			

Issue 5 Coastal Health - Objectives, Outcomes and Six yearly targets		Status	Discussion	Proposed changes to targets
	f) Assist in the education and implementation of guidance on Water Sensitive Design; this includes provisions in respect of at-source reduction and on-site treatment and management of contaminant generating areas (IC)	Target met	This target is similar to target (i) in the Growth section. See additional comments above.	No Change
	g) Engage with industry and Central Government on initiatives to consider the feasibility of, and where possible implement, source control of key stormwater contaminants.	Target met	This target is similar to target (I) in the Stream section. See additional comments above.	No Change

Issue 6 Groundwater

Issue 6. Ground	dwater - Objectives, Outcomes and Six yearly targets	Status	Discussion	Proposed changes to targets		
Issue	16 Groundwater aquifers underlying urban areas can be adversely affected by land development and stormwater discharges to ground soakage.					
Objective	Healthy and Connected Waterways that provide for te mauri o te wai: Stream, groundwater and coastal water values are maintained and enhanced and communities are connected with them - utilise streams, aquifers and harbours as integral natural components of Auckland's stormwater system while reducing the adverse effects of stormwater runoff, restoring te mauri o te wai and enhancing our community's connection with, its waterways					
Outcomes	As for O4.1 above					
	As for O4.2 above					
Six Year Targets	Council Stormwater Infrastructure Performance Standards	In progress	The FWMT will identify and inform on the management of stormwater issues related to contaminants to groundwater.	No change		
	a) As for Managing Effects on Coastal Health, focusing on managing contaminants to aquifers					
	Identified Reviews and Management Improvements for Managing the Council's	In progress	The FWMT will identify and inform on the management of stormwater issues related to contaminants to groundwater.	No change		
	public stormwater infrastructure					
	b) As for Managing Effects on Coastal Health, focusing on managing contaminants to aquifers					
	c) Prepare guidance for soakage device design, including treatment	Target met	HW staff worked closely with ETS (Now Resilient Land and Coast) to develop GD07.	No change		
	requirements (TR2013/40 completed, ongoing implementation)		Ongoing implementation.			
	Collaboration with stakeholders	Target met	This target is similar to target (i) in the Growth section. See additional comments above.	No change		
	d) Assist in development and implementation of guidance on Water Sensitive	ranger mer				
	Design; including recharge of high use aquifers, peat soils and stream baseflow (IC)					
	e) Input into the implementation and review of the Stormwater Code of Practice	Target met	This target is the same as target (n) in the Assets section. See comments above.	No change		
	and Bylaw (IC)					
	f) Engage with industry and Central Government on initiatives to consider the	Target met	This target is similar to target (I) in the Stream section. See additional comments above.	No change		
	feasibility of, and where possible implement, source control of key stormwater					
	contaminants.					

Issue 7 Effects on the Wastewater system

Issue 7 Effects of targets	on the Wastewater system - Objectives, Outcomes and Six yearly	Status	Discussion	Proposed changes to targets		
Issue	I7 In parts of Auckland, particularly where there is a combined stormwater-wastewater network, flood waters are contaminated with wastewater which can cause a public health risk, especially in areas with high contact recreation, and affects the Mauri of the waterbody and thereby has an effect on social and Maori cultural values.					
Objective	Healthy and Connected Waterways that provide for te mauri o te wai: Stream, groundwater and coastal water values are maintained and enhanced and communities are connected with them - utilise streams, aquifers and harbours as integral natural components of Auckland's stormwater system while reducing the adverse effects of stormwater runoff, restoring te mauri o te wai and enhancing our community's connection with, its waterways					
Outcome	As for O4.2 above					

