



# **WATERBODY MANAGEMENT STRATEGY: ~ Framework & Waterbody Management Plans (Ululah Lagoons & Lowlands Lagoons)**

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## **COMMUNITY ENGAGEMENT & EVALUATION REPORT**

**Period: November 2019 – December 2019**  
**Fraser Coast Regional Council**

There has been a continued and repeated history of requests for maintenance activities for urban waterbodies around the Fraser Coast for many years. Council recognises the community's interests and concerns in relation to urban waterbodies. Council have committed to ensuring the community and stakeholders are given the chance to **'have their say'**.



**Remit: How do we collaboratively develop a strategic management approach for urban waterbody asset management?**



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# 1 EXECUTIVE SUMMARY

## 1.1 OVERVIEW

There has been a continued and repeated history of requests for maintenance activities for urban waterbodies around the Fraser Coast for many years. Council recognises the community's interests and concerns in relation to urban waterbodies. Council have committed to ensuring the community and stakeholders are given the chance to 'have their say'.

Between **21 November and 9 December 2019** Council undertook an engagement process for the project. The process involved online engagement through Council's community engagement platform Engagement Hub, which included a survey – receiving 266 responses. Council also conducted two information drop-in sessions and walking tours with members of the project team and one of Council's specialist consultants to discuss issues, potential actions and answer questions with the community. During the engagement process Council received 10 submissions from the community and included them as part of the engagement analysis and evaluation.

The aim of the engagement for this project was to understand the community's perspective on their values and views relating to urban waterbody issues and management options, whilst providing a process for collaboratively developing an approach for strategically managing these dynamic asset types.

This report will inform Council in making a decision on a strategic management approach, as well as assisting with establishing levels of service for urban waterbodies, to manage future requests for maintenance activities and overall strategic management intent of urban waterbody assets.

## 1.2 KEY ENGAGEMENT FINDINGS

Overall the findings show a clear level of concern from the community in relation to the overall maintenance, protection and preservation of the waterbodies and immediate area - across the region. Through the theming of the engagement there was a clear message of maintaining and managing the waterbodies as an important asset for the community and wildlife. While there is a concern for the impact of exotic fauna and flora species (i.e ibis and pepper trees) on waterbodies and immediate areas – many respondents see the waterbodies as important areas for local wildlife (particularly in our urban areas).

The top three priorities relating to actions were: creating wetlands; stabilising bank erosion including re-profiling and/or repairing areas of bank erosion and revegetating using native species; and managing exotic fish species. Other themed priorities included (but were not limited to): wildlife management, preservation and protection; waterbody preservation, maintenance and management; and collection and control measures of rubbish and debris.

Some respondents also raised concerns about proposed actions including (but not limited to), being against the reduction in water depths, draining and filling in of waterbodies.

It is important to note as part of the summary that the large majority of respondents live on/ near or visit a waterbody frequently.

### *Ululah Lagoons and Lowlands Lagoons (Anembo Lakes)*

Overall the majority of respondents were in agreement to the issues and actions associated with Ululah Lagoons and Lowlands Lagoons (Anembo Lakes) plans. However, respondents raised concerns about some of the proposed actions including (but not limited to), being against the removal of islands and against filling in the Anembo Drive Inlet.



## 2 INTRODUCTION

### 2.1 BACKGROUND AND CONTEXT

Council manages fifty-four (54) urban (constructed/artificial) waterbodies, which provide a range of social, environmental and economic values and/functions such as: aesthetics, amenity, park landscape, ecological habitat and flood management.

Urban waterbodies are under considerable pressure due to urban runoff and other factors. Many waterbodies are in a degraded condition, or are at risk of deteriorating, with declining water quality and aesthetic values, fish kills, algal blooms, failure of hydraulic structures and infestations of noxious weeds.

Council committed, on 14 June 2017, to developing a **Waterbody Management Strategy**, and subsequently committed to ensuring the community and stakeholders were given the chance to 'have their say'.

Council recognises the community and stakeholder interests and concerns in the management of urban waterbodies on the Fraser Coast, for example as reflected in the petition considered at Council's Ordinary Meeting on 27 June 2018 (No. 6/18).

The **Draft Fraser Coast Waterbody Management Framework** is being developed in order to strategically manage the 54 waterbodies across the region (with a combined surface area of 120 hectares and 45 kilometres of shoreline). This includes identifying, characterising and prioritising Council's waterbody assets, assessing operational efficiency of waterbodies across the region, and assigning relevant service levels for water bodies (particularly in relation to high profile waterbodies).

In conjunction with the Framework, two (2) of the highest priority and largest waterbody systems were selected for the development of **Draft Waterbody Management Plans (Ululah Lagoons, Maryborough and Lowlands Lagoons (Anembo Lakes), Torquay)**. These Waterbody Management Plans are considered pilot projects and may be progressively developed for other high priority waterbodies in the future. So far, key issues and potential actions have been identified.

### 2.2 ENGAGEMENT OVERVIEW

#### Remit:

~ **How do we collaboratively develop a strategic management approach for urban waterbody asset management?**

The purpose of the engagement for this project was to understand the community's perspective on their values and views relating to urban waterbody issues and management options, whilst providing a process for collaboratively developing an approach for strategically managing these dynamic assets. The process included members of the public evaluating the **Draft Waterbody Management Framework** and the **individual action plans** for the waterbodies located **Ululah and Lowlands Lagoons**.

The project included, inform, consult, involve and collaborate IAP2 levels of engagement.

To facilitate the engagement Council undertook surveys, and other activities, including open houses and walking tours, which took place from **21 November to 9 December 2019**. The survey closed **11:59pm Monday 9 December 2019**. Council also accepted submissions from stakeholders during the process.

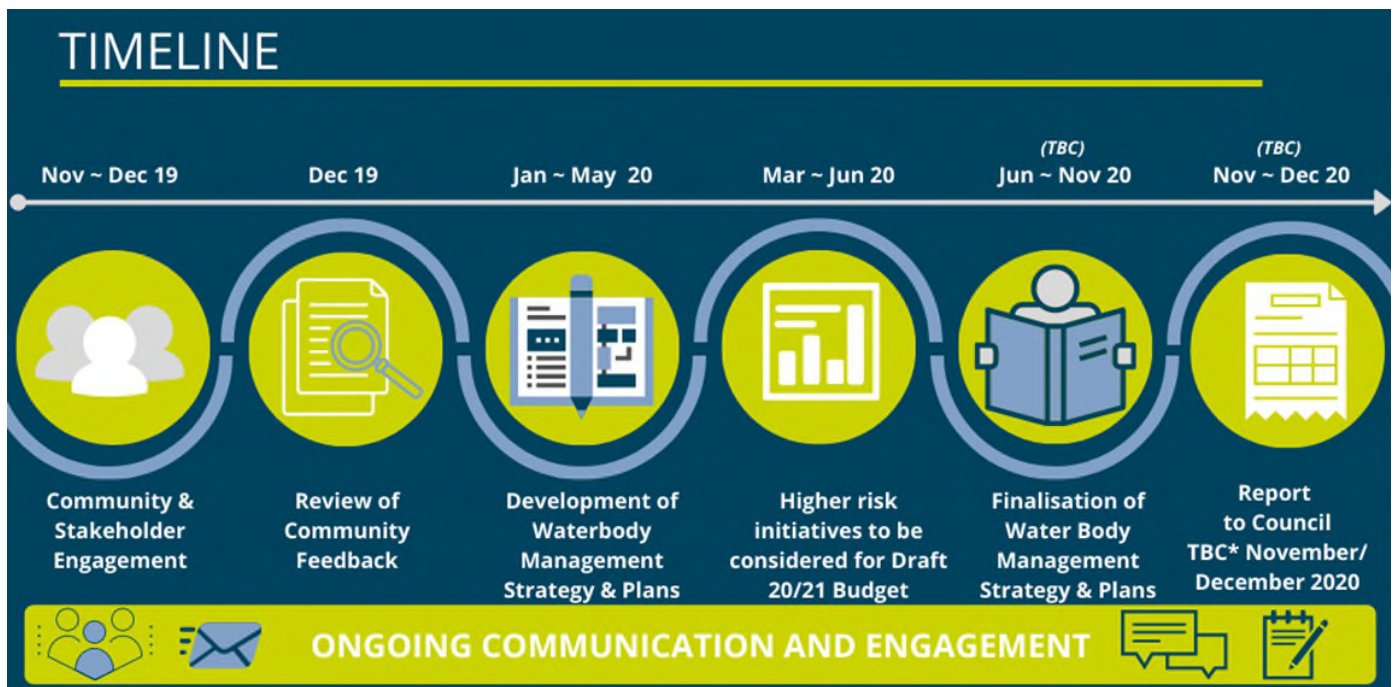


Council’s goal for Fraser Coast waterbodies is to protect and enhance their values and functions, reduce risks associated with open water, and to optimise the effort involved in the sustainable management of these assets.



### 2.2.1 Engagement Timeline

The engagement timeline is outlined in the following diagram:





### 3 METHODOLOGY

#### 3.1 THEMES AND CATEGORISATION

Council identified themes based on comments made by stakeholders through the survey, submissions and open house walking tours. These themes are to illustrate a common or inclusive view of the community in relation to the overall project as well as analysing the comments in regards to the following four engagement topics in response to the remit of the engagement.

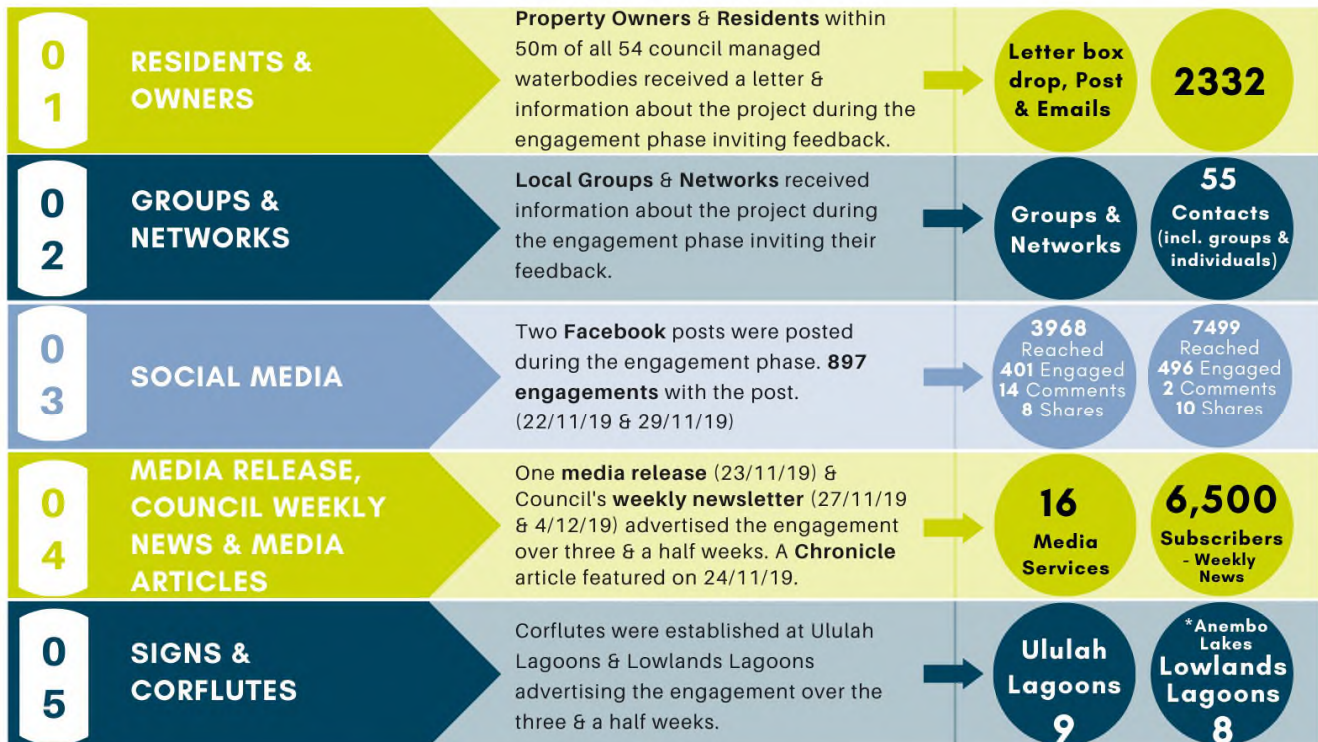
- Waterbody Issues and Priorities
- Waterbody Values (Interactions and Experiences)
- Waterbody Management Options and Priorities (incl Actions)
- Pilot Individual Plans – Ululah Lagoons and Lowlands Lagoons (Anembo Lakes)

The numerical values of comments, in relation to each theme, has been determined based on the total number of comments received in an engagement activity, for example the number of responses to a survey. Please note in some cases comments have been categorised under more than one theme - due to multiple comments within a response. Furthermore, some responses did not relate to a theme at all. Consequently, the total number of comments made in answer to a question may not correspond to the total number of comments calculated within the determined themes.

Submissions and comments from the open house walking tours have been included individually with a summary of each submission/ comment (in some instances the full response has been included).

#### 3.2 COMMUNICATION CHANNELS

Council utilised a diverse range of communication channels to promote the engagement process, invite stakeholders to have their say and communicate with the community in relation to the project. The channels utilised are outlined below:



THE PROJECT ALSO FEATURED ON COUNCIL'S ENGAGEMENT HUB PAGE DURING THE ENGAGEMENT





### 3.3 ENGAGEMENT ACTIVITIES

#### 3.3.1 Survey

The survey was conducted online through Survey Monkey with a link from the Engagement Hub platform, from **21 November to 11:59pm Monday 9 December 2019** – receiving **266 responses**. Hard copy versions were supplied to residents who made requests to Council – returned surveys were entered manually into the system for analysis.

Council devised 18 questions to ask the community for their feedback in answer to the remit of the engagement. The survey was split into several parts. The first part focused on the respondent's interaction with waterbodies in the region. The second part focused on the issues, actions and priorities for waterbodies on the Fraser Coast. The third part focused on the specific locations of the Ululah Lagoons and Lowlands Lagoons (Anembo Lakes). Lastly, the survey finished with a series of demographic questions and two questions relating the survey competition, as well as keeping up to date with the project.

#### 3.3.2 Submissions

Council received **10 submissions** from residents and stakeholders during the project. These submissions were received via email and mail.

#### 3.3.3 Open Houses and Walking Tours

Council resolved to conduct two open house sessions with walking tours at **Ululah Lagoons & Lowlands Lagoons (Anembo Lakes)** as part of the engagement process. These sessions were held with members of the project team and one of Council's specialist consultants, to discuss issues, potential actions and answer questions with the community.

