



# Te Awanui Tauranga Harbour Programme

Annual Report 2015/2016



BAY OF PLENTY  
REGIONAL COUNCIL  
TOI MOANA

Caring for Te Awanui  
Tauranga Harbour



Western Bay of Plenty  
District Council



Tauranga City

# Te Awanui Tauranga Harbour Programme Highlights

2015/16



Caring for Te Awanui  
Tauranga Harbour



**11 Estuary Care groups** supported to help care for the harbour margins and estuaries



**Additional 70 km** of river and stream margins protected from stock



**54 sites actively managed** to protect and restore our biodiversity



**5 new detainment bunds and 4 wetlands constructed** to stop sediment run-off into the harbour



**3,935kg of rubbish collected** during 10 litter clean-ups involving 1400+ school children and other volunteers



**30 kindergartens** participated in the Great Waste Race



**3 new monitoring sites** set up to look at sedimentation in our waterways



**42 eradication or new incursion pest plant sites** being managed



**42 new Environmental Management Plans implemented** with landowners to improve water quality and wildlife habitat



**18 popular swimming sites monitored** for unsafe bacteria levels during summer



**680 + bait stations serviced** by volunteers to control rats and mice



**Fencing and planting of harbour margins** in 7 new places



**240ha of erosion prone land** converted to more sustainable use



**50,000 native coastal dune plants planted** by school groups, volunteers and Corrections crews



**150m<sup>3</sup> of beach sand** re-nourishment at Pilot Bay



**160 pollution audits** of business and industrial sites



**29 volunteer harbour wardens** supported to educate boaties and enforce bylaws



**74 safety warnings issued** to boaties



**283 garden ponds checked** for pest fish



**433 swing moorings** administered



**44 reports** of oil spills or other pollution responded to



**Pest sea squirts found and removed** from 5 new harbour locations



**496 tonnes of sea lettuce** removed from Tauranga Harbour beaches



**285 navigation hazard reports** responded to

**Key:** Councils working in partnership.



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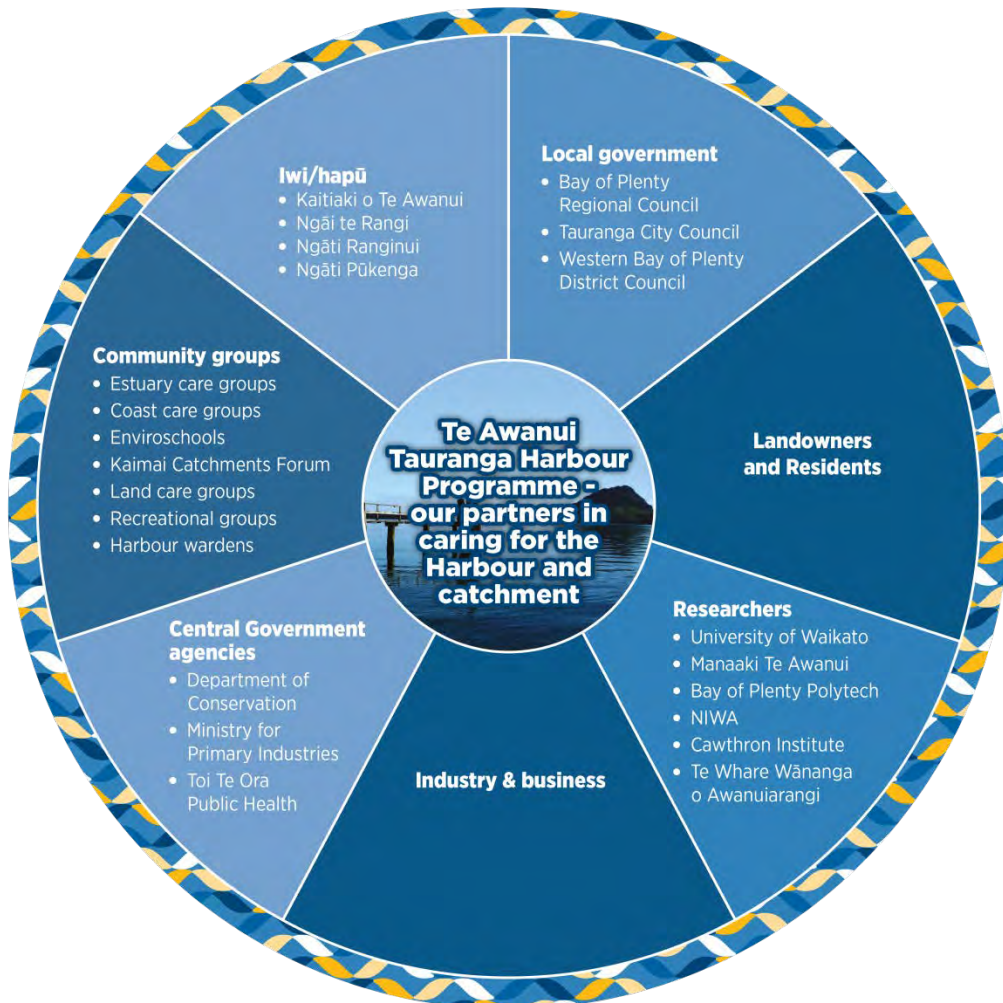


# Purpose

The purpose of this annual report is to outline the results of work carried out by Tauranga City Council, Western Bay of Plenty District Council and Bay of Plenty Regional Council through Te Awanui Tauranga Harbour Programme during the 1 July 2015–30 June 2016 year.