Issue 7 Effects on the Wastewater system - Objectives, Outcomes and Six yearly targets		Status	Discussion	Proposed changes to targets
Six Year Target	Collaboration with stakeholders (all Co) a) Develop a strategy for investigation and management of identified issues relating to cross contamination	Target met	The Safe Networks program was established in 2018 and is now an ongoing programme that investigates stormwater and wastewater networks to identify cross connections between these networks so they can be eliminated and make popular Safeswim sites more swimmable. Reword to reflect that the strategy was already developed. Change "develop" to "implement"	Proposed Change: a) Implement a strategy for investigation and management of identified issues relating to cross contamination
Six Year Target	b) Collaborate with Watercare Services Ltd to identify the optimal solution to reduce overflows to the receiving environment for public and environmental health reasons for the central combined sewer area (Western Isthmus Water Quality Improvement Programme (WIWQIP)	Target met	Western Isthmus Water Quality Project - major infrastructure programme that will significantly reduce wastewater overflows into the Waitematā Harbour and reduce stormwater volumes going into the Manukau Harbour. Once complete, there should be a 65% reduction in the volume of wet weather over flows. • 4 major infrastructure projects have been completed since the beginning of the programme. • 7.6km of major pipes have been constructed, with 5.8km completed in 2020. • 3,700+ properties are now being serviced by upgraded networks, significantly reducing overflows into the inner city harbour.	No change
Six Year Target	c) Regularly engage with Watercare Services Ltd and Building Control to identify and assess inflow and infiltration issues and collaboratively design and implement infrastructure upgrades	Target met	Continuous collaboration with Watercare through the above two programs. This is increasing as preparations are being made in anticipation of the Three Waters Reform changes.	No change

Issue 8 Common to all issues

Issue 8 Common to all issues - Objectives, Outcomes and Six yearly targets		Status	Discussion	Proposed changes to targets			
Objective	ective Collaborative Outcomes:						
	Stakeholders are engaged to achieve the best stormwater outcomes including for	are engaged to achieve the best stormwater outcomes including for te mauri o te wai for present and future generations.					
Outcomes	O8.1 Collaborate with Council departments and CCOs that have a key role in delivering positive stormwater outcomes.	Ongoing	Healthy Waters works closely with other local and central government agencies to achieve improved water outcomes. These agencies include Ports of Auckland, Auckland Council Closed Landfills Team, Kainga Ora, Watercare, Auckland Transport, Waka Kotahi, and Kiwirail.	No changes			
	O8.2 Build constructive, working relationships with key stakeholders to achieve integrated stormwater solutions and cost effective outcomes.	Ongoing					
	O8.3 Establish effective mechanisms for mana whenua to be appropriately engaged in stormwater management. This includes recognising and actively working to operationalise and integrate the relationship and cultural values mana whenua have with their waterways	Ongoing	The Mana Whenua Engagement Strategy has been built on a continuous improvement approach that has been implemented for the last few years. It identifies key focus areas to improve relationship and the future initiatives that need to be scoped and implemented to work towards genuine partnerships. A refresh of the Mana Whenua Engagement Strategy is now needed to reflect new Healthy Waters programs and approaches including the Te Taunga framework and the Māori Outcomes plan: Kei Hea Te Kōmako in order to continue to meet the principles set out in the strategy. Work is underway to address the matters identified by iwi through an ongoing collaborative partnership across the Healthy Waters work programme.	No changes			
	O8.4 Work with the stormwater industry to continue to identify, refine and communicate best practice and increase industry capacity, resources and knowledge.	Ongoing	Healthy Water regularly attends conferences to share learnings with the stormwater industry. Additional training and resources are recommended as outcomes of this review.	No changes			
Six Year Targets	Council Stormwater Infrastructure Performance Standards (DC)	Target to be	Mana whenua are not formally surveyed as this is no longer an LTP target.	Target to be reworded following further engagement.			
	a) Proportion of mana whenua that are satisfied with Auckland Council's engagement with iwi in relation to stormwater projects: 10/19 or more (LTP)	amended					
	b) Percentage of projects that contribute to Maori outcomes: at least 95% (AMP)	Target to be amended	Reporting on this target is currently not accurate. Reporting processes to be improved.	Target to be reworded following further engagement.			
	c) >\$100,000 of other Council departments or CCOs growth projects are supported by the HW capital investment each year (AMP)	Target met	This target is the same as target (d) in the Growth section. See comments above.	Proposed Change:			
			Remove target from this section as only relates to growth and is direct duplicate.	Remove target			
	d) Compliance with NDC – number of abatement notices, infringement notices, enforcement orders or successful prosecutions: 0 (zero) (AMP)	Target met	Zero abatement notices, infringement notices, enforcement orders or successful prosecutions in relation to the NDC have been issued since the NDC was granted. The implementation of the NDC is ongoing.	No change.			
	Identified Reviews and Management Improvements for Managing the Council's pu	blic stormwater infra	<u>astructure</u>				