The Open House sessions featured:

- Poster display boards of the factsheet pages including draft issues plans and action plans for Ululah Lagoons and Lowlands Lagoons Waterbody Management Plans, respectively;
- Notes pages, stickers and markers for participants to mark-up posters and to provide notes or other feedback;
- Tablet for completing the survey;
- Hard copies of the survey;
- Display hard copies of the Draft Waterbody Management Framework Technical Report and Draft Waterbody Management Plans for Ululah Lagoons and Lowlands Lagoons.

#### 3.3.4 Other Feedback

Informal comments were received via Council's Facebook posts in relation to communicating about the consultation. These comments were not included in the engagement analysis and evaluation. Individuals were encouraged to complete the survey to formalise their feedback.

### 3.4 CONSTRAINTS AND ISSUES

Council experienced the following issues and constraints during the engagement process.

#### 3.4.1 Feedback from Open House Sessions

While around 100 people attended the open house drop-in sessions little feedback was obtained from these sessions. Most attendees had either filled in the survey already or wanted to complete the survey at home or at a later time. Council officers and consultants provided the attendees with the information needed to fill out the survey at their convenience.



## 4 ENGAGEMENT FINDINGS

### 4.1 SURVEY

#### 4.1.1 Who participated

Council received **266** responses. The below diagram outlines the survey participation.



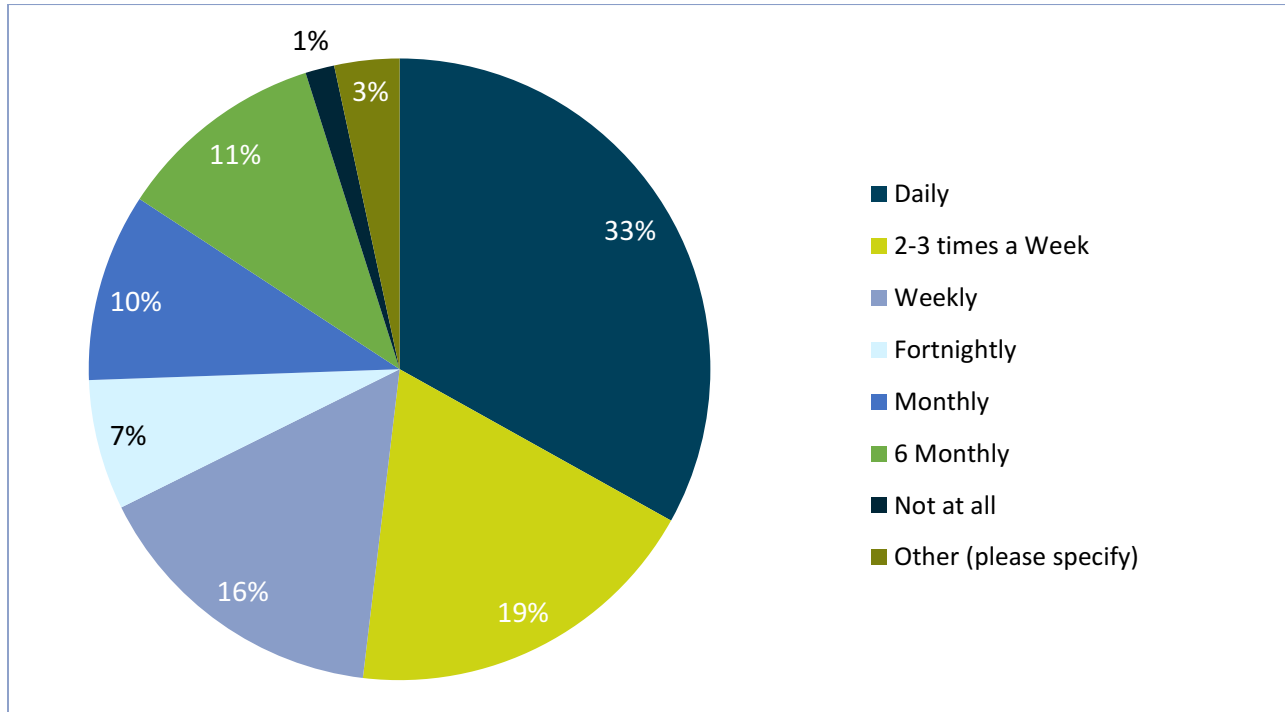
#### 4.1.2 Survey Questions & Results

Below is a summary of the survey questions and results, including number of responses and percentages for each question. Some questions were open ended questions or had 'Other/Comment' fields – these answers have been themed with comment examples – as well as the number of responses against the theme. Please see [methodology section](#) for how responses were themed.



**Q1- How often have you visited or been to a waterbody in the last 12 months? (Please select the most appropriate option)**

The majority of respondents visit a waterbody frequently with 33% of respondents visiting a waterbody daily, 19% 2-3 times a week, 16% weekly and 7% fortnightly. 10% of respondents answered they visit monthly and 11% said 6 monthly. Only 1% said they don't visit a waterbody at all.



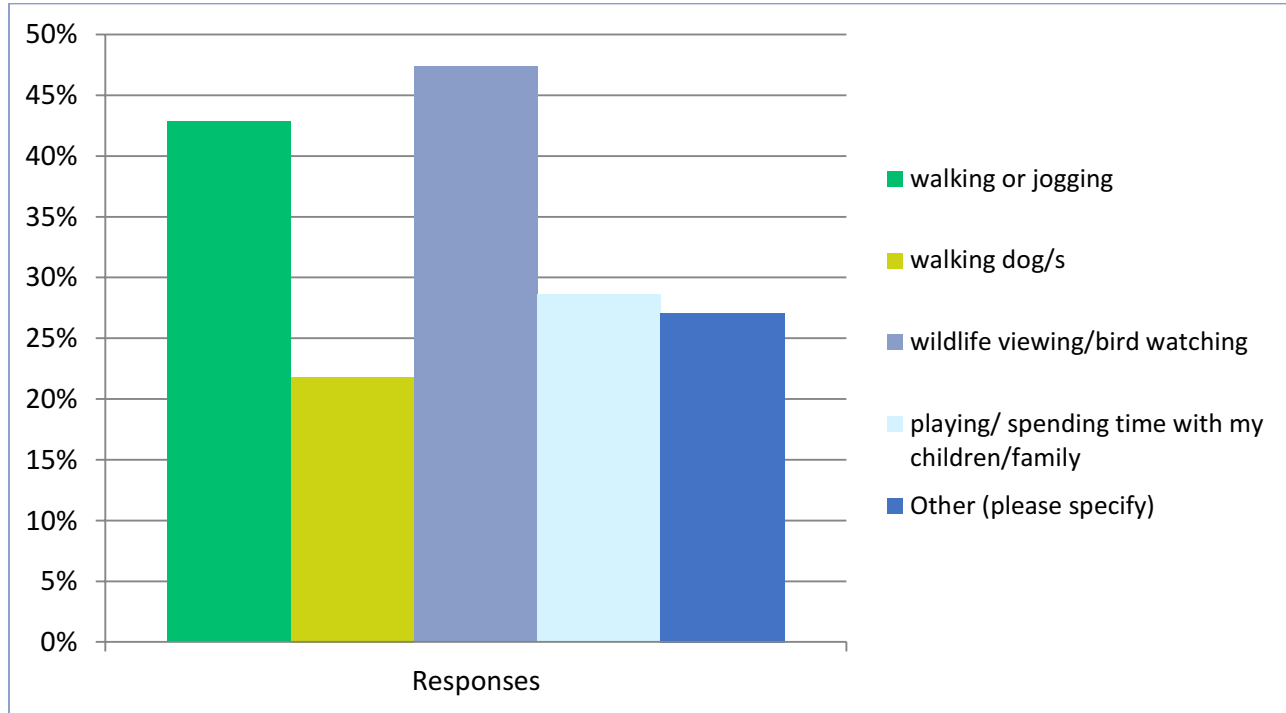
9 (3%) respondents chose 'Other' – below is a breakdown of their comments.

Theme	No. of Responses	Comments/Examples
<b>'See' waterbody daily – live near one (may not visit but do see it every day)</b>	5	<i>"We live right beside the Anembo waterway between Dayman Street and Bruce Street, Torquay. We see it every day, all day."</i> <i>"I live in Lakeside Court so I can see it everyday"</i> <i>"Located at residence at ... so go out our back gate or view from our deck."</i>
<b>Infrequent visitation</b>	2	<i>"8 times this year"</i> <i>"Daily when in the area"</i>
<b>Comments not attributed to Theme</b>	2	<i>"Love going daily"</i> <i>"Visited Ululah today for the first time..."</i>



**Q2 – What was the purpose of your visit? (Please select all applicable options)**

This question required the respondent to select as many options that were applicable. The top two responses for the purpose of visiting a waterbody were ‘walking and jogging’ (43%) and ‘wildlife viewing/ bird watching’ (47%). Other responses included; 29% enjoying ‘playing/ spending time with my children/family’, 22% ‘walking dog/s’.



27 % of respondents chose ‘Other’ - below is a breakdown of their comments including themes and comment examples – as well as the number of responses against the theme. There was also a small number of comments that either did not relate to the topic of the question or survey and could not be contributed to any theme.

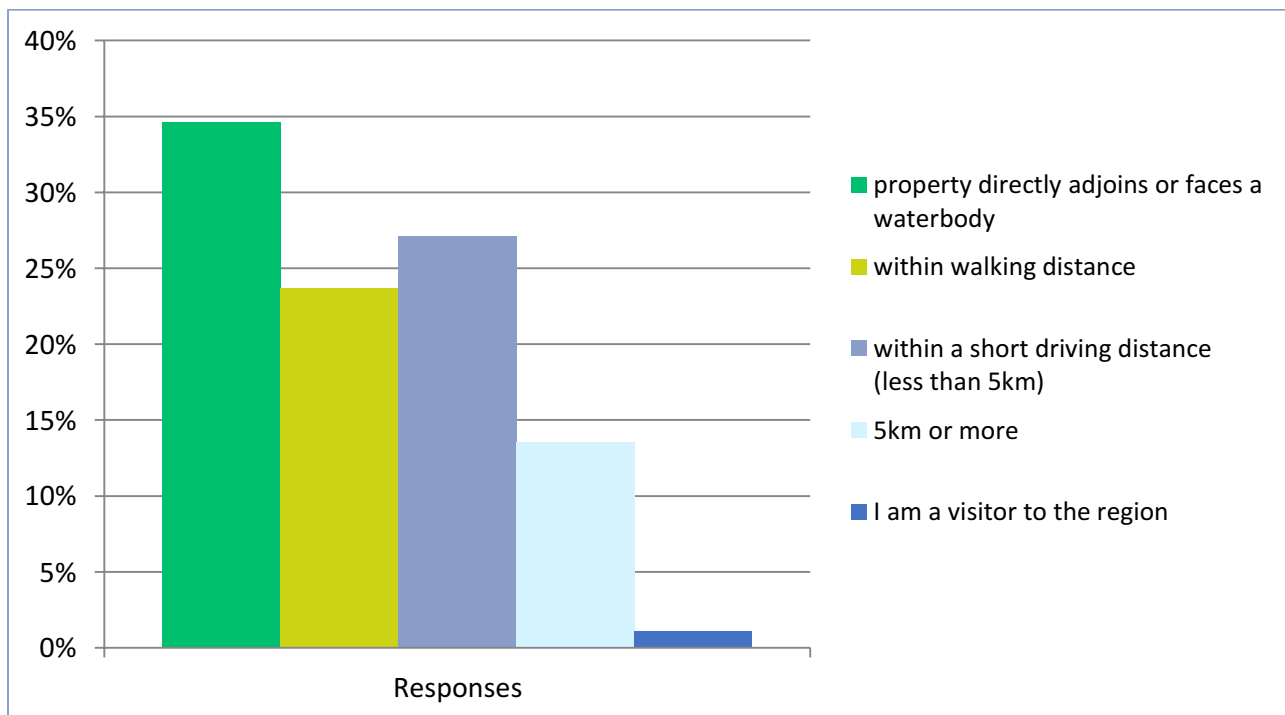
Theme	No. of Responses	Comments/Examples
<b>Living on or near waterbody</b>	34	<i>“Live adjacent to Anembo Lakes and enjoy walking”</i>
<b>Mental Health &amp; Wellbeing</b>	3	<i>“I take people with mental health issues as part of therapeutic intervention”</i> <i>“Just enjoying the peacefulness to help my anxiety”</i>
<b>Enjoyment &amp; Aesthetics (view, beauty etc)</b>	4	<i>“Admiring the sunsets across the waterways with the waterlife.”</i> <i>“just enjoying sitting by the water”</i>
<b>Passing through or Passing by</b> <i>(e.g For work/ study/ going to shops etc)</i>	10	<i>“passing by (bicycle) on my way to work”</i> <i>“teacher at Hervey Bay State High School, the waterbody is very close to the school”</i>
<b>Leisure Activities</b>	9	<i>“Rock Hunting”</i> <i>“Photography”</i> <i>“Fishing”</i>
<b>Eating</b>	3	<i>“BBQ”</i> <i>“visit café at lagoon”</i>  <i>“Eating lunch with our family by the Ululah lagoons”</i>



<b>Exercise or Sport and Recreation</b>	5	<i>"bike riding around these features for exercise"</i> <i>"Swimming"</i>
<b>Themes or Comments - 2 or less (1)</b>	7	<i>Rubbish collection</i> <i>Checking access (blockages to waterbodies)</i> <i>Monitoring (incl aquatic species collection)</i> <i>Do not visit or not near one</i> <i>Attending Council drop in session</i>

**Q3 – How close do you live to the nearest waterbody?**

This question required the respondent to identify how close they live to a waterbody. 35% of respondents identified that their 'property directly adjoins or faces a waterbody', 27% live 'within a short driving distance (less than 5km)', 24% live 'within walking distance' and 13% live more than '5km' from a waterbody. Only 1% identified that they were a 'visitor to the region'.