The report covers all operational, integrated planning, iwi engagement and involvement, science and programme management/governance work undertaken within the Programme. The results of the work are reported against specific actions from Te Awanui Tauranga Harbour Annual Work Plan 2015/16, which was agreed by all three councils.

The report also provides an up to date summary of our state of the environment monitoring for the harbour and catchment. Where good robust information is available, trends in the data are described.





## Background

Te Awanui Tauranga Harbour Programme is in place to coordinate work in Tauranga Harbour and its catchment, and deliver on community expectations. Tauranga City Council, Western Bay of Plenty District Council and the Bay of Plenty Regional Council are partners in the programme.

The Programme is overseen by Te Awanui Tauranga Harbour Advisory Group which includes representatives from Tauranga Moana Iwi Collective and councillors from the three councils.

The Programme and Advisory Group are expected to be reviewed once the Tauranga Moana Iwi Collective Deed of Settlement is passed into law, and co-governance arrangements are in place.







## Key Achievements

A high level of delivery was achieved against the key work approved and committed to in the 2015/16 Annual Work Plan. Key achievements are described below.

### *Governance and programme management*

- Tauranga City Council and Western Bay of Plenty District Council are now participating in the programme at the staff, management and governance level for the first time.
- Quarterly e-newsletter kicked off and now has more than 400 subscribers.
- Thirty one media releases on Tauranga Harbour related topics issued during the year.

### *Integrated planning*

- Stocktake reports and maps completed to support preparation of the co-governance document (<http://www.boprc.govt.nz/environment/coast/te-awanui-tauranga-harbour/about-tauranga-harbour/tauranga-harbour-maps>).
- Policy development on coastal and inner harbour erosion, navigation and safety, and water quantity and allocation.

### *Science*

- Natural Environment Regional Monitoring Network monitoring carried out, and additional projects commenced, including nutrient and bacteria monitoring in areas of concern, sampling for oil contamination and increased sediment monitoring.
- Long Term Tauranga Harbour Science Plan 2016–2019 delivered.

### *Iwi engagement and involvement*

- Tauranga Moana Iwi Management Plan completed and lodged with Councils.
- Partnered with Manaaki Te Awanui on a case study, to show the interface between Mātauranga Māori and western science, and provide an example of how Mātauranga Maori can initiate and drive research.

### *Operations*

- New sediment monitoring sites set up and large-scale mitigation put in place in high risk areas across the catchments.
- Harbour margin restoration work undertaken with the three councils, with a total of seven new plans in place for the 2015/16 year.
- Sand replenishment completed at Pilot Bay with 150 m<sup>3</sup> (cubic metres) of dredged sand being placed.
- Successful tests and trials of the mangrove hovercraft at Athenree and Waikareao estuaries, and preparation of the Safe Operational Plan for Maritime New Zealand requirements.
- Fifty thousand native plants planted in coastal dunes around the Tauranga and Waihi Beach areas by Coast Care.
- Nine operations cleaned up 496 tonnes of sea lettuce that accumulated in inner harbour beaches.



- Ten litter clean up events organised with local schools, which removed nearly 4 tonnes of rubbish from the harbour environment.
- Eight hundred and eighty compliance inspections of consented sites undertaken in the Tauranga Harbour catchments, and two industrial audits undertaken in the Central Business District, and the Fraser Cove and Maleme Street area.
- Progress on Ongare Point and Te Puna West reticulation schemes underway, with design options discussed with the community.
- Seawall renewal and upgrade work completed in a number of priority areas across the city and district.







# Tauranga Harbour and catchment environmental monitoring

Monitoring of the health of Tauranga Harbour and catchments has occurred since the 1990's, as part of the Natural Environment Regional Monitoring Network. The following is a summary of recent trend information.

## Water quality

Water quality information is collected from 18 swimming water quality sites, 18 stream water quality sites and eight harbour water quality sites across Tauranga Harbour.

## Estuarine water quality

Sampling of estuarine water quality has now been increased to monthly at eight sites. The last analysis of data was up to 2013 and was reported in 2015 (<http://www.boprc.govt.nz/media/433844/nermn-estuary-water-quality-report-2014.pdf>). Key findings from that report are as follows:

- A decreasing trend was observed in Tauranga Harbour in total phosphorus concentrations at five sites in the southern harbour and a decrease in dissolved phosphorus at three sites in the northern harbour.
- Increased chlorophyll-a concentration was found at three northern harbour sites which is an indicator of phytoplankton production.
- The highest suspended solids and turbidity occurred at Pahoia, Otumoetai and Te Puna. Three quarters of the data is below guideline levels for all sites. This shows that overall water clarity is good.
- Guideline levels for quality of shellfish gathering waters have been exceeded at Otumoetai, Te Puna and Omokoroa, based on the median value faecal coliform bacterial count. Often high counts are occurring after rain events which highlights that shellfish gathering should be avoided at those times.

## Stream and river water quality

Water quality in streams and rivers in harbour catchments (measured by suspended sediment, clarity, nitrogen, phosphorus and faecal contamination) at 18 sites has been largely stable or improving over the last decade.