Issue 8 Comm	on to all issues - Objectives, Outcomes and Six yearly targets	Status	Discussion	Proposed changes to targets		
	e) Take into account and be cognisant of current or future lwi Management Plans (DC)	Target met	Explore how this can be fully utilised as part of SMP and Plan Changes	No changes		
	Collaboration with stakeholders (Co)					
	f) Develop and integrate, in partnership with mana whenua, best practice tools which can be used to effectively measure and assess cultural impacts of stormwater operations and programmes as part of the project scoping, prioritisation and cost-benefit analysis process (Mauri-model) - model developed, ongoing implementation for all significant projects	In progress	Healthy Waters have regular engagement with mana whenua including attending monthly kaitiaki hui and discussing various work programmes and topics. There are also pilots and programmes developing in partnership with mana whenua, such as cultural monitoring frameworks. The NDC mana whenua engagement strategy and NDC monitoring strategy was developed with consultation with mana whenua. Mana whenua are also provided regular project spreadsheet updates that Healthy Waters send around. Te Mātāpuna will also be an effective tool for sharing information and enable mana whenua to choose when and how they may want to engage in our projects.	No change		
	g) Establish a draft process to operationalise and integrate the relationship and cultural values mana whenua have with their waterways. This includes annual reporting on mana whenua engagement efficacy in order to determine when engagement took place in a project, what the value of the input was, and how mana whenua feedback was (or was not) incorporated	In progress	As with f) above.	No change		
	h) Regular engagement with iwi to assess implementation via the mana whenua hui	In progress	As with f) above.	No change		
Objective	Prioritised Investment: Benefits from limited resources are maximised by targeting our priorities to achieve	e the best outcome	s we can afford			
Outcomes	O8.5 Undertake regional prioritisation that targets investment in the right areas, as agreed within Council, with mana whenua and our community and in accordance with the Auckland Plan vision and statutory requirements.		Healthy Waters recently adapted the internal framework into a 'Project First' model, where iwi, consultants, designers, and contractors are brought into Healthy Waters CAPEX delivery programmes right from the start for an extended period. This aims to achieve better efficiency by having all partners involved on the same table right from the beginning, working on similar projects within a programme.	No change		
	O8.6 Establish levels of service that are relevant and affordable.	Met/ongoing	Levels of service are established through the Asset Management Plan	No change		
Objective	Efficient Business: Robust systems, processes, practices and management are implemented to support delivery of stormwater services					
Outcomes	O8.7 Undertake efficient and effective network operational, renewals and maintenance programmes.	Met/ongoing	Refer to asset section.	No change		
	O8.8 Regionalise stormwater management through harmonisation of standards, contracts and business processes.	Met/ongoing	Part of ongoing business as usual (BAU)	No change		
	O8.9 Provide fit for purpose information systems and business tools.	Met/ongoing	Healthy Waters uses a range of information systems and business tools as ongoing BAU.	No change		
	O8.10 Undertake efficient and effective response to customers and incidents.	Met/ongoing	Healthy Waters responds to hundreds of queries, requests for service and information each year. High customer satisfication scores are received from surveyed customers.	No change		
	O8.11 Rationalise network consents and compliance requirements.	Met/ongoing	At the time of granting of the NDC, Healthy Waters held approximately 120 historic network discharge consents for catchments of various sizes across the region. 99 have been submitted for surrender to date. 27 Catchment Plans have been adopted into the Regionwide NDC	No change		
	O8.12 Monitor and report performance.	Met/ongoing	This includes the monitoring strategy and the three and six year reviews of the NDC.	No change		