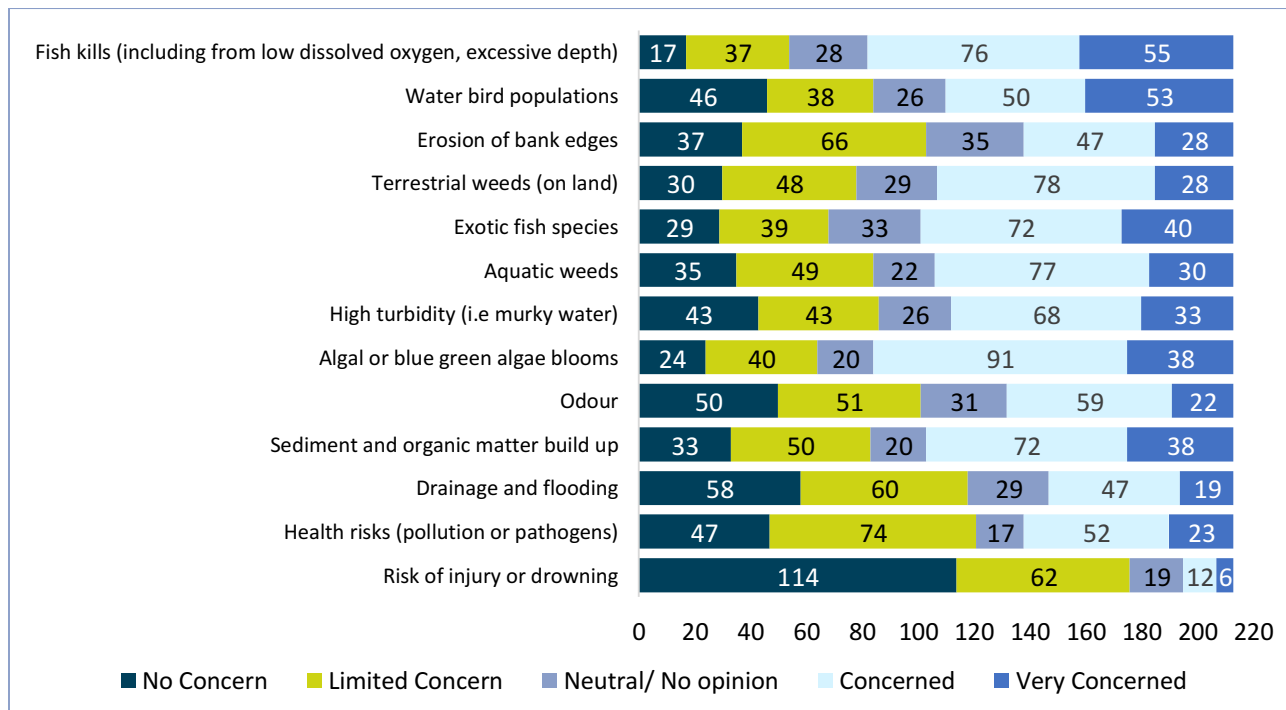


**Q4 – The following areas of concern are common issues associated with urban waterbodies. To what extent are the following areas of concern to you?**

- a) Fish kills (including from low dissolved oxygen, excessive depth)
- b) Water bird populations
- c) Erosion of bank edges
- d) Terrestrial weeds (on land)
- e) Exotic fish species
- f) Aquatic weeds
- g) High turbidity (i.e murky water)
- h) Algal or blue green algae blooms
- i) Odour
- j) Sediment and organic matter build up
- k) Drainage and flooding
- l) Health risks (pollution or pathogens)
- m) Risk of injury or drowning

This question required the respondent to rate their level of concern in relation common issues associated with urban waterbodies. 213 respondents answered the question. The top five areas of concern were:

- Fish kills (including from low dissolved oxygen, excessive depth) (131 respondents rated ‘Concerned’ to ‘Very Concerned’)
- Algal or blue green algae blooms (129 respondents rated ‘Concerned’ to ‘Very Concerned’)
- Exotic fish species (112 respondents rated ‘Concerned’ to ‘Very Concerned’)
- Sediment and organic matter build up (110 respondents rated ‘Concerned’ to ‘Very Concerned’)
- Aquatic weeds (107 respondents rated ‘Concerned’ to ‘Very Concerned’)





26% of respondents provided comments regarding other areas of concern - below is a breakdown of their comments including themes and comment examples – as well as the number of responses against the theme. There was also a small number of comments that either did not relate to the topic of the question or survey and could not be contributed to any theme.

Theme	No. of Responses	Comments/Examples
<b>Wildlife Preservation (incl. Birds)</b>	16	<p><i>“No safe breeding area for black swans. We have watched eggs taken by feral animals”</i></p> <p><i>“Ibis breeding uncontrollably all along the water course and on the little islands that effect other native species”</i></p> <p><i>“Concerned about declining water bird populations”</i></p> <p><i>“Concerned of removal of islands, as this is also the only safe breeding ground for other birds than Ibis. So get rid of pepper trees off the islands and plant native grasses and sedges with the odd native tree for other bird species.”</i></p> <p><i>“Need to leave areas for natural wildlife to exist without disruption; if they have safe places to go they can stay without going to more populated areas. These areas need to remain clean...”</i></p>
<b>Water body Preservation &amp; Maintenance</b>	9	<p><i>“My main concern is that council does not interfere with the natural water course and the Island in front of my property...”</i></p> <p><i>“Lakes rely on storm water run off. The man made weir adjacent to The Palms ... What is the purpose of this weir?. It blocks tidal flow from Tuan Tuan Creek which could be beneficial to the lakes”</i></p> <p><i>“The water body adjacent to Northshore Avenue in Toogoom does not appear to have sufficient flora (Australian) that can assist with water quality and attract wildlife.”</i></p>
<b>Rubbish &amp; Debris</b>	9	<p><i>“A general lack of debris clean-up which if left to build up provides a habitat for snakes.”</i></p> <p><i>“ingress of rubbish from street/ property drains”</i></p> <p><i>“...combined with bottles and fishing gear left on water edge”</i></p> <p><i>“Needles and rubbish”</i></p>
<b>Vandalism, Damage &amp; Prohibited Use</b>	7	<p><i>“Our waterway is isolated and dries completely, killing the fish, turtles, eels etc in it. If it was reconnected to adjacent waterways this would not happen. Locals have told us it was once connected but property owners have removed this”</i></p> <p><i>“Vandalism and illegal use of water”</i></p> <p><i>“Water extractions by local land owners, depleting the water bodies of their water at an unnatural rate”</i></p>
<b>Health &amp; Safety</b>	6	<p><i>“The lake bank along this stretch is only meters from the footpath, has a very steep decent or drop off straight into this lake - and it is straight into deep water” [USC/ Waterbody – O’Rourke St, Pialba]</i></p> <p><i>“bacterial health issues”</i></p> <p><i>“Ensure areas have more signage stating that swimming, boating and drinking the lakewater is prohibited. Kayaks and motorised mini boats operated by hand</i></p>



		<i>controls are noisy and scare the wildlife. List that amoebic meningitis may be an issue if swimming or boating as I have seen children on BMX bikes riding off a portable ramp and doing jumps into the lakes."</i>
<b>Water Levels &amp; Quality</b>	5	<p><i>"...Water quality is vital."</i></p> <p><i>"Since Council drained Boat Harbour Drive into the lake between the back of Harrison Circuit and Breathe Gym the water colour has gone from a very clean looking green to a dark brown dirty colour..."</i></p> <p><i>"Concern that water bodies are kept to a reasonable level of water quality for native frog populations and water insects."</i></p> <p><i>"Birds and turtles should not be fed by public, it is detrimental to the health and well being of the birds and water quality."</i></p>
<b>Preservation &amp; Maintenance of Natural Green Space areas</b>	6	<p><i>"There are some trees growing around the water edge that are exotic. Would be better to have natives or even better to review which plants would be the best around Ululah."</i></p> <p><i>"Native vegetation providing significant buffer zones around water bodies."</i></p> <p><i>"Mowing appears to be undertaken in some areas but not all."</i></p>
<b>Insect Populations</b>	5	<p><i>"At the moment we are going through a massive mosquito like insect attack, by day but mostly at night, we can't leave the light on after dusk and have to sit in the dark with only the TV on for light or go to bed early."</i></p> <p><i>"insect populations"</i></p> <p><i>"Swarms of non biting midges that cover outdoor surfaces to the point of a plague"</i></p>

<b>Themes or Comments between 3 and 1 responses - (could not be attributed to any higher level themes)</b>		
<b>3 responses</b>	<b>2 responses</b>	<b>1 response</b>
<ul style="list-style-type: none"> <li>▪ Ibis effecting native species</li> <li>▪ Recreational Fishing Issues</li> <li>▪ Accessibility to waterbodies</li> <li>▪ Against removal or impacts to Islands</li> </ul>	<ul style="list-style-type: none"> <li>▪ Other waterways not mentioned in plan</li> <li>▪ Dogs (incl. off leash issues)</li> <li>▪ Subsidence of properties/ land</li> <li>▪ List Irrelevant to [my] local water body (no alternatives given)</li> <li>▪ Lack of water body interconnection</li> <li>▪ Feeding of birds &amp; wildlife</li> </ul>	<ul style="list-style-type: none"> <li>▪ Lack of a central water course</li> <li>▪ Lack of shade around waterbodies</li> <li>▪ Drainage &amp; Flooding</li> <li>▪ Lack of Native Plant species</li> <li>▪ Keeping of Non-Native plant species (i.e for bird habitat)</li> <li>▪ Pepper Trees</li> <li>▪ Lack of community education &amp; awareness</li> <li>▪ Inadequate walking paths</li> <li>▪ Against filling in Anembo Drive Inlet (Lowlands)</li> <li>▪ Adverse effects of previous Council decisions</li> <li>▪ Impacts to House Values i.e if water bodies filled in</li> <li>▪ Disagree with Council's assessment of the issues (no alternatives given)</li> <li>▪ Drought impacts to water bodies</li> </ul>



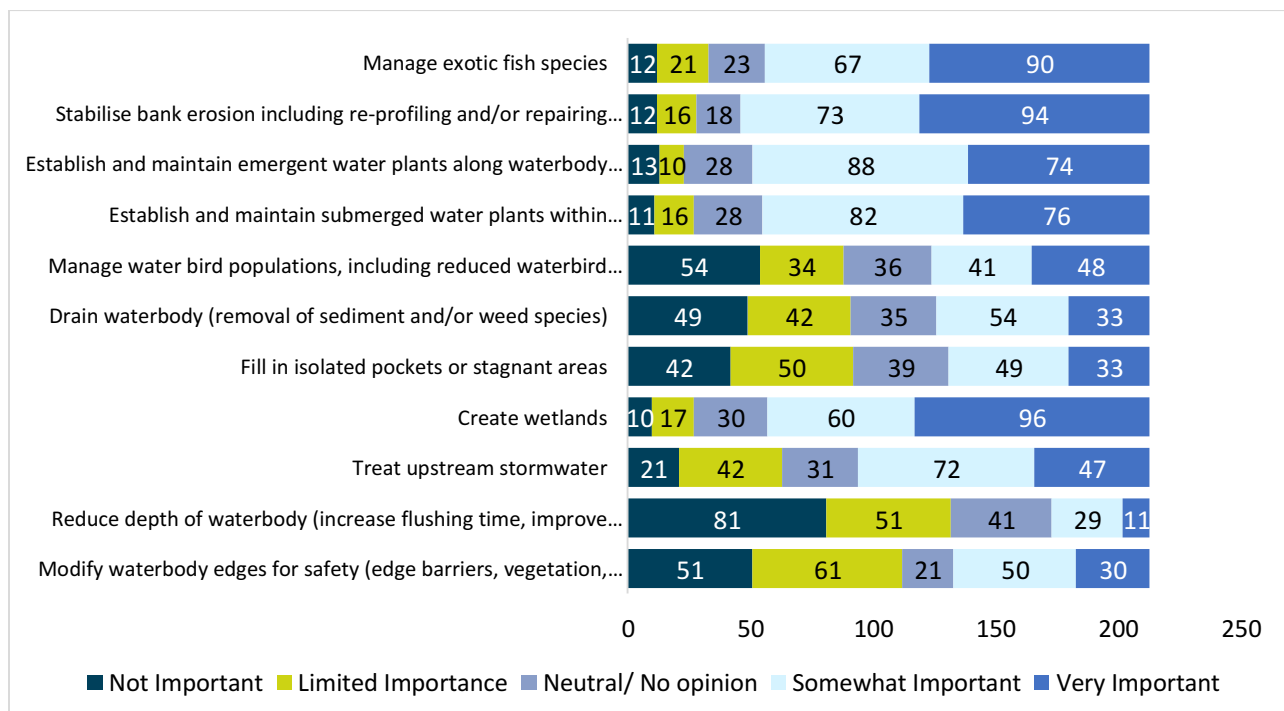


**Q5 – Which of the following actions do you believe are important or not important in addressing the above areas of concern?**

- a) Manage exotic fish species
- b) Stabilise bank erosion including re-profiling and/or repairing areas of bank erosion and revegetating using native species
- c) Establish and maintain emergent water plants along waterbody margins
- d) Establish and maintain submerged water plants within waterbody
- e) Manage water bird populations, including reduced waterbird feeding
- f) Drain waterbody (removal of sediment and/or weed species)
- g) Fill in isolated pockets or stagnant areas
- h) Create wetlands
- i) Treat upstream stormwater
- j) Reduce depth of waterbody (increase flushing time, improve safety)
- k) Modify waterbody edges for safety (edge barriers, vegetation, fencing or profiling bank edges)

This question required the respondent to rate the level of importance of proposed actions in addressing the issues associated with urban waterbodies. 213 respondents answered the question. The top five actions rated ‘somewhat important’ to ‘important’ are outlined below:

- Stabilise bank erosion including re-profiling and/or repairing areas of bank erosion and revegetating using native species (167 respondents rated ‘Somewhat Important’ to ‘Very Important’)
- Establish and maintain emergent water plants along waterbody margins (162 respondents rated ‘Somewhat Important’ to ‘Very Important’)
- Establish and maintain submerged water plants within waterbody (158 respondents rated ‘Somewhat Important’ to ‘Very Important’)
- Manage exotic fish species (157 respondents rated ‘Somewhat Important’ to ‘Very Important’)
- Create wetlands (156 respondents rated ‘Somewhat Important’ to ‘Very Important’)





21% of respondents provided comments regarding other important actions not listed - below is a breakdown of their comments including themes and comment examples – as well as the number of responses against the theme. There was also a small number of comments that either did not relate to the topic of the question or survey and could not be contributed to any theme.