## Recreational water quality

Swimming water quality of streams flowing into the Tauranga Harbour over the 2015/16 bathing season was variable. Kaiate Stream had the highest exceedances with a median value in the red/action mode. For all other streams, no median values were over the green/safe mode, indicating that on average, all rivers over the season were suitable for swimming. Estuarine swimming sites within the harbour (12) were generally suitable for swimming, if exceedances associated with significant rainfall events are taken into account.

## National Objectives Framework comparison

The National Objectives Framework in the National Policy Statement for Freshwater Management defines thresholds for water quality attributes, ranked into four bands (A-D) which effectively set national bottom lines for water quality.

Below is a summary of water quality data compared to the bands for the Tauranga Harbour catchments for 2015.

- No sites are currently below the national bottom line, or indeed in the 'C' Band, for nitrate or ammonia.
- Te Mania Stream was rated "C" for *E.coli* (for secondary contact recreation) and the Waitao Stream was "B", all other streams rated as "A".
- In summer surveillance, *E.coli* monitoring (weekly or bi-weekly monitoring over the summer period) all but one site failed to meet the Minimum Acceptable State (MAS) for primary contact recreation (e.g. bathing, swimming).

## Groundwater and geothermal resources

A conceptual model was developed in 2009 to understand the groundwater systems of the Tauranga area. In 2013, a numeric model of the Tauranga Geothermal System was also developed to provide direction for the management of geothermal groundwater. The model suggested that some areas could cool if the volume of take is not better managed. This model has been reviewed and requires further data sets to be included and the model rerun. Before this is embarked on, a review of what would be the more appropriate model to be used within the Tauranga Harbour and Kaituna-Maketū-Pongakawa Water Management Areas for groundwater and the geothermal component is being sought. Once this is complete, decision will be made on the direction of model for this resource.

## River and stream ecology

Sampling of stream invertebrates and fish has occurred in the harbour catchment at 33 sites. Trends observed in stream ecological health indicate that in 16 streams, the ecological health is relatively stable. Of the 33 streams examined, none were rated as 'poor', with most streams (17) being assessed as 'good'.



## Harbour ecology

Overall estuarine health in Tauranga Harbour is under pressure from a range of stressors, particularly sediment and nutrients. In the main harbour basin, it is reasonably stable but shows decreasing ecological health trends in the upper estuaries, where habitats are more sensitive to sediment inflows and nutrients from the catchments.

- Between 1959 and 2011, seagrass beds have decreased over the whole harbour by 38%, with the greatest decreases observed in the sub-estuaries and southern harbour.
- Surveys of shellfish distribution and abundance have shown a decline in the upper estuaries. In the lower more exposed eastern harbour areas, shellfish beds have shown much less change.
- Monitoring of benthic macrofauna indicates declining habitat quality in the western sub-estuaries. No significant changes have been found in the lower eastern open harbour areas.
- Mapping mangroves indicates that canopy cover of mangroves has increased significantly from 200 ha in the 1940's to 811 ha in 2011. Mangrove expansion in the harbour is a natural response to increased sedimentation, nutrients and less frequent frosts.
- Monitoring of sea lettuce shows abundance is highly variable with a strong correlation between blooms and periods of strong westerly winds, inducing coastal upwelling. Research is currently being conducted to better understand the drivers of sea lettuce growth.

## Sediment and contaminant trends

Estuaries are very sensitive to sediment and contaminants inputs. In Tauranga Harbour, contaminant levels tend to be low and meet guidelines. However, contaminants increase substantially in industrial areas, and Council is targeting these areas through pollution audits.





High sedimentation rates are caused by high loads settling in sheltered sub-estuaries, causing a decline in health of harbour ecology. In the open areas of Tauranga Harbour, sediments are in a healthy sandy state. Additional monitoring has been setup at 60 sites across the harbour to provide more accurate sedimentation information.






## Programme update 2015-2016


The table below provides a report on achievements against actions agreed in the Te Awanui Tauranga Harbour Annual Work Plan 2015/2016.

The project status column shows progress status indicators as follows:

-  Achieved.
-  Not complete, in progress, a risk but not an issue yet.
-  Not applicable/no data available.
-  Not achieved.

Governance and programme management			
Agency	What we said we would do (Annual Plan 2015/2016)	What we achieved?	Project status
BOPRC	Te Awanui Tauranga Harbour 2014/2015 Annual Report and 2015/16 Six Month Report.	Reports presented to relevant committee meetings.	
BOPRC	Tauranga Harbour Annual Work Plan 2016/2017.	2016/2017 Annual Work Programme presented to relevant committee meetings.	
BOPRC	Engaging our partners into the programme.	Tauranga City Council and Western Bay of Plenty District Council are now fully represented at the programme management level and programme board level.	