Theme	No. of Responses	Comments/Examples
<b>Water body Preservation, Maintenance, &amp; Management</b>	13	<p><i>“Measures to manage water quality are essential: eg overhanging trees provide shade and reduce water temperature. Water movement (eg through a fountain) is also beneficial to reducing the tendency for still water to become stagnant.”</i></p> <p><i>“Managing the areas as filters for the ocean, creating similar systems as seen in Victoria to slow sediment and debris reaching oceans, also improving upper reaches may improve water quality , Utilising all techniques understanding the system needs a longer term management plan.”</i></p> <p><i>“Generally clean up the areas, remove all exotic fish and plant species, stabilise the banks with reprofiling and revegetation using native species and in that way native frogs, fish, birds will return to the area. With proper plantings the water won't go stagnant...”</i></p>
<b>Wildlife Protection &amp; Preservation (incl. Birds)</b>	10	<p><i>“...for me the issue is the survival of the waterbirds and them having enough places to feed and drink not reduce them because people don't like too many birds around.”</i></p> <p><i>“Providing safe areas that wildlife can easily access water”</i></p> <p><i>“Managing Bird Populations, our bird populations are dwindling now and we should be doing everything we can to ensure we are increasing our water and other bird populations to the areas.”</i></p>
<b>Habitat/ Green Space - Maintenance, Preservation and Protection</b>	9	<p><i>“Stop public mowing to waterbody edges on public land.”</i></p> <p><i>“Encourage natural riparian/littoral vegetation growth for bird protection and nesting.”</i></p> <p><i>“Encourage natural vegetation along waterway banks to a distance of at least 3 meters from highest water level.”</i></p> <p><i>“Maintain grass and trees along the E.R.Uhr Reserve. Check regularly for salivina growth...”</i></p>
<b>Collection and Control of Rubbish and Debris</b>	5	<p><i>“Rubbish collection pods”</i></p> <p><i>“Control rubbish from being washed into lakes from drains e.g rubbish traps be installed at end of emerald park way concrete drain”</i></p> <p><i>“Drainage from lake choked up, needs clearing”</i></p>
<b>Against reduction in water depth, draining and filling in</b>	6	<p><i>“...Increase rather than decrease depth !!!”</i></p> <p><i>“Please do not drain bodies of water that wildlife depend on!!!!!!!!!!!!!!!!!!!!”</i></p> <p><i>“I am concerned about the reduction in the water depth and how this may impact the area when flooding occurs.”</i></p>



<b>Education</b>	<p>4</p>	<p><i>“education of public about the harm of feeding water birds”</i></p> <p><i>“Regarding managing waterbird populations I would like to see a region wide high profile education campaign discouraging the community from feeding the birds.”</i></p> <p><i>“Placing signs to deter public feeding birds, education about the value of wildlife habitat and the realisation that a little messy vegetation is great for the wildlife, not everything has to be perfect to be at it's best”</i></p>
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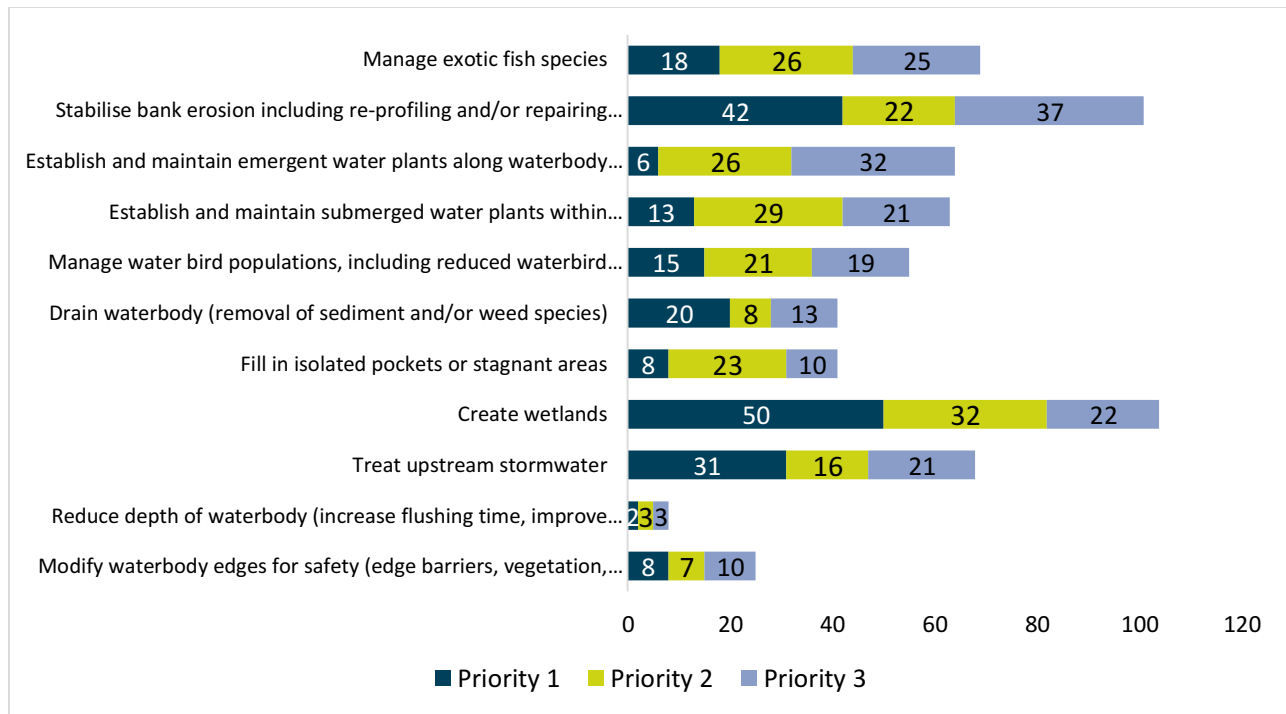
<b>Themes or Comments between 3 and 1 responses - (could not be attributed to any higher level themes)</b>		
<b>3 responses</b>	<b>2 responses</b>	<b>1 response</b>
<ul style="list-style-type: none"> <li>▪ Dog measures (no off leash, poo bags, &amp; buffer zones)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Trust nature/ natural processes</li> <li>▪ Insect management (i.e native fish introduction)</li> <li>▪ Drought management (keeping waterbodies working/flowing)</li> <li>▪ Pest management (i.e foxes)</li> <li>▪ Against feeding birds</li> <li>▪ Against removal of islands</li> <li>▪ Proper access points to water body – minimise bank erosion etc</li> </ul>	<ul style="list-style-type: none"> <li>▪ Consultation with traditional owners</li> <li>▪ Dredge waterbody</li> <li>▪ Manage herbicide runoff from neighbouring properties</li> <li>▪ Odour management</li> <li>▪ Stop fishing</li> <li>▪ Costs of implementation</li> <li>▪ Board walks</li> <li>▪ Connect adjacent water bodies</li> <li>▪ More Volunteers and Employees to help</li> <li>▪ General acknowledgement of how good the plan is</li> <li>▪ General negative comments regarding the survey</li> </ul>



**Q6 – Out of the above actions, which are the top 3 priorities you want to see implemented?**

This question required the respondent to choose their top 3 priorities from a drop down list. The top 3 priorities, identified by respondents, are outlined below:

- Create wetlands (104 responses)
- Stabilise bank erosion including re-profiling and/or repairing areas of bank erosion and revegetating using native species (101 responses)
- Manage exotic fish species (69 responses)



54 respondents provided ‘Other or Comments’ responses - below is a breakdown of their comments including themes and comment examples – as well as the number of responses against the theme. There was also a small number of comments that either did not relate to the topic of the question or survey and could not be contributed to any theme.

Theme	No. of Responses	Comments/Examples
<b>Water body Preservation, Maintenance, &amp; Management</b>	14	<p>“Lakes need to be drained, deepened and aerated by use of fountains etc as per university lake and the botanical gardens.”</p> <p>“Removal of sediment &amp; weeds is also a priority for me. It seems that all the items listed are important but which are the best priorities would be better decided by experts.”</p> <p>“Creating wetlands with strategically selected and placed native plants with stabilise banks, improve water quality, and create places for birds and other wildlife. If you build it - they will come.”</p>
<b>Collection and Control Measures – Pollution, Rubbish and Debris</b>	12	<p>“Remove coconut palms along lake edge to reduce blockages -regularly clear debris collecting around drainage pipes and areas that collect plant matter and grass clippings that settle”</p>



		<i>"In flow Management - Drains not cleaned and all sorts of pollution ending up in our lakes - e.g. tree leaves, bottles, McDonalds Wrappers."</i>
<b>Wildlife Protection &amp; Preservation (incl. Birds)</b>	6	<p><i>"Just PLEASE PLEASE PLEASE don't disturb the birds and remove islands as has been proposed, doing this would just move the problem elsewhere, where would they go? these Islands are Sanctuaries and the birds and everything else that inhabits the islands are under threat/pressure from so many things, please let them stay."</i></p> <p><i>"... the islands should be kept for safe breeding habitat for ducks, swan, spoonbills, etc. With a few native trees ibises would not form colonies. Give the other birds a chance to have a safe haven from foxes, cats and dogs."</i></p> <p><i>"Just leave wildlife to nature and their vegetation except in areas where Ibis colonies persist!"</i></p>
<b>Against reduction in water depth, draining and filling in</b>	4	<p><i>"In my opinion lowering the level of Ululah would increase erosion , particularly on the Golf Club side of the lagoon."</i></p> <p><i>"We do not want the lakes in our area shallower. As currently we have clean water at all times. We are aware there are other areas of Anembo lakes that are not as good as our area... Our area is what your framework has termed a good status waterbody and we do not want it compromised by a global approach."</i></p> <p><i>"We need wetlands and filling them in is NOT what the council should be doing"</i></p>

<b>Themes or Comments between 3 and 1 responses - (could not be attributed to any higher level themes)</b>		
<b>3 responses</b>	<b>2 responses</b>	<b>1 response</b>
<ul style="list-style-type: none"> <li>▪ Leave it alone (trust nature)</li> <li>▪ Ensure public don't take water from the system/water body</li> <li>▪ Against Island removal (habitat, safety, move the problem elsewhere)</li> <li>▪ Water bird management incl. ibis</li> <li>▪ Stop bird feeding</li> <li>▪ Education (bird feeding, how water bodies work etc)</li> <li>▪ Habitat/ Green Space - Maintenance, Preservation and Protection</li> </ul>	<ul style="list-style-type: none"> <li>▪ Urgent and Fast Action/Implementation</li> <li>▪ Pest management (stop predators – foxes, cats etc)</li> <li>▪ General acknowledgment - good work Council is doing</li> </ul>	<ul style="list-style-type: none"> <li>▪ Mental Health and Wellbeing</li> <li>▪ Central Water Course</li> <li>▪ Connect lagoons (maintain flow etc)</li> <li>▪ Off limit areas for public</li> <li>▪ Employment of conservation and wildlife workers</li> <li>▪ Volunteers (incl. property owners)</li> <li>▪ ALL are important</li> <li>▪ Solar run aeration</li> <li>▪ Walking paths</li> </ul>

**Q7 – If you would like to comment on either the Draft Waterbody Management Plans for Ululah Lagoons or Lowlands Lagoons (Anembo Lakes), please continue the survey.**

122 respondents continued with the survey to provide comments on either the Draft Waterbody Management Plans for Ululah Lagoons or Lowlands Lagoons (Anembo Lakes). 91 answered 'No' and did not continue the survey from this point forward – proceeding to the "All about you" section (Q14-18). Please also note 53 people skipped this question.



**Q8 – Would you like to comment on Ululah Lagoons (Maryborough) Draft Waterbody Management Plan?**

64 respondents answered 'Yes'. 61 respondents answered 'No'. 141 skipped the question.

**Q9 - Issues have been identified through a condition assessment of the Ululah Lagoons system. Please tell us in the comment box below if we have missed anything?**

- a) Backwater/still water areas (submerged pipes, harbour weeds i.e. Salvinia);
- b) Small islands difficult to maintain;
- c) Lack of overflow point for drainage (some locations);
- d) Weedy bank edges (including weed trees);
- e) Sediment accumulation in pipes and channels;
- f) Excessive water bird population contributing to poor water quality and potential public health hazard;
- g) Nutrient runoff into waterbody from fertilisers/adjacent land uses;
- h) Presence of aquatic weeds;
- i) Poor water quality – high turbidity, algal growth, low flushing rate

8 respondents provided comments regarding issues that may have been missed from the above list – however most of the comments were in providing comments on the above list not missing actions. All comments have been included - below is a breakdown of the comments. No theming has been applied as there were not enough comments to do so.

Theme	No. of Responses	Comments/Examples
<b>Preserve 'no public access' areas</b>	1	<i>"preserve some areas with no public access to improve regeneration and wildlife access to water"</i>
<b>General acceptance of measures</b>	1	<i>"All Good"</i>
<b>Fertilisers dispersed by neighbouring industries</b>	1	<i>"Ensure golf course reduces potential of fertilisers to disperse in system by alternatives, increase buffer, water filtering techniques etc, include education of other neighbouring industry."</i>
<b>No concern &amp; Maintenance of wildlife habitat</b>	1	<i>"Many of these points do not concern me .Maintenance of the habitat for the wildlife is of the greatest concern to me."</i>
<b>Litter collection before reaching waterbody</b>	1	<i>"Collection of litter from the drain before it goes to Ululah - Water Body C 9 and 10"</i>
<b>Disagreement with birds issue</b>	1	<i>"The water birds are not in excess, natural attrition sees to that, lack of rain is contributing to poor water quality, we just need rain, it is coming. Please don't take their sanctuary/habitat, they are relying on us for their survival, they don't deserve their habitat being taken from them as an 'easy fix' and if we do destroy their islands, they will move en masse to another lake which in turn will bring problems. Please leave the islands and the birds in peace."</i>
<b>Native fish stocking to reduce exotic species</b>	1	<i>"Better native fish species access (fish ladder) and predator fish stocking to reduce exotic fish species"</i>
<b>Importance of Weeds &amp; Weed types</b>	1	<i>"Please note re classification of weeds. Some weed types are providing a root system that can help stabilise edges."</i>