<b>BOPRC</b>	<p>Communications Strategy Implementation</p> <ul style="list-style-type: none"><li>➤ Deliver targeted communications material throughout the year as per the Communications Strategy and Plan.</li><li>➤ Respond to media and communications opportunities and issues as they arise.</li></ul>	<p>Targeted communications work this year has included ongoing proactive media releases (including on sea lettuce, hovercraft trial and Navigation and Safety Bylaw review), regular web and Facebook updates, introduction of a new quarterly e-newsletter, development of sea lettuce media kit (including expert commentary videos), a rates mail-out insertion, repeat of the Enspire Youth video competition, and display and distribution of promotional materials through relevant local channels, including the Tauranga Boat Show, Tauranga A &amp; P show, Coastal Economic Symposium, paint stores and car dealers.</p> <p>The e-newsletter has over 400 subscribers and a consistent open rate of &gt;54% (higher than industry standard). Web page views have been maintained at &gt;13,500 annual views.</p> <p>Thirty one media releases on Tauranga Harbour related topics were issued during the year, helping to achieve broadcast of 402 relevant news items that reached more than 5.45m people across print, radio, TV and online channels and generating equivalent advertising revenue of \$302,000.</p> <p>Marine pests and boating safety awareness campaigns targeting moored boat owners and other harbour users have also been delivered to support the work of Regional Council's Maritime and Biosecurity teams.</p>	
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Integrated planning			
Agency	What we said we would do (Annual Plan 2015/2016)	What we achieved?	Project status
BOPRC	Support to Te Awanui Tauranga Harbour Advisory Group - provide reports and advice to Te Awanui Tauranga Harbour Advisory Group as necessary.	Update reports have been provided to Te Awanui Tauranga Harbour Advisory Group over the 2015/16 year. Topics have included: <ul style="list-style-type: none"> <li>➤ Mapping and stocktake outputs.</li> <li>➤ Sea level rise and coastal hazard information.</li> <li>➤ Navigation and Safety Bylaw review.</li> </ul>	
BOPRC	Completing stocktake for Tauranga Harbour - Complete a stocktake on Tauranga Harbour and catchment by the end of 2015.	Stocktake reports and maps have been completed. Maps have been added to the Te Awanui Tauranga Harbour webpage: Community Environmental Works, Natural Character and Historic Heritage; Biodiversity, Water Quality of Rivers; Regionally Significant Infrastructure; Consented Activities.	
TCC	Flood hazard mapping and mitigation - 2D models for each catchment. Remaining models completed by end of 2015/2016.	2D flood models have been completed for all areas of Tauranga City (with the exception of Bethlehem, Wairoa River, Kaitemako and Welcome Bay catchments).	
TCC	Stormwater Catchment Management Plan preparation, implementation, consultation, cultural input and five yearly reviews.	The Papamoa Comprehensive Stormwater Consent (CSC) variation appeal has been settled and amended conditions have been provided by the court. Development of the Papamoa Catchment Management Plan is close to completion.	





<p style="text-align: center; color: white; font-weight: bold;">TCC</p>	<p>Water supply catchment management - ongoing work through 2015/2016.</p>	<p>Ongoing works in the catchment have been completed including the following:</p> <ul style="list-style-type: none"> <li>➤ Native forest pest animal controls.</li> <li>➤ Fencing off and planting riparian margins in association with BOPRC and WBOP.</li> <li>➤ Pest plant controls.</li> <li>➤ Monitoring and managing acute, chronic and potential sources of pollution/contamination, including: slips, forest access, stormwater discharges, land use, illegal dumping and stream sampling, analysis and trending.</li> </ul> <p>A significant area of exotic forest has been harvested from within the water supply catchment.</p>	
<p style="text-align: center; color: white; font-weight: bold;">WBOPDC</p>	<p>Coastal Erosion Policy development - a consistent policy approach to future long term decision-making on erosion mitigation in the Tauranga Inner Harbour.</p>	<p>A Policy Scoping Workshop was held on 5 August 2015. The workshop looked at the following:</p> <ul style="list-style-type: none"> <li>➤ explain the causes and drivers of coastal erosion, to assess the nature of coastal erosion in the district,</li> <li>➤ raise awareness of the relevant national and regional legislation and policy,</li> <li>➤ look at Council's response to harbour and coastal erosion to date,</li> <li>➤ review recent community feedback, and</li> <li>➤ outline the directions required from this workshop and the timeline for policy development process.</li> </ul> <p>The document "Living by the Sea" has been presented to the Maori Partnership Forum.</p> <p>A legal review of the document has been completed and the draft document is being considered by Council for release for public consultation.</p>	



<b>WBOPDC</b>	Coastal hazards line review - new coastal hazard lines added to District Planning Maps. Anticipated that decisions will be made by end of 2015 with final Environment Court sign-off in mid-2016.	Public open days occurred at Waihi Beach and Pukehina Beach in May 2015 and formal public consultation undertaken in August/September 2015. The plan change was notified on in October 2015 and following submissions and hearings was adopted on 4 June 2016.	
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Science			
Agency	What we said we would do (Annual Plan 2015/2016)	What we achieved?	Project status
BOPRC	NERMN monitoring and Tauranga Harbour Science Plan 2015/2016 delivery - all NERMN monitoring and reporting will be carried out in accordance with the current NERMN monitoring programme. Projects identified in the Tauranga Harbour Science Plan 2015/2016 will be delivered.	NERMN monitoring has been conducted in all the various modules that relate to Tauranga Harbour, providing a substantial amount of environmental data. All reporting is on schedule except for the sea lettuce monitoring module.	
BOPRC	Relationships with research providers - in accordance with the Chair in Coastal Science Memorandum of Agreement, the University of Waikato will: <ul style="list-style-type: none"> <li>➤ Report to BOPRC in June 2015 and June 2016, on relevant items or issues associated with the Chair, and</li> <li>➤ Report in April 2016 on student research projects.</li> </ul>	Reporting for June 2016 on matters relating to the Chair is currently behind schedule, but has been requested.  Updated reporting has been provided for four of the five students' projects and a response is pending for Alex Port's study on sea lettuce. There are currently two funded research projects underway (sediment and nitrogen) that are on schedule at this point in time.	
BOPRC	University of Waikato PhD student funding - deliver a progress report on all BOPRC funded research project by 30 April 2016.	A progress report was provided to the Tauranga Harbour Programme Manager in May 2015.	
BOPRC	Science to support mangrove consent applications and monitoring - ongoing work through 2015/2016.	Significant science support has been provided for both consent applications and monitoring required by consents. In addition, technical science support has been provided for Environment Court hearings for coastal planning process.	
BOPRC	Longer Term Tauranga Harbour Science Plan 2016-2019 - deliver plan by 31 December 2015.	A Longer Term Tauranga Harbour Science Plan was completed within the required timeframe.	









Tangata Whenua engagement and involvement			
Agency	What we said we would do (Annual Plan 2015/2016)	What we achieved?	Project status
BOPRC	Build capacity for the use of Mataranga Māori for Te Awanui Tauranga Harbour. Ongoing work through 2015/2016.	Partnering with Manaaki Te Awanui in a case study to show how Mataranga Māori can initiate and drive research projects using Tauranga Harbour as an example and to then show the point of interface between Mataranga Māori and Western Science. A Cultural Health Index being developed for the harbour will act as the tool to show the interface and ongoing relationship of Mataranga Maori and Western Science.	●
BOPRC	Iwi Management Plan Project.	The Iwi Management Plan has been completed and lodged with BOPRC, WBOPDC and TCC. A Socialisation Plan will be developed to introduce the plan to staff and the other two councils.	●
BOPRC	Tangata whenua involvement and capacity building. Ongoing work through 2015/2016.	No specifics have started but some planning has been discussed of how tangata whenua will change, after the establishment of the co-governance entity for the Tauranga Harbour.	●
TCC	Prepare for Te Awanui Tauranga Harbour co-governance.	TCC has worked collaboratively with tangata whenua on a wide range of projects including stormwater and wastewater management.	●



Operations			
Agency	What we said we would do (Annual Plan 2015/2016)	What we achieved?	Project status
BOPRC	<p>Catchment Action Plan implementation:</p> <ul style="list-style-type: none"> <li>➤ Fifty additional kilometers of waterway margin in the Tauranga Harbour catchments protected to reduce sediment, nutrient and/or bacterial contamination of water.</li> <li>➤ An additional two High Value Ecological Sites and four community led sites where biodiversity is actively managed within the Tauranga Harbour Catchment.</li> <li>➤ Review of catchment action plans complete.</li> </ul>	<p>Catchment Action Plan targets were exceeded. An additional 69 km of new waterway margin was protected, three new High Value Ecological Sites and nine new community led sites were protected under Biodiversity Management Plans.</p> <p>The catchment action plan review is complete, and the plans are now being refreshed.</p>	●
BOPRC	Sediment monitoring - monitoring sites set up and first year of monitoring programme implemented.	Two sediment monitoring sites have been set up on the Kopurererua and the Waimapu streams, with a third control site on upper reaches of the Tuapiro Stream. Eight months of monitoring data has been collected. One event on 24 March 2016 measured 93 ton of sediment in 22 hours. Further calibration of the equipment is necessary to ensure accurate results. Ongoing annual sediment monitoring at these sites is required to build a clear picture of the sediment issue, assess effectiveness of interventions and set a baseline for any future studies.	●
BOPRC	Sediment management tools - report on the effectiveness of sediment control interventions by end of 2015/2016.	Three sites were selected with a total of five bunds and four wetlands constructed. Site locations were selected late into the project and this has put the monitoring behind schedule.	●
BOPRC	Te Awanui Tauranga Harbour Margins Project - five new Harbour Management Plans in place each year.	This target was exceeded. An additional seven Harbour Margins Projects are now in place.	●






<b>BOPRC</b>	Te Awanui Tauranga Harbour Stream Works - five new Stream Management Plans in place.	Stream Management Plans are initiated as a response to severe weather events. We have only needed to put three of these plans in place over the last year.	
<b>BOPRC</b>	Marine Biosecurity - continued delivery of an intensive surveillance programme. Implementation of response plans where required. Implementation of the Small Scale Management Plan for fanworm and tunicates.	<p>The latest round of marina surveillance has been completed in early July within Tauranga Harbour. Three single small fanworms were found within Sulphur Point Marina on walkway pontoons and one found within Bridge Marina also on walkway pontoon. One vessel was detected within Bridge Marina with eight small fanworm on its hull. This vessel was cleaned before departing to Auckland, as directed by Marina staff in Tauranga, but an area of the hull was missed around the water intake.</p> <p>Over the past year there has been an increase in the number of <i>Styela clava</i> locations with five new sites being found in March 2016. These were located at the base of the concrete “feet” of both bridges near the Tauranga CBD. More intensive surveillance is planned in November to determine the full extent of <i>Styela</i> in this area. <i>Styela</i> has also been found on five vessels and three other locations (walkway pontoon) since October 2013.</p>	
<b>BOPRC</b>	Ongoing support for the Kaimai Mamaku Catchment Forum - continued participation in the joint agency project. Continued support of the forum.	The forum met in September 2015, but have not convened since. This is mostly due to the loss of dedicated coordination through Landcare Trust. Staff have been working with Department of Conservation and Environment Waikato staff to support the forum in determining their next steps.	
<b>BOPRC</b>	Ongoing estuary care group support - Estuary Care Groups are satisfied with the level of service they receive from Council.	Estuary Care Groups have continued to be supported through supply of materials, working bee support, open day planning, provision of advice, training, weed control, AGM attendance, information distribution, compliance reporting and facilitation of the Leader’s Forum. Verbal feedback and annual survey results indicate satisfaction with the level of service provided.	