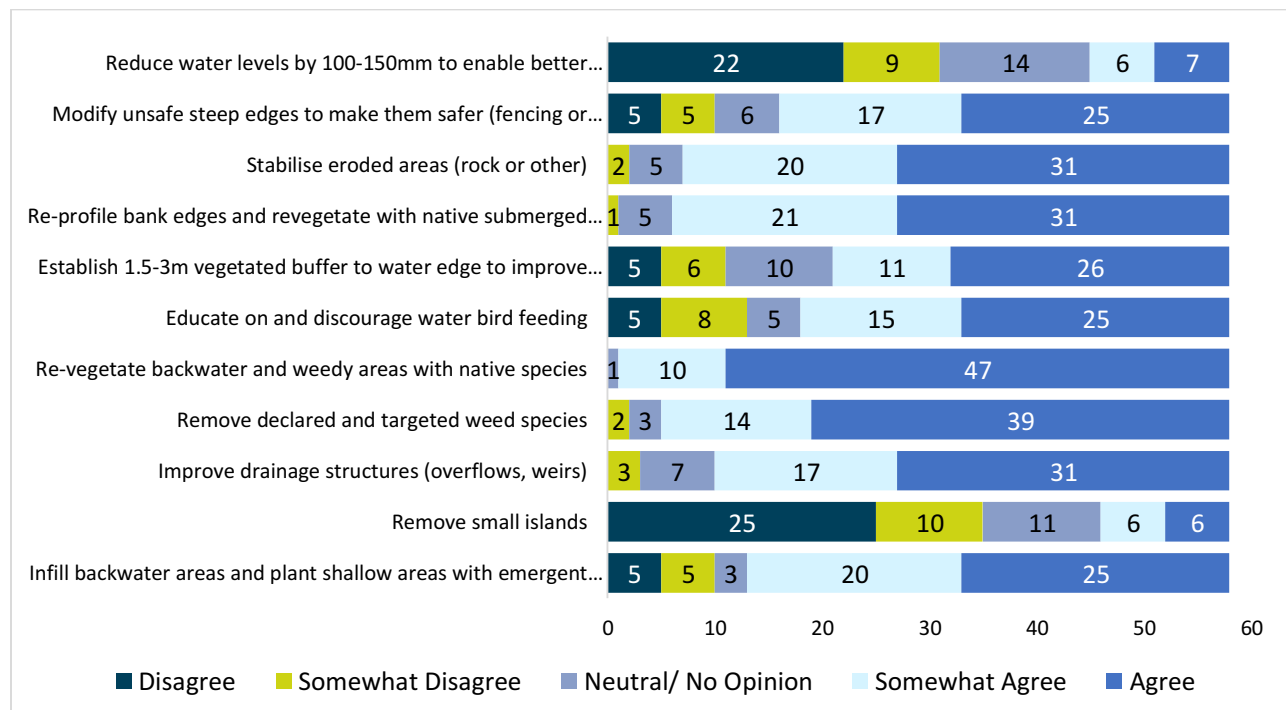
**Q10 - What do you think of the potential actions to address these issues?**

- a) Reduce water levels by 100-150mm to enable better management and planting to waterbody margins.
- b) Stabilise eroded areas (rock or other)
- c) Modify unsafe steep edges to make them safer (fencing or landscaping)
- d) Re-profile bank edges and revegetate with native submerged and emergent water plants
- e) Educate on and discourage water bird feeding
- f) Establish 1.5-3m vegetated buffer to water edge to improve safety and reduce water quality impacts from birds and runoff
- g) Re-vegetate backwater and weedy areas with native species
- h) Remove declared and targeted weed species
- i) Improve drainage structures (overflows, weirs)
- j) Remove small islands
- k) Infill backwater areas and plant shallow areas with emergent water plants to improve water quality

58 respondents answered this question. The top five priorities by respondents are outlined below:

- Re-vegetate backwater and weedy areas with native species (57 respondents answered 'somewhat agree' to 'Agree')
- Remove declared and targeted weed species (53 respondents answered 'somewhat agree' to 'Agree')
- Re-profile bank edges and revegetate with native submerged and emergent water plants (52 respondents answered 'somewhat agree' to 'Agree')
- Stabilise eroded areas (rock or other) (51 respondents answered 'somewhat agree' to 'Agree')
- Improve drainage structures (overflows, weirs) (48 respondents answered 'somewhat agree' to 'Agree')

Please note, if a number isn't shown for a value it means there were '0' responses to that answer. For example there were '0' responses to 'Disagree' regarding 'Removing declared and targeted weed species'.





18 respondents provided comments regarding other actions - below is a breakdown of their comments including themes and comment examples – as well as the number of responses against the theme. There was also a small number of comments that either did not relate to the topic of the question or survey and could not be contributed to any theme. Please note as there was only 18 responses high level theming for this question was difficult.

Theme	No. of Responses	Comments/Examples
<b>Water body Preservation, Maintenance, &amp; Management</b>	3	<p><i>“Depends where you are putting the vegetated buffers at the moment near Waterbody C they look like they are unkept and horrible, breeding ground for vermin, The plants need to not cover the drain when we get a lot of rain and the force bends the trees and blocks the drain near Alice St, results in the water spreading out more and going over and flooding the road.”</i></p> <p><i>“It’s imperative the lakes remain”</i></p>
<b>Wildlife Protection &amp; Preservation (incl. Birds)</b>	3	<p><i>“Build the area to encourage wildlife, waterbirds, fish, turtles, natives animals, lizards etc better community walking tracks”</i></p> <p><i>“We should be increasing bird populations, we barley have any left as it is”</i></p>

Themes or Comments between 2 and 1 responses - (could not be attributed to any higher level themes)	
2 responses	1 response
<ul style="list-style-type: none"> <li>▪ Employment and Volunteer programs (to help with the work/ implementation)</li> <li>▪ Involved local indigenous people (Butchulla etc)</li> <li>▪ Collection and Control Measures – Pollution, Rubbish and Debris</li> </ul>	<ul style="list-style-type: none"> <li>▪ Walking paths &amp; tracks</li> <li>▪ No public access areas – (improve wildlife access and regeneration)</li> <li>▪ Dogs on leash only</li> <li>▪ Education (bird feeding, need for plants, natives etc)</li> <li>▪ Other waterways (i.e E.R Uhr reserve - which flows into Ululah)</li> <li>▪ Whole community responsibility</li> <li>▪ Against fencing</li> <li>▪ Against filling in – fix it</li> <li>▪ More trees for shade</li> <li>▪ The importance of papyrus – as habitat</li> <li>▪ Establish native fish to reduce exotic species</li> <li>▪ When reducing exotic plants mitigate impact on wildlife</li> <li>▪ Leave the Islands</li> <li>▪ General Acknowledgement of Council's good work</li> <li>▪ No swimming activity</li> <li>▪ Against reducing water levels</li> <li>▪ Urgent and Fast Action/Implementation</li> <li>▪ Community benefit - Public amenity and aesthetics value needs to be considered</li> </ul>

**Q11 - Would you like to comment on Lowlands Lagoons (Anembo Lakes), Torquay - Draft Waterbody Management Plan?**

89 respondents answered ‘Yes’. 30 respondents answered ‘No’. 147 skipped the question.





**Q12 - Issues have been identified through a condition assessment of the Lowlands Lagoons (Anembo Lakes) system. Please tell us in the comment box below if we have missed anything?**

- a) Algal blooms and turbidity (murky water);
- b) Lack of submerged water plants;
- c) Safety risk due to steep vertical edges;
- d) Nutrient runoff into waterbody from adjacent land uses/stormwater;
- e) Scour and erosion;
- f) Exotic fish species (Tilapia);
- g) Terrestrial weeds (Singapore daisy, Broad-leaved Pepper trees);
- h) Stagnant, poorly flushed areas;
- i) Lack of waterbody edge buffer vegetation;
- j) Aquatic weed infestations (Mexican waterlily);
- k) Excessive water bird population contributing to poor water quality and potential public health hazard
- l) Bird and turtle feeding
- m) Fish kills

25 respondents provided comments regarding issues that may have been missed from the list above - below is a breakdown of their comments including themes and comment examples – as well as the number of responses against the theme. There was also a small number of comments that either did not relate to the topic of the question or survey and could not be contributed to any theme. Please note as there was only 25 responses high level theming for this question was difficult.

Theme	No. of Responses	Comments/Examples
<b>Management, Preservation and Protection Habitat &amp; green space</b>	7	<p><i>“Targeting the removal of feral species of plants and putting in natives should be the primary focus as strategic planning and planting should manage many of the above factors.”</i></p> <p><i>“It is not just Pepper Trees and Singapore Daisy that should be removed and replaced with more appropriate vegetation. Invasive Casuarinas produce excessive and unpleasant pollen and pine needle falls and grow to a significant height... Where Casuarinas are present...they should be removed and replaced with more appropriate vegetation such as bottlebrush.”</i></p>
<b>Preservation and Protection Wildlife</b>	5	<p><i>“Protection of environment for rarer birds that use island and banks for nesting, tunnels eg nankeen night heron, bee eaters, it’s only ibis that are a problem.”</i></p> <p><i>“... DO NOT AGREE that they are in excessive populations, they are NOT, upstream at ... a woman feeds excessive amounts of food at ... several birds have choked and died. In turn the birds are losing territory, failing to disperse as they are congregating for free food, in turn trees are dying from overpopulation in this small area. Even residents agree the problem isn't the birds but the feeding... is killing the birds from choking, unnatural diet, causing disease amongst them due to living too close to each other, their faecal matter is unnatural, there is such a flow on effect from this behaviour and it is detrimental to both birds and residents. It MUST stop...”</i></p>



<b>Maintenance, Preservation, Protection Waterbody</b>	3	<p><i>“Install better native fish species access (fish ways) and incorporate predator fish stocking (bass, barramundi, saratoga) to reduce exotic fish species.”</i></p> <p><i>“... Over the past 20 years, urban development in the "Anembo Basin" has seen rainwater diverted from being stored in the ground, and diverted into the stormwater system and directly out to sea. The in ground water is now gone and the lakes are no longer being replenished. I would not be surprised if there is a dry summer for the western portion of the lakes at Ann St to dry out completely.”</i></p>
<b>Collection and control measures rubbish and debris</b>	3	<p><i>“Floating debris eg plastics building rubble, garden waste”</i></p> <p><i>“As a result of McDonalds being nearby there is a lot more rubbish being left in area 5 near the new pedestrian bridge through to the Hervey Bay caravan park, Dayman St area. More bins need to be provided and serviced by council.”</i></p>

<b>Themes or Comments between 2 and 1 responses - (could not be attributed to any higher level themes)</b>	
<b>2 responses</b>	<b>1 response</b>
<ul style="list-style-type: none"> <li>▪ Community benefit - Public amenity and aesthetics value needs to be considered</li> <li>▪ Leave it alone - trust/respect nature</li> <li>▪ ALL [are important]</li> <li>▪ Importance of native plant species</li> <li>▪ Education</li> <li>▪ Insect Management</li> </ul>	<ul style="list-style-type: none"> <li>▪ Public access</li> <li>▪ Don't agree with the list of issues (the bank edge and the island in [my] area all fine)</li> <li>▪ Issue with the humans not the wildlife (i.e feeding)</li> <li>▪ Drought exasperating the issues</li> <li>▪ Limit public access areas</li> <li>▪ The issues start at the botanic gardens</li> <li>▪ Residents beautifying ramifications - i.e mowing bank edges</li> <li>▪ Off leash dogs</li> <li>▪ Public taking water from the system/water body</li> <li>▪ Issues with net fishing</li> </ul>

**Q13 - What do you think of the potential actions to address these issues?**

- a) Remove islands to reduce bird roosting habitat and improve water mixing
- b) Infill Anembo Drive inlet, stabilise channel and revegetate batter;
- c) Staged removal of Mexican waterlily;
- d) Removal of broad leaf pepper tree and Singapore daisy;
- e) Re-establish emergent and submerged native water plants throughout the waterbodies to manage nutrient content;
- f) Discourage water bird and turtle feeding;
- g) Establish a bird management plan to reduce waterbird numbers;
- h) Establish vegetation buffers, especially along steep mown edges;
- i) Re-profile eroded batters and stabilise edges;
- j) Undertake batter safety risk assessment and implement acitons to improve public safety

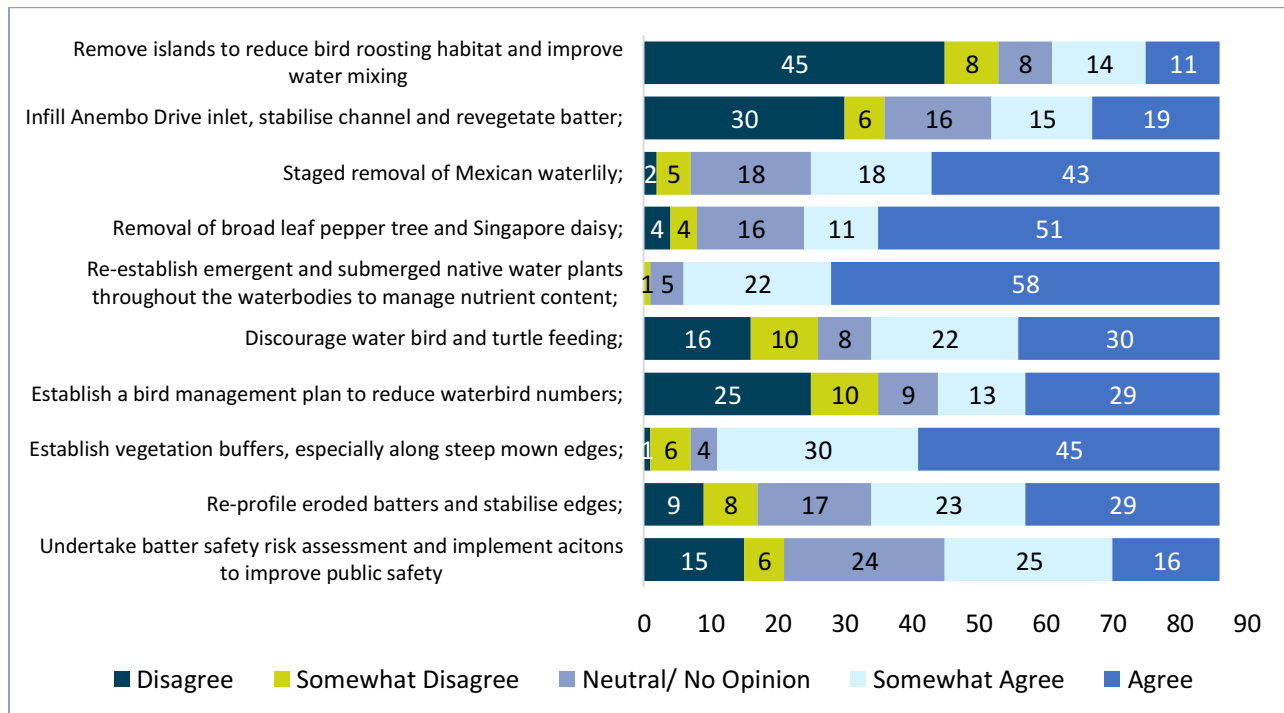
86 respondents answered this question. The top five priorities by respondents are outlined below:

- Re-establish emergent and submerged native water plants throughout the waterbodies to manage nutrient content (80 respondents answered ‘Agree’ to ‘Somewhat Agree’)
- Establish vegetation buffers, especially along steep mown edges (75 respondents answered ‘Agree’ to ‘Somewhat Agree’)
- Removal of broad leaf pepper tree and Singapore daisy; (62 respondents answered ‘Agree’ to ‘Somewhat Agree’)



- Staged removal of Mexican waterlily; (61 respondents answered 'Agree' to 'Somewhat Agree')
- Re-profile eroded batters and stabilise edges; (52 respondents answered 'Agree' to 'Somewhat Agree')
- Discourage water bird and turtle feeding; (52 respondents answered 'Agree' to 'Somewhat Agree')

Please note, if a number isn't shown for a value it means there were '0' responses to that answer. For example there were '0' responses to 'Disagree' regarding 'Removing declared and targeted weed species'.