BOPRC	Mangrove Management Environmental Decision-Making Framework (Stage 2).	Stage 2 requirements were revised following outcomes of the Stage 1 literature review. No decision-making framework required, given direction through the Regional Policy Statement (RPS), proposed Regional Coastal Environment Plan and the Mangrove Operational Policy.	●
BOPRC	Seedling mangrove management - up to 600 ha per annum of mechanical mangrove seedling maintenance.	This year we have achieved the completion of the required modifications to the design of the hovercraft, resulting in a successful trial of its performance at Athenree Inlet, including a Maritime New Zealand survey. We have also completed driver training (including securing approval to a change to our Maritime New Zealand (MNZ) approved training framework) in Waikareao Estuary, which included positive media coverage. We have prepared and submitted all required Maritime New Zealand documentation for assessment. We are currently working through an audit with a Maritime New Zealand appointed auditor. This process includes an in depth review of the Safe Operational Plan that we have prepared in conjunction with Fieldmaster, and an operational audit of the hovercraft. Once the auditor signs off, Maritime New Zealand can certify the operation and we can commence full operation. In the interim, we are continuing to support Estuary Care Groups to manage seedlings.	●
BOPRC	Mature mangrove management - mature mechanical mangrove management as required. Mechanical mangrove stump maintenance.	Mature mangrove and stump management has been successfully carried out this year through contracts with Valley Forest Contractors. Sites where this has occurred, include Welcome Bay, Waimapu, Mangawhai Bay and Wainui. Feedback from the public has been very positive. Further management of mature mangroves is expected to be minor, with most consented areas now completed.	●









<p><b>BOPRC</b></p>	<p>Coast Care - identified priority areas are actively managed and maintained with support from Coast Care partners and community volunteers.</p>	<p>Tender process was undertaken for Coast Care delivery in Tauranga and Waihi Beach areas. This was awarded to FloraGrow. Tender of plant supply for the two areas was awarded to Coastlands Plant Nursery. Both contracts are for three years.</p> <p>Key focus for Coast Care is education – 2552 students, parents and teachers reached. A total of 50,000 native dune plants were planted in the Tauranga and Waihi Beach areas, with a total of 3ha managed by Coast Care in 2015/16.</p> <p>Two hundred and fifty volunteers planted over 15,000 plants. Corrections crew provided over 8000 man hours to prepare and maintain the planting areas.</p>	
<p><b>BOPRC</b></p>	<p>Sea lettuce management - ongoing work. Level of response depends on the severity of the 2015/2016 bloom. Ensure contracts with clean-up contractor and receiving site operators are finalised by 30 October 2015.</p>	<p>The sea lettuce clean-up season started with an expected flurry of activity but tapered off just before Christmas 2015, due to a die-off of sea lettuce caused by sustained warm (greater than 23-27 degrees Celsius) harbour water conditions.</p> <p>A total of 496t of sea lettuce was removed from Tauranga Harbour beaches in nine separate clean-up jobs. Budget for the year was slightly exceeded.</p>	
<p><b>BOPRC</b></p>	<p>Opureora Channel dredging - complete dredging by 30 June 2016.</p>	<p>Up until the end of March 2016, the dredging project was on-track according to timeframes, schedules and budget set out in project plan. All outputs and reporting was delivered as agreed and project management methodology followed throughout. Unfortunately, there were no acceptable tenders for the work and the project was put on hold for retendering in the 2016/2017 year. Key outputs delivered were: Comprehensive and thorough resource consent application, extensive community consultation, resource consents from both consent authorities, detailed design drawings and tender specifications and high quality tender documentation.</p>	







BOPRC	Litter clean-ups - Ongoing work throughout the year.	<p>Ten joint TCC/BOPRC managed litter clean-ups were held during the year. A total of over 1400 school children and other volunteers participated in these clean-ups removing 3935 kg of litter and rubbish from the harbour environment. In addition, an unscheduled clean-up at Opureora on Matakana Island involving BOPRC staff, Matakana Island Nursery staff and children from the Kura, collected approximately 500 kg of rubbish.</p> <p>Planning meeting for 2016 calendar year litter clean-ups held with key TCC staff prior to Christmas 2015.</p>	●
BOPRC	Implement Tauranga Harbour Recreation Strategy - ongoing work throughout the year.	Although there has only been one Recreation Users Forum Meeting in the period, regular email updates have been provided to forum contacts on a range of matters, such as marine biosecurity, the Mobil oil spill, Opureora Channel Dredging Project and harbour water quality/bathing quality.	●
BOPRC	Navigation Bylaw Review - review will start July 2015, and take a year to complete.	Navigation Bylaw Review is ongoing. Hearings were undertaken in July.	●
BOPRC	24/7 oil spill response- <b>Long Term Plan KPI:</b> 99% ongoing throughout year. Navigation safety - <b>Long Term Plan KPI:</b> Percentage of time to maintain 24/7 response to navigational incidents and maritime oil spills.	24/7 Navigation safety coverage and oil spill response was achieved.	●
BOPRC	OSET Plan implementation - project to be completed by 1 December 2015 pending funding decision.	<p>Te Puna West: Supply tender for the grinder pump supply contract is out – to be awarded 29 July. Then seeking cost for design. Due to start construction October/November 2016 plus four months for works. Commissioning of the system around April 2017.</p> <p>Ongare Point: close to securing land. Process on track. Full design being developed by Innoflow. Construction planned for 2017/18, but need resource consent first. The WBOPDC presented an update to their Council meeting in August.</p>	●