34 respondents provided comments regarding other actions - below is a breakdown of their comments including themes and comment examples – as well as the number of responses against the theme. There was also a small number of comments that either did not relate to the topic of the question or survey and could not be contributed to any theme.

Theme	No. of Responses	Comments/Examples
<b>Waterbody, management, Preservation and Protection</b>	8	<p><i>"Install better native fish species access (fish ways) and incorporate predator fish stocking (bass, barramundi, saratoga) to reduce exotic fish species."</i></p> <p><i>"Filtration of drain as no 1 priority..."</i></p> <p><i>"The lakes need a central water flow to assist the flushing when we get a decent rain. Re assess the water filter recently put in by council It is not affective as most of the water comes from Ann St. Very little water goes through the filter even in a down pour"</i></p>
<b>Bird Management – For and Against</b>	8	<p><i>"The ibis are a problem but the other many bird varieties are not. Can you control the ibis without destroying the habitats of the other birds...The ibis have increased in number since we moved in, and they are the only problem. The water system needs help but we need to keep the birds and their habitat."</i></p> <p><i>"Once done residents are willing to maintain the area under council supervision as we like the ducks and wildlife Ibis aren't a problem here. We</i></p>



		<p><i>paid a premium price for this water outlook. This is a wood duck breeding ground."</i></p> <p><i>"Birds will come to roost closer to our homes unless they are culled"</i></p> <p><i>"... cut down the trees that attract the breeding colonies of those large smelly "dump birds" with the long beaks, don't get rid of our ducks or water hens. I also have two domestic ducks that I have been feeding for at least ten years behind my home...please don't move them on as they are harmless and good friends."</i></p>
<b>Management, Preservation and Protection Habitat &amp; green space</b>	7	<p><i>"Encourage wetland environment. Reduce mowing and discourage lawns... Focus on native vegetation for significant green zone /wildlife corridor emphasis."</i></p> <p><i>"Remove the pepper trees and retain the native large tree that are on the islands."</i></p> <p><i>"Plant large native trees for better habitat trees."</i></p> <p><i>"Revegetate with native species if Pepper trees and Singapore daisy are removed."</i></p>
<b>Against removal of islands</b>	5	<p><i>"Don't drain water bodies or remove islands, maintain them properly."</i></p> <p><i>"Please do not remove islands."</i></p> <p><i>"Islands provide a visual impact on lakes and are home to migrant birds at times. Remove the pepper trees and retain the native large tree that are on the islands..."</i></p>
<b>Preservation and Protection of Wildlife (incl. birds)</b>	4	<p><i>Maintain areas and increase animal, bird and fish populations, use native plants and create conditions wildlife can flourish. There's enough species dying already.</i></p> <p><i>"Don't infill Anembo inlet... we paid a premium price for this water outlook. This is a wood duck breeding ground. If this inlet was to be infilled it would change the whole cycle of the flora and fauna in this area not to mention the beautiful large trees and birds that depend on the water here. We received and read the technical report and attended the meeting Sat and we understand the complex issues. After speaking with the consultant we believe there is another solution other than infilling the inlet and there's room to negotiate Other neighbours have the same concern."</i></p>

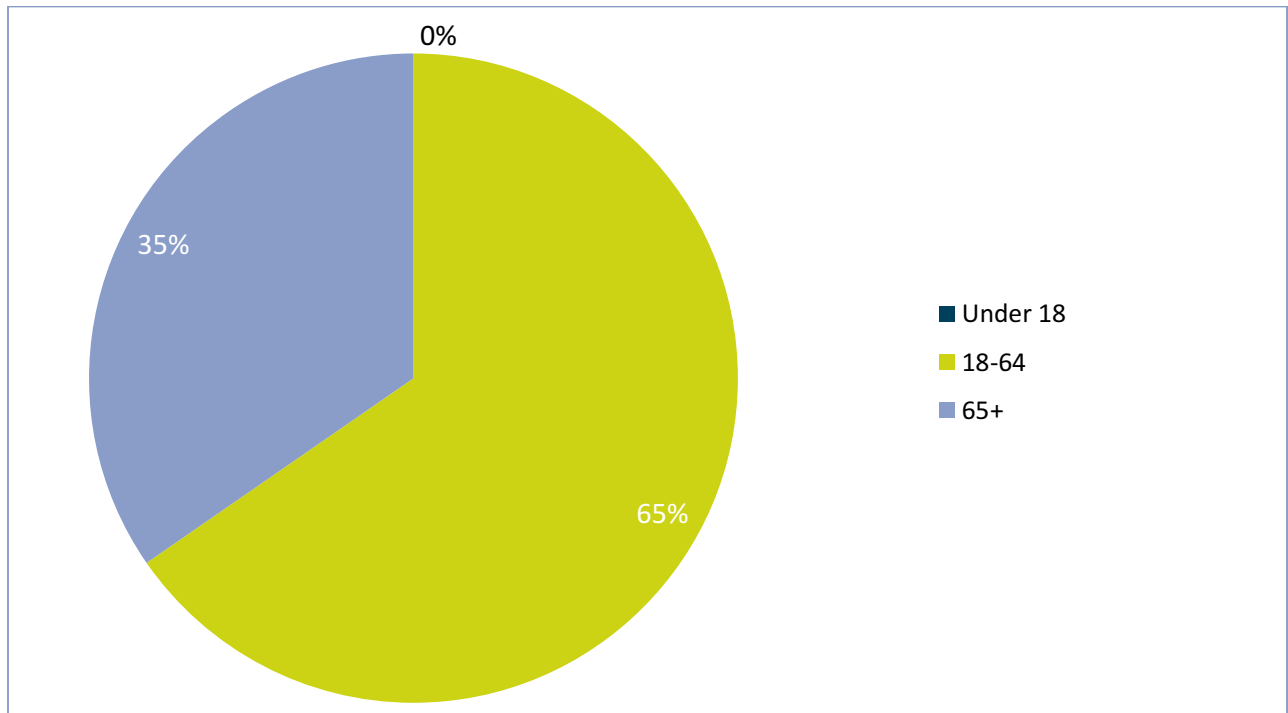
<b>Themes or Comments between 2 and 1 responses - (could not be attributed to any higher level themes)</b>		
<b>3 responses</b>	<b>2 responses</b>	<b>1 response</b>
<ul style="list-style-type: none"> <li>▪ Education (i.e bird feeding, importance of plants etc)</li> <li>▪ Against filling in Anembo Drive Inlet (Lowlands)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Public taking water from the system/water body</li> <li>▪ Cost implications of implementation</li> <li>▪ Volunteer or Employment Programs (to help with work and implementation)</li> <li>▪ Get rid of nesting birds</li> <li>▪ Against the building of bridge to island – Anembo Dr</li> </ul>	<ul style="list-style-type: none"> <li>▪ Whole community responsibility</li> <li>▪ No public access areas</li> <li>▪ Dogs on leash only</li> <li>▪ Support recreational activities on water body</li> <li>▪ Walking paths and board walks</li> <li>▪ Central water course</li> <li>▪ Other waterways (i.e Botanical Gardens - and impact downstream)</li> </ul>



	<ul style="list-style-type: none"><li>▪ Leave it alone – trust/ respect nature</li><li>▪ Collection and control measures rubbish and debris</li><li>▪ Pest management</li></ul>	<ul style="list-style-type: none"><li>▪ Against reduction in water depth, draining and filling in</li><li>▪ Against net fishing</li><li>▪ Involve indigenous groups</li><li>▪ Community benefit - Public amenity and aesthetics value needs to be considered</li></ul>
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**Q14 - What is your age bracket?**

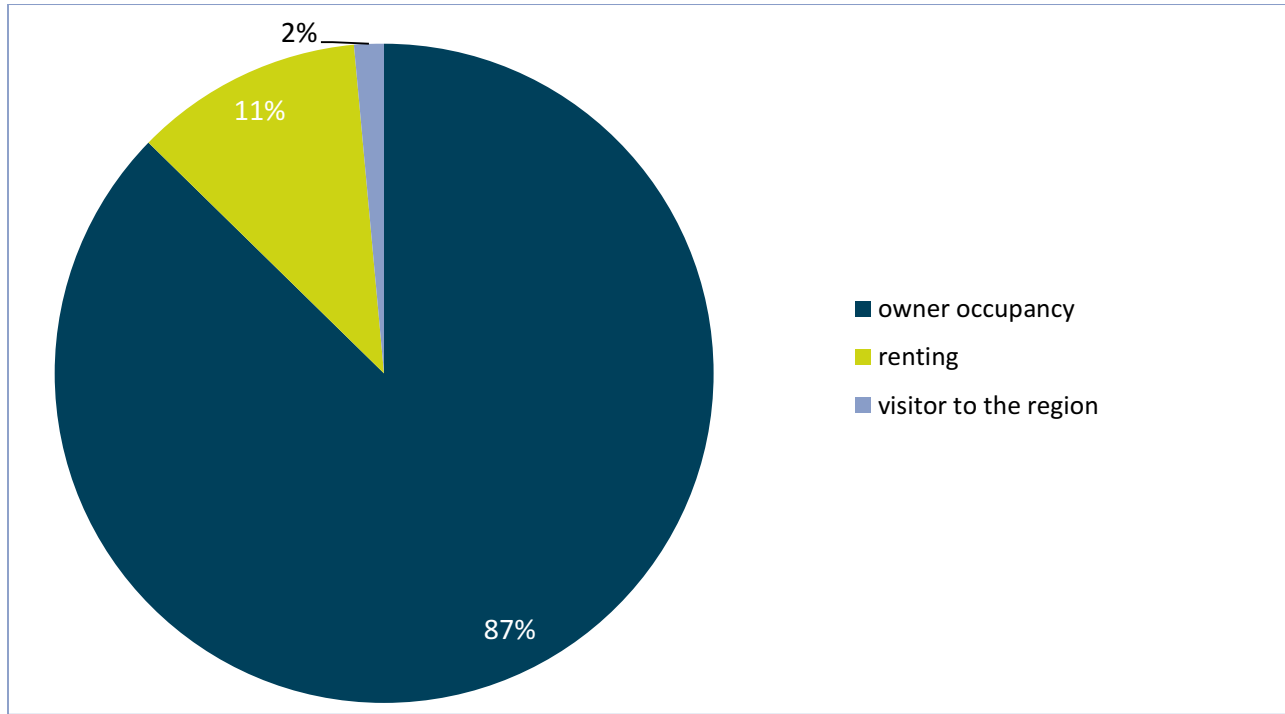
The majority of the respondents were aged between 18-65 (65%), with 35% being over the age of 65. No respondents were aged under 18 years.





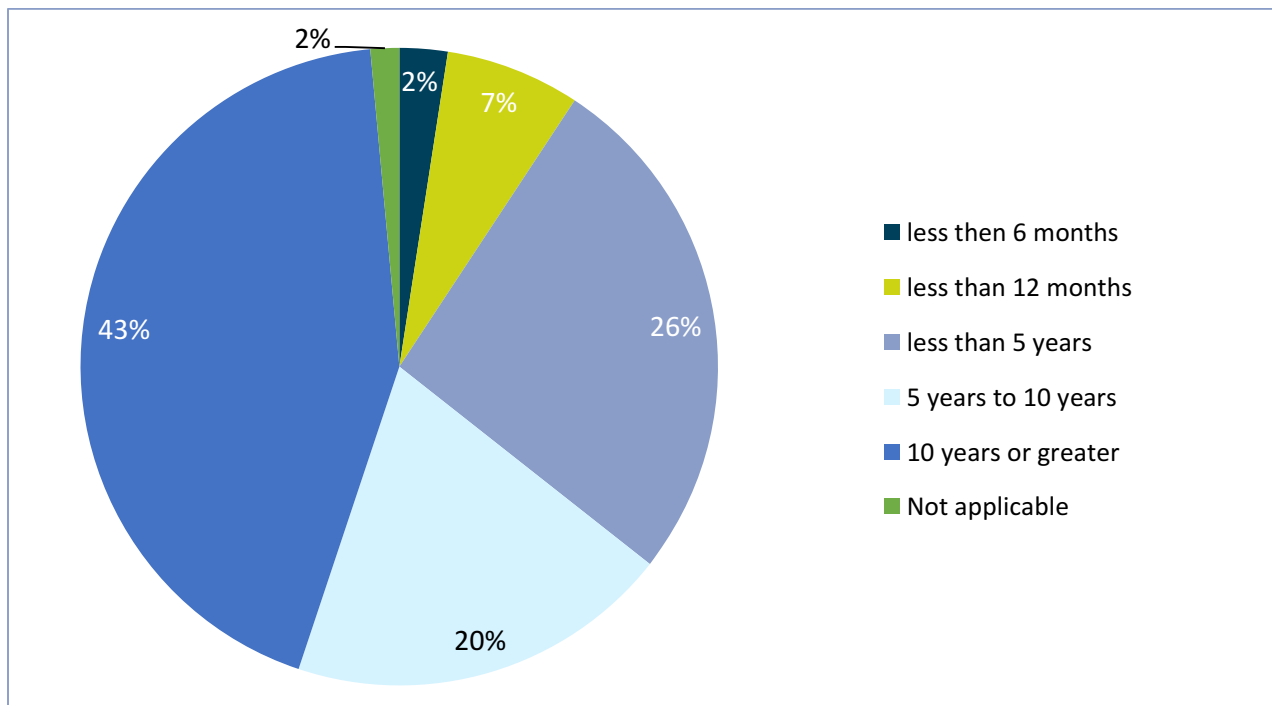
**Q15 - What is your current residency status?**

87% of respondents identified as owner occupied as their residency status. 11% identified as renting and only 2% identified as a visitor to the region.



**Q16 - How long have you been living in your current residency?**

The majority of respondents (43%) identified that they have lived in their current residence for more than 10 years. 26% of respondents identified as living in their current residence for less than 5 years, 20% 5 years to 10 years, 7% less than 12 months and 2% less than 6 months. Only 2% of respondents chose 'not applicable'.





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**Q17 - SURVEY PRIZE!** *Would you like to go into the draw to win a Samsung, 10.1", 32GB Tablet? Terms and Conditions are located on our project page - under the Document Library heading.*

200 of the 266 respondents answered this question, 127 answered 'Yes' and 73 answered 'No' 66 respondents skipped the question.

**Q18 -** *Thank you for taking the time to fill out this survey. If you would like to receive updates, please enter your contact details here.*

149 of the 266 respondents provided their information so they could be kept up to date by Council on the project.



## 4.2 SUBMISSIONS

### 4.2.1 Who contributed

Submissions were received from individuals and organisations from across the Fraser Coast Region. A summary of the 10 submissions are provided below. Please note, individual names of residents have been redacted for privacy and are referenced as ‘resident’. There was one organisation submission from the Maryborough River Catchment Coordinating Committee (MRCCC).

### 4.2.2 Submission Feedback

Below is a summary of the submission responses including comment examples.

Stakeholder/Group	Comments Summary	Date
Resident, Urangan	<p><b>Lowlands Lagoons</b></p> <ol style="list-style-type: none"> <li>The resident believes the bioretention (drainage) basin does not filter water from the drainage easement adjacent to Torquay Tce; that there is no water quality improvement because there is no filter from Ann St entry and exit points that flow between Waterbodies B &amp; C.</li> </ol> <p>The resident also suggests that no action should be taken as Council's efforts have not improved water quality and have diminished flows into the waterbody. Furthermore, identifies that the water flows in the opposite direction to where the drainage basin was constructed.</p> <p><i>“The construction of that drainage basin and its vegetation has not achieved anything. This is because the water that flows from the drainage easement does not flow towards where the drainage basin was constructed but in fact flows in completely other direction”</i></p> <ol style="list-style-type: none"> <li>The submitter objects to removal of islands and the pepper trees without substantial reasoning. The resident suggests no action be taken to remove pepper trees or other actions as the resident believes there are no issues with the birds.</li> </ol> <p><i>“I absolutely oppose any interference with that Waterbody. The birds that roost do not cause any significant difficulty and the islands provide protection and privacy not only for residents but for all other “critters” that live in the area.”</i></p> <ol style="list-style-type: none"> <li>Overall, the resident would prefer to see no action and states the waterbodies are self-cleaning and self-managing which the resident has observed for many years.</li> </ol> <p><i>“...unless they are familiar with the waterways as many of the residents have been for in excess of fifteen (15) to twenty (20) years, they do not appreciate that they are self-cleaning and self-managing if given the opportunity and without interference rather than more.”</i></p>	22/11/19
Resident, Maryborough	<p><b>Ululah Lagoon</b></p> <p>The resident makes the following suggestions for <b>Ululah Lagoon</b>:</p>	30/11/19





	<ol style="list-style-type: none"> <li>1. Installation of trash rack to collect debris entering waterway at stormwater outlet (assumed to be referring to Alice St culverts between Waterbody C and Uluah Lagoon)  <i>“Construction of a cage to collect debris entering the waterway at the storm water outlet.”</i></li> <li>2. Establishment of reeds on Golf Course side of waterbody bank (western banks of Ululah Lagoon)  <i>“Planting of reeds on the golf course bank of the waterway to prevent further undermining of the bank.”</i></li> <li>3. Dredging of waterbody to remove silt build up when water levels drop to increase water depth; the resident believes that dredging was previously not allowed by the then Environment Department but can now be cleaned out as Water Resources department recognises the man-made weir.  <i>“Dredging of the waterway when water level drops to remove excess silt build up to maintain a greater depth of water.”</i></li> </ol>	
<p><b>Resident, Torquay</b></p>	<p><b>Lowlands Lagoons:</b> The resident requests for the lakeside bank and narrow channel to be filled between two properties along Anembo Drive, Torquay to address severe erosion issues which threaten private property and pose health risk due to rubbish and mosquitos.  <i>“We wish to request that the Council give urgent attention to the erosion of the lakeside bank between ... Anembo Drive in Torquay. Over the past 5 years we have lost approx. 2 metres of the lakeside bank on each side through erosion.”</i>  <i>“The best solution we feel is to fill in the space in this narrow area between the two properties, thereby giving support to both properties.”</i>  <i>“At present this space between the two properties is a breeding ground for mosquitoes and disease. It virtually looks like a rubbish pit.”</i></p>	<p>14/11/19</p>
<p><b>Resident, Maryborough</b></p>	<p><b>Ululah Lagoon:</b></p> <ol style="list-style-type: none"> <li>1. The resident agrees with the removal of Salvina;  <i>“Definitely Salvinia must be removed”</i></li> <li>2. The resident agrees with the removal of the Broad-leaved Pepper trees by a slow gradual process of revegetation of the areas in which they occur; suggests planting and regular watering of some of, or a mix of the following species of native plants: bottlebrushes (Melaleuca viminalis and Melaleuca linariifolia), Hibiscus (Hibiscus heterophyllus /Hibiscus diversifolius) Tulipwood (Harpulia pendula) and Breynia (Breynia oblongifolia).</li> </ol>	<p>04/12/19</p>



	<p><i>“As these natives become established, with the implementation of ongoing care, the Pepper trees can be progressively trimmed and eventually over time be completely removed as the new natives become mature.”</i></p> <p>3. The resident disagrees with full removal of Papyrus despite it being an exotic. Papyrus is good at improving water quality through uptake of nutrients. The resident advises that the Papyrus locations at Ululah are the only habitat for the Australian Reed- warbler when they are there. And when they are there they nest in it, and rarely leave it: when they do it is ever so briefly. The Papyrus also serves as nesting sites for many other waterbirds, such as the Dusky Moorhens and Australasian Swampheens. Over a twenty-year period Papyrus has not encroached on the whole of the lagoon area. If it has been cut back from time to time that is all that should occur.</p> <p><i>“Papyrus is one of the most effective and efficient natural filters known to mankind. Papyrus swamps are known to have the ability to trap sediment and are therefore useful for filtering out pollutants including heavy metals.”</i></p> <p>4. The resident agrees with vegetating banks with wetland water plants; however, does not want to see fencing of waterbody edges due to diminished amenity.</p> <p><i>“...the proposal to vegetate the edges of the lagoon banks with wetland water plants to stop erosion and provide a barrier. I would not like to see the edges fenced off though. This would not be visually appealing.”</i></p>	
<p><b>Resident, Torquay</b></p> <p><i>(resident submitted a hard copy survey however didn't answer all the questions – therefore has been included as submission as it couldn't be entered into the online survey)</i></p>	<p><b>The resident responses highlighted the following:</b></p> <p><b>Framework (All waterbodies):</b></p> <ol style="list-style-type: none"> <li>1. The resident has limited or no concern for the common issues associated with the urban waterbodies (Q4).</li> <li>2. The resident identified that the actions [management options] identified for addressing issues in relation to urban waterbodies were Not important, or had limited importance or responded with neutral/no opinion.(Q5)</li> <li>3. The resident identified their top priority as - not wanting to see bird habitat disturbed along waterbody edges. (Q6)</li> </ol> <p><i>“Please do not disturb bird habitat along water edge”</i></p> <p><b>Lowlands Lagoons</b></p> <ol style="list-style-type: none"> <li>4. Disagree to neutral with most responses (Q13), supports removal of broadleaved pepper tree &amp; Singapore daisy, as well as the staged removal of Mexican waterlily;</li> </ol>	<p>04/12/19</p>
<p><b>Resident, Torquay</b></p>	<p><b>Lowlands Lagoons:</b></p> <ol style="list-style-type: none"> <li>1. The submitter disagrees with premise that water quality would be improved by removal of birds and islands, acknowledging storm-water inflow contribution to pollution and suggesting that <i>e.coli</i> from bird presence should be reflected by signage "no swimming" with no further action.</li> </ol> <p><i>“I strongly object to the proposed assault on the White Ibis, it's nests and eggs and it's roosting sites and habitat on the Islands. These birds are protected. The suggested activities are disgraceful...”</i></p>	<p>5/12/19</p>



	<p>2. The submitter objects to breeding restriction or culling of white ibis as the population will infill and/or create more complaints by shifting the problem to surrounding properties.</p> <p><i>“...then the Ibis will roost in surrounding properties and Council will have to deal with even more complaints. This is the Law of Unintended Consequences in action.”</i></p> <p>3. The submitter objects to the removal of broad leaved pepper tree for the purpose of removing bird roosting sites.</p> <p><i>“I strongly object to the removal of Island Pepper Trees. They are an endemic weed species in Queensland, and removal of the few involved here will make no difference to that. This is an excuse for another assault on the birds roosting sites.”</i></p> <p>4. The submitter objects to the connection of Anembo Island to the mainland.</p> <p><i>“I strongly object to the reduced water storage capacity, and connection of Anembo Island to the mainland. The Island protects the birds from feral and domestic cats and foxes...”</i></p> <p>5. The submitter strongly objects to removal of any islands as they have amenity and would be a huge waste of ratepayer funds; suggests that imported fill from urban areas for free for batter edge stabilisation and contouring. The submitter feels the Framework Plan is geared to degrade the recreational and environmental values of the lagoons.</p> <p><i>“I strongly object to the removal of any Islands, they have amenity value, and are not just a soil "opportunity" for plundering. This proposed wanton destruction is a huge waste of rate payers funds. There is always excavated soil-fill available in urban areas for free if you need it for batter edge stabilisation and contouring.”</i></p> <p>6. The submitter noted the importance of nature as an identity of individuality of Hervey Bay from the Esplanade Planning Committee and wished to see the balance of nature with development continued; also noted the importance of supporting natural feeding habitats for migrating birds including islands particularly in times of drought.</p> <p><i>“This was eloquently put by a resident of Hervey Bay and resounds with many of us living here:</i></p> <p><i>‘I would like to remind Council that the 20 year Esplanade Planning Committee from representatives of the WHOLE Fraser Coast agreed that nature is a an identity of individuality of Hervey Bay. Only because this area is not on the Esplanade doesn't mean the views of the committee doesn't have relevance to that of how a majority voice viewed and wished to see continued in the future the balance of nature with Development to keep that individual identity.’”</i></p>	
<p><b>Resident, (no address provided)</b></p>	<p><b>A very detailed submission was provided by the resident in relation to Anembo Lakes (Lowlands Lagoons) – summary provided:</b></p> <ol style="list-style-type: none"> <li>1. The resident provided comments on the history of the system and naming.</li> <li>2. The resident suggests increasing the standing water level of Waterbodies D &amp; E from 1.45m to 1.65m would reduce the duration of the annual winter algal</li> </ol>	<p>7/12/19</p>



flush and associated bad smells; and thereby improve amenity destroyed for flood mitigation.

3. The resident suggests some uncertainty in the reports about the reference to Anembo Drive inlet and the proposed infilling.
4. The resident believes that Council withheld water quality sample results and claims a right to information request over water quality tests via a Councillor for a fish kill incident was denied; The resident believes the public should have access to this information and know the consequences on human health and lake management.
5. The resident feels the drop in session did not provide adequate public consultation.
6. The resident suggests Council should have a full public consultation with the community including the Mayor and Deputy Mayor on the final draft documents before it goes before Council.
7. The resident states there is nothing in the report to address all sources of pollution entering the waterbodies and that submerged/emergent plants will do nothing; suggests not enough is being done to treat stormwater; suggests contoured filter beds at each stormwater outlet and re-engineering submerged outlets to allow simpler solutions.
8. The resident states Council will need to establish ban on trees and protection as well as limits on shrubs to avoid class action lawsuit should amenity values be reduced; believes ratepayer clear views and protective emergent vegetation can both be accommodated.
9. The resident states de-oxygenation has not been adequately addressed and suggests aeration by aquaculture aerators, can be a relatively cheap answer. These can be easily modified to have solar panels as a power source, instead of expensive land based floating power cabling.
10. The resident feels pollution from the increased population of ibis needs to be dealt with sharply, with decisive action by Council; if not the problem of pollution of waterways will not be solved; that there are several more bird feeding areas not identified in the report (i.e. both sides of waterbody D & E and other waterbodies) and suggests concentration on ibis food reduction would be effective to return populations to levels of the carrying capacity of the waterbodies. Suggests water hens are not recognised as a problem but they are predators of young birds and populations also grow from the bird feeding problem. Roosting areas and nesting area terminology should not be used interchangeably in the management reports.
11. The resident believes that seasonality of bird species and numbers is under-recognised in the draft report. Suggesting that there are gross errors in the Draft Management Plan; associated with the identification of bird species, when/where they usually can be found, and numbers relative to the overall population.
12. The resident suggests that the number of predators that live in the area are NOT identified in the management plans; Foxes and cats are predators to the birds and Council has done nothing about it.
13. The resident disagrees with island removal as it is costly and suggests attention should be focused on island nesting habitat and replacement of native species when peeper bush is removed.



14. The resident believes that the main mis-interpretation is the supposed lack of currents and mixing of waters, underpinning a number of vital recommendations. The resident believes that there is no hard evidence supporting the conclusion of lack of currents. There is no hard evidence about the currents over a “normal” twelve month period, nor when the lakes are full. There is lack of any evidence to say that current depth of water is of any concern where depth is mentioned in the draft report.
15. The resident believes that there is an error in report about annual fish kills, stating they don't occur annually and enquires why Council won't release the results of fish and water tested from a fish kill earlier this year.
16. Resident suggests that papyrus and Yellow flowering Vigna is proving to be great as a ground protection in the emergent vegetation zone and particularly stabilising steep banks. [BUT it will eventually have to be considered an exotic weed and removed when other species are planted.]
17. The resident raises safety issues are overdone in terms of resident's issues and public access. 'At own risk' notices should cover residents and public liability. Access steps should be cut into steep slopes so people can get out if they fall in and ratepayers should be allowed to do this.
18. The resident believes that public access around all waterways has not been dealt with adequately in the management plan. Not all waterways have full access around them. The resident states that the public has a right of access under common law. This public access must be considered when designing emergent vegetation and the buffer strip around each waterway. Council has a responsibility to guarantee public access and to ensure this is in place.
19. The resident states a control measure for control of pepper bush needs to be spelt out, with follow up actions.
20. The resident supports vegetation and buffer strips for bank erosion control over more expensive bank re-profiling.
21. The resident states that the Water Body Residence Time, was quoted several time at the drop-in-session and in the Draft Management Report. It is a technical term that is not adequately explained to the ratepayers. As the Consultant relies of the concept frequently, an adequate explanation is called for and proof presented that the phenomena is relevant to each waterbody.
22. The resident identified that Fig 2-2 of the Draft Plan has a minor typo, of extension of Truro instead of Dayman St. The Margaret St Weir is given as 1.45 m AHD whereas the text reads 1.59m AHD (page 8). No time of year is given for the 2013 figures.
23. The resident believes that so far the Lakeside Vegetation Policy (2017) has only worked in some areas of Council controlled land. Ratepayers have not joined in where they mow, and nobody is sure where the 1.0-1.5 m begins (high water or other?). Some Council developed emergent vegetation is greater than 1.5m.
24. The resident questions that there is any proof that all of these waterbodies actually have a long residence time, or that it is just conjecture on the part of the Consultant? There is a big variation in the ratio of water surface and purported water volume, to catchment area, between the five waterbodies?
25. The resident identifies that the area along Alexandra St is not grassed and mown as shown in map figure 4-14
26. The resident suggests that the channel along the north side of Aembo Island is not deep enough for stratification of water.