<b>BOPRC</b>	Implement Regional Waste Strategy 2013-2023.	None of the projects being funded have an effect on the Te Awanui Tauranga Harbour Programme. No reporting required.	
<b>BOPRC</b>	<p>Ongoing pollution prevention work: compliance monitoring, complaint response and enforcement:</p> <ul style="list-style-type: none"> <li>➤ Compliance and impact monitoring of sites/consents to be in accordance with the 2015/2016 Council Charges Policy.</li> <li>➤ Long Term Plan KPI: All urgent complaints to the Pollution Hotline are responded to within 12 hours and all non-urgent complaints are responded to within five working days.</li> </ul>	<p>The Tauranga based Pollution Prevention Team carried out 1360 compliance inspections of consented sites in the financial year. Approximately 70% of these (880) were in the Tauranga Harbour Catchment and were carried out according to the Council Charges Policy.</p> <p>A total of 2358 complaints were registered over the 365 day reporting period. Of these, 1325 were air complaints, with the remaining 1033 being a variety of non-air complaints.</p> <p>Thirteen of the 2358 complaints received were urgent. All of these were actioned within 12 hours from the time of the initial complaint. Note, these were region wide complaints. At this point in time, we do not have capability to separate out Tauranga Harbour Catchment complaints in our reporting capability.</p>	
<b>BOPRC</b>	IP3 Hazardous Activities and Industries List (HAIL) activity audits - ongoing work through 2015/2016.	The Industrial Pollution Prevention Programme (IP3) continues into its eighth year. During this financial year, 160 geographical based audits were undertaken with TCC in the Tauranga CBD as well as Maleme Street and Fraser Cove.	
<b>TCC</b>	Wastewater consents implementation and monitoring (including Wastewater Management Review Committee) - ongoing work throughout 2015/2016.	Wastewater consents have been implemented effectively with consent conditions in general being met. A non-compliance with a condition in the Te Maunga Odour Consent relating to decommissioning of the sludge pond, was identified in late 2015 and plans were implemented to address this (the biosolids strategy currently underway). The UV Plant at Te Maunga is now built and is being commissioned. The five yearly Wastewater Review Report, including the Tangata Whenua cultural report was completed and provided to BOPRC.	



TCC	<p>Stormwater CSC implementation and monitoring:</p> <ul style="list-style-type: none"> <li>➤ Long-term stormwater and receiving environment monitoring data for stormwater catchments across the city.</li> <li>➤ Annual or five yearly monitoring reports presented to stakeholders and consenting authority from which to determine the requirement for further catchment management plans or stormwater treatment.</li> </ul>	<p>The 2015 annual monitoring report for the CSC's was completed and provided to BOPRC. The report highlighted exceedances in water quality sampling and provided detail on actions to be taken to either undertake further investigation or provide for mitigation.</p>	
TCC	<p>Regional Wastewater Overflow Forum - preparation of a region specific best practice guide to encompass wastewater overflow mitigation strategies, response and reporting procedures.</p>	<p>Members of the forum have been developing initial draft content for various sections of the best practice guide.</p>	
TCC	<p>Wastewater inflow and infiltration mitigation - ongoing work through 2015/2016.</p>	<p>A flow derivation tool is used to prioritise catchments for inflow and infiltration source detection/rehabilitation. Monitors have been placed at various parts of Ngatai Road Catchment, Palm Beach Boulevard, The Lakes, Westwood St., Graham Place, Princess street, to monitor both Wet and dry weather flows. Rehabilitation work for the Ngatai Road catchment is complete.</p>	
TCC	<p>Wastewater overflow mitigation planning - ongoing work through 2015/2016.</p>	<p>Overflow mitigation planning has included identifying problem areas, network inspections, network upgrades, jetting, root removal and relining. Fats accumulating in lines continues to be an issue. Educational signage on 'what not to flush' is in place in three locations around the city. The Regional Wastewater Overflow Forum is working in part, toward developing a common approach across the Bay of Plenty, to minimising wastewater overflow risks. The Southern pipeline Project has been delayed.</p>	





TCC	Monitoring functions to check compliance with Tauranga City Plan/Land use Consents - ongoing work through 2015/2016.	There were no significant non-compliance issues in 2015/16. Compliance officers have implemented a programme to monitor small site earthworks issues, where sites have initiated earthworks prior to applying for a building consent.	●
TCC	Three Waters Education Programme - ongoing work through 2015/2016.	Waterline Programme delivered educational lessons to 24 schools (90+ classes) on the Three Waters. The great drain game was delivered at 21 schools. The great waste race was delivered at 30 kindergartens. The stream and estuary clean-up programme held 10 events over 2015/2016.	●
TCC	Pollution Prevention Programme - Completion of industry or area specific audit reports summarising the outcomes of audits issues identified and sites for referral to BOPRC for consent consideration and/or enforcement.	Pollution Prevention Audit programmes were successfully carried out in the Maleme Street and Courtney Road Catchment and within the Tauranga CBD and surrounding areas.	●
TCC	Ongoing development of major city harbour reserves - in accordance with approved management plans and Council's Annual and Ten Year budgets.	Works have been successfully delivered in line with reserve management plans. Sea wall renewal work at Maxwell's Road was completed. Memorial Park seawall upgrade has commenced.	●
TCC	Wairoa River sustainable harbour margin management - compliance and achievement of strategy policies and objectives.	A survey of Esplanade boundaries was completed. The first stretch of fencing has been completed and the new area of reserve land is now under TCC's reserve maintenance contract.	●
TCC	Harbour margin parks ecological restoration - compliance and impact monitoring of sites/activity to be in accordance with city plan and restoration plans for each site.	Works have been successfully delivered in line with reserve management plans, including native planting.	●
TCC	Beach sand re-nourishment - Compliance and impact monitoring of sites/activity to be in accordance with consent.	Tauranga City Council was granted consent to allow for beach nourishment, to raise sand levels in the following areas – Memorial Park, Fergusson Park to Kulim Park and Maxwell's Road. No works took place in 2015/16 under this new consent.	●



<b>TCC</b>	Implement Tauranga Harbour Recreation Strategy - ongoing work throughout the year.	Strategy is being implemented.	
<b>WBOPDC</b>	Review Kaimai Ward Reserve Management Plan - end of 2015 calendar year.	Public consultation and hearings have been completed. The Policy and Strategy Committee will be making formal decisions on 23 August 2016.	
<b>WBOPDC</b>	District wide natural environment support - key community groups are encouraged to continue to be viable in the future.	Engagement with environmental groups has been ongoing throughout the year.	
<b>WBOPDC</b>	Implement Tauranga Harbour Recreation Strategy - ongoing work throughout the year.	Aspects of strategy have been implemented.	
<b>WBOPDC</b>	Ongare Wastewater Scheme - reticulated community system by 2017.	Final design issues to be worked through with the community.	
<b>WBOPDC</b>	Te Puna West Wastewater Scheme - Reticulated community system by 2017.	Design options completed.	
<b>WBOPDC</b>	Katikati wastewater treatment investigations - re-consenting of the pipeline and outfall by November 2016. Application to be lodged by May 2016.	An application for the renewal of the resource consent to operate the Wastewater Treatment Plant was completed and lodged with the Regional Council.	
<b>WBOPDC</b>	District-wide fencing subsidies - ongoing work through 2015/2016.	Fencing subsidies have been provided on a case by case basis has been ongoing throughout the year.	
<b>WBOPDC</b>	District-wide natural environment support (Coast Care, Care Groups etc.) - ongoing work through 2015/2016.	Engagement with environmental groups has been ongoing throughout the year.	
<b>WBOPDC</b>	Tauranga Harbour Esplanade Reserves Management Project – refer to “Tauranga Harbour Margins Project in BOPRC Operations”.	Harbour Management Plans implemented in conjunction with BOPRC.	



<b>WBOPDC</b>	Tauranga Harbour Margins Project – Refer to “Tauranga Harbour Margins Project in BOPRC Operations”.	Harbour Management Plans implemented in conjunction with BOPRC.	●
<b>WBOPDC</b>	Ōmokoroa Seawall – complete construction of Ōmokoroa Seawall in line with the consent conditions.	The rock revetment was completed in accordance with the resource consent requirements.	●
<b>WBOPDC</b>	District wide monitoring of protection lots – significant areas of indigenous vegetation/ecological importance are protected in perpetuity.	Protection Lot monitoring has been completed as per programme.	●
<b>WBOPDC</b>	Stream works – Stream bank repair and stabilisation of eroding banks undertaken as and when required within budget.	Significant repairs have been undertaken along the true right bank of the Uretara Stream just upstream from the Haiku pedestrian bridge.	●

# Financials

Te Awanui Tauranga Harbour Contributory Programmes – end of Financial Year (2015/2016).

Bay of Plenty Regional Council	2015/16 Budget	2015/16 Actual
Maritime	\$847,569	\$510,084
Tauranga catchments	\$4,729,920	\$3,436,705
Integrated planning and Tangata Whenua engagement and involvement	\$40,000	\$15,263
Pollution prevention	\$558,610	\$421,889
Science	\$333,703	\$191,858
Marine biosecurity	\$104,543	\$24,136

Tauranga City Council Budget	2015/16 Budget	2015/16 Actual
Recreation and natural environmental	\$247,060	\$187,918
Stormwater pollution prevention	\$725,848	\$667,626
Wastewater effects mitigation	\$25,537,237	\$13,783,896
Flood mitigation and modelling	\$1,410,000	\$1,157,743

Western Bay of Plenty District Council	2015/16 Budget	2015/16 Actual
Integrated planning and operations	1,367,603	\$539,879