	27. The resident believes that the waterbird management strategies identified in 5.1.4 page 41-42, are ridiculous as a solution to the problem.	
<b>Resident, (no address provided)</b>	<p>The resident objects to reduction of natural waterbodies at Ululah Lagoon and Anembo Lakes. The resident states that they should be left as is.</p> <p><i>“I strongly object to the reduction of our natural water bodies Ululah and Anembo Lakes. The problem with this is the lack of consideration for the native species and the continual drought conditions. These are natural water courses and the impact this would have on native wildlife would be unforgivable. Please leave them as is.”</i></p>	
<b>Maryborough River Catchment Coordinating Committee (MRCCC)</b>	<p><b>The MRCCC provided a submission – a summary is provided below:</b></p> <ol style="list-style-type: none"> <li>1. The submitter advises of water quality data being collected by Mary River Catchment Coordinating Committee since 2016 (ongoing) in relation to Ululah Lagoons [known as Waterbody C. in the plan]</li> <li>2. The submitter supports the proposed approach to deal with highly invasive Cabomba and Hydrophila in Ululah.</li> <li>3. MRCCC supports actions detailed in draft plan for Ululah Lagoons - specifically the establishment and maintenance of native aquatic and riparian vegetation, and supports long-term catchment management and stormwater treatment actions.</li> <li>4. The reference to dredging in Ululah Lagoons lacks any explanation why it has been suggested by the public. The submitter describes that dredging is likely to de-stabilise the lagoon bed and shore leading to further bank slumping and steeper vertical banks. A deeper lagoon is likely to further increase residence time of the waterbody leading to more stratification and fish kills.</li> <li>5. The MRCCC are supportive of actions identified for Waterbody A &amp; B of Ululah Lagoons. They would prefer option 1 of factsheet be to modify Waterbody C back to a creek but accepts Council's recommended action. They also support option 1 for hydraulic retention times and mixing by lowering crest height by 150mm and conversion of a section of the lagoon to treatment wetland.</li> <li>6. The MRCCC strongly supports phasing out encouraging bird feeding at the site; most likely the single highest contributing factor to high nutrient levels within the system. Practice of bird feeding encourages a significantly higher bird population than the area would naturally support, and it is widely recognised that feeding of birds in such situations has a number of adverse impacts on the birds themselves.</li> <li>7. The MRCCC recommends monitoring program established for Ululah Lagoons to benchmark and track progress of plans' implementation and improvements to Water Quality (WQ). The MRCCC has established many WQ monitoring programs over the last 10 years for different clients and shared some summary results.</li> </ol>	9/12/19
<b>Resident, Torquay</b>	<p>The submission identifies issues in relation to significant drop-offs around waterbodies:</p> <ol style="list-style-type: none"> <li>1. The resident identifies the issue of the presence of non-biting midges and suggests needing to control them by spraying the lake as they breed in it; [lake being stagnant would contribute].</li> </ol> <p><i>“These are a major pest and often spoil our enjoyment of such a beautiful area. They make a mess around the security screens and often make their way into the house.”</i></p>	8/12/19



	<p>2. The resident believes that the fish kills are due to water quality from weeds and lack of oxygen, stating many lake systems have aeration fountains, and conditions are healthy now with fish jumping but will change as lake dries up and water levels drop.</p> <p><i>“Over the length of time living in this area we have seen many fish die due to the quality of the water with weed and lack of oxygen.”</i></p> <p>3. The resident provided photos of steep bank erosion near Anembo Drive; erosion due to south easterly winds; previous attempts by council to plant water lilies in wire cages failed.</p> <p><i>“Our southern banks are greatly eroded by the South Easterly strong winds. To try and control this the Council tried to plant water lilies and placed them in chook wire cages but over a short time they died off.”</i></p> <p>4. The resident requests Council maintain the lake frontage like they do on the other side.</p> <p><i>“As mentioned above I have maintained the 100m lake frontage for the past 12 years. With rates forever increasing I would like you to review this and so it can be maintained by council just as they do on the other side.”</i></p>	
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### 4.3 Open Houses and Walking Tours

#### 4.3.1 Who participated

The Open House and Walking Tours were advertised via the Engagement Hub and media outlets. 2332 letters were sent to residents and property owners within 50 metres of a council-managed waterbody, which included an invitation to the Open House and Walking Tours. A copy of the letter is included in the appendix (7.7).

#### 4.3.2 Feedback

The residents who attended were encouraged to engage with poster material on display to provide feedback during the open house session. They were also encouraged to fill in a submission or survey either with the tablet provided, or via the Engagement Hub. As mentioned in the [Constraints](#) section little feedback was obtained from these sessions. Most attendees had either provided their feedback already by filling in the survey or wanted to complete the survey at home or at a later time. Below is a summary of the feedback received from these sessions.

Theme	No. of Responses	Comments/Examples
<b>Fencing Issues or Concerns</b>	3	<p><i>“Safety fencing requirements around USC waterbody, especially along Old Maryborough Road”</i></p> <p><i>“Barrier Fence lower Neptune St – collecting rubbish and makes walking dogs difficult”</i></p> <p><i>“Vehicle barrier/fence on north-east side of Anne Street to prevent hoons driving on council land”</i></p>



<b>Costs</b>	2	<p><i>“Council rates are still amongst the highest in Queensland; carefully consider socio-economic catchment and price rates accordingly – spending, needs to be targeted and strategic (but not limited to waterbodies)”</i></p> <p><i>“Cost benefit analysis to remove islands?”</i></p>
<b>Programs</b>		<i>“Consider community based or earn &amp; learn strategies (e.g. partnerships with universities) to undertake targets (e.g. planting of emergent plants along edges)”</i>
<b>Removal of exotic species</b>		<p><i>“Removal of existing problem plantings (e.g. casuarina &amp; the pollen problem) and replace with appropriate natives”</i></p> <p><i>“Plant thicket west end of Ann Street lake may be mimosa species – spreads rapidly and kills other vegetation”</i></p>
<b>Arkarra Lagoons</b>		<i>“Arkarra Lagoons – lake is green. Never used to be like that. Has lost most of its bird life. Have a look on Google Earth.”</i>
<b>Ann St</b>		<i>“I think the walkway between Ann Street lake and the upper reaches toward Toosan Creek should have pipes in the walkway”</i>
<b>Anembo Dr</b>		<p><i>“Action now Anembo Drive”;</i></p> <p><i>“Action Now No2 (eroding batters and stabilise edges) before it rains”</i></p> <p><i>“Fill in narrow in Anembo Drive”</i></p>
<b>Protection &amp; Preservation of Wildlife</b>		<p><i>“Ensure lakes are for wildlife only no paddle or no kayaks, canoes, battery operated boats, sailboards”</i></p> <p><i>“If islands are gone, nesting areas &amp; roosting areas will be gone &amp; those birds will come closer to our homes”</i></p>
<b>Signage/ Education</b>		<i>“Control/signage re: net fishing to feed home aquariums”</i>
<b>Litter/Waste</b>	2	<p><i>“Ululah Lagoons - Litter control (trash nets?) at weir, vegetation maintenance for drainage in open drain and surrounding open space”</i></p> <p><i>“Dog poo bags and notice to say “Pick up” poo”</i></p>

#### 4.4 FEEDBACK RESULTS SUMMARY

##### 4.4.1 Feedback – Waterbody Issues and Priorities

###### *Issues and Priorities*

The survey responses showed a high level of concern in relation to many of the common issues associated with urban waterbodies. The top five areas of concern were:

- Fish kills (including from low dissolved oxygen, excessive depth) (131 respondents rated ‘Concerned’ to ‘Very Concerned’)
- Algal or blue green algae blooms (129 respondents rated ‘Concerned’ to ‘Very Concerned’)
- Exotic fish species (112 respondents rated ‘Concerned’ to ‘Very Concerned’)
- Sediment and organic matter build up (110 respondents rated ‘Concerned’ to ‘Very Concerned’)
- Aquatic weeds (107 respondents rated ‘Concerned’ to ‘Very Concerned’)

Comments and themes highlighted concerns relating to (but not limited to); wildlife management, preservation and protection; waterbody preservation and maintenance, rubbish and debris; prohibited use of waterbodies (water); health and safety; water levels and quality; preservation and maintenance of habitat/ natural green spaces; and insect populations.





#### 4.4.2 Feedback - Waterbody Values (Interactions and Experiences)

There was a clear message from respondents of a high level of community importance and value associated with the waterbodies – with many respondents either visiting frequently (i.e 33% daily, 19% 2-3 times a week and 16% weekly); or living on / near a waterbody (33% ‘property directly adjoins or faces a waterbody’, 27% ‘within a short driving distance’ and 24% ‘within walking distance’).

The top two responses for the purpose of visiting a waterbody were, ‘walking and jogging’ (43%) and ‘wildlife viewing/ bird watching’ (47%). Other areas of enjoyment were (but limited to); walking the dog/s; wildlife viewing/ bird watching; playing/ spending time with children and family; living on/near a waterbody; mental health and wellbeing; visual aesthetics, and exercise.

#### 4.4.3 Feedback - Waterbody Management Options and Priorities (incl. Actions)

##### *Options and Actions*

The survey responses showed a high level of importance of proposed actions in addressing the issues associated with urban waterbodies. The top five actions rated ‘somewhat important’ to ‘important’ are outlined below:

- Stabilise bank erosion including re-profiling and/or repairing areas of bank erosion and revegetating using native species (167 respondents rated ‘Somewhat Important’ to ‘Very Important’)
- Establish and maintain emergent water plants along waterbody margins (162 respondents rated ‘Somewhat Important’ to ‘Very Important’)
- Establish and maintain submerged water plants within waterbody (158 respondents rated ‘Somewhat Important’ to ‘Very Important’)
- Manage exotic fish species (157 respondents rated ‘Somewhat Important’ to ‘Very Important’)
- Create wetlands (156 respondents rated ‘Somewhat Important’ to ‘Very Important’)

Comments and themes highlighted importance for actions associated with (but limited to); wildlife management, preservation and protection; waterbody preservation and maintenance, preservation and maintenance of habitat/ natural green spaces; collection and control measures of rubbish and debris; and education.

Respondents also raised concerns about proposed actions including being against the reduction in water depths, draining and filling in of water bodies.

##### *Priorities*

The survey responses highlighted the following three priorities:

- Creating wetlands (104 responses)
- Stabilising bank erosion including re-profiling and/or repairing areas of bank erosion and revegetating using native species (101 responses)
- Managing exotic fish species (69 responses)

Comments and themes highlighted priorities for (but not limited to); wildlife management, preservation and protection; waterbody preservation, maintenance and management; and collection and control measures of rubbish and debris.

#### 4.4.4 Feedback - Pilot Individual Plans – Ululah Lagoons and Lowlands Lagoons (Anembo Lakes)

##### *Ululah Lagoons*



## Issues

The survey responses highlighted that most respondents were in agreement with issues associated with Ululah Lagoons. Only 8 respondents provided additional comments including (but not limited to); fertilisers; maintenance of habitat for wildlife; rubbish and debris; disagreement with the bird issue; and weeds.

## Actions

The top five priorities by survey respondents are outlined below:

- Re-vegetate backwater and weedy areas with native species (57 respondents answered 'somewhat agree' to 'Agree')
- Remove declared and targeted weed species (53 respondents answered 'somewhat agree' to 'Agree')
- Re-profile bank edges and revegetate with native submerged and emergent water plants (52 respondents answered 'somewhat agree' to 'Agree')
- Stabilise eroded areas (rock or other) (51 respondents answered 'somewhat agree' to 'Agree')
- Improve drainage structures (overflows, weirs) (48 respondents answered 'somewhat agree' to 'Agree')

Comments and themes highlighted priorities for (but not limited to); wildlife management, preservation and protection; waterbody preservation, maintenance and management; collection and control measures of rubbish and debris; employment and volunteer programs (to help with implementation); and involvement of local indigenous people (Butchulla).

## Lowlands Lagoons (Anembo Lakes)

### Issues

The survey responses highlighted that most respondents were in agreement with issues associated with Lowlands Lagoons (Anembo Lakes). 25 respondents provided additional comments including (but not limited to); wildlife management, preservation and protection; waterbody preservation, maintenance and management; preservation and maintenance of habitat/ natural green spaces; and collection and control measures of rubbish and debris.

### Actions

The top five priorities by survey respondents are outlined below:

- Re-establish emergent and submerged native water plants throughout the waterbodies to manage nutrient content (80 respondents answered 'Agree' to 'Somewhat Agree')
- Establish vegetation buffers, especially along steep mown edges (75 respondents answered 'Agree' to 'Somewhat Agree')
- Removal of broad leaf pepper tree and Singapore daisy; (62 respondents answered 'Agree' to 'Somewhat Agree')
- Staged removal of Mexican waterlily; (61 respondents answered 'Agree' to 'Somewhat Agree')
- Re-profile eroded batters and stabilise edges; (52 respondents answered 'Agree' to 'Somewhat Agree')
- Discourage water bird and turtle feeding; (52 respondents answered 'Agree' to 'Somewhat Agree')

Comments and themes highlighted priorities for (but not limited to); waterbody preservation, maintenance and management; preservation and maintenance of habitat/ natural green spaces; wildlife management, preservation and protection;



Respondents also raised concerns about proposed actions including being against the removal of islands and against filling in the Anembo Drive Inlet. There was also comments for and against associated with bird management.

## 5 ENGAGEMENT CONCLUSIONS

There are a number of key overarching messages throughout the engagement:

- Maintenance and service levels of the waterbody areas in general
- Protection and Preservation of the water bodies and associated green spaces – as well as the wildlife that inhabit the water body areas.
- The community's high level of importance and value related to the waterbodies
- Key priority actions involve (but not limited to): creating wetlands; stabilising bank erosion; managing exotic fauna and flora (i.e weeds and pests); collection and control measures of rubbish and debris; and revegetation.

## 6 FUTURE STEPS

The Implementation Phase for the Strategy and Waterbody Management Plans includes: prioritising the recommended actions, preparing detailed designs and detailed cost estimates for consideration by Council for inclusion in 2021/22 and future budgets.

## 7 4111845 APPENDICES

### 7.1 SURVEY (copy)





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## Draft Fraser Coast Waterbody Management Framework

### Have Your Say!

The **Draft Fraser Coast Waterbody Management Framework** has been developed in order to strategically manage the 54 urban (constructed/artificial) waterbodies across the region (covering 120 hectares and 45 kilometres of shoreline). In conjunction with the Framework, **two (2) of the highest priority** large waterbody systems were selected for the development of **Draft Waterbody Management Plans** (Ululah Lagoons, Maryborough and Lowlands Lagoons (Anembo Lakes), Torquay). The Framework and Plans will help Council to develop a Strategy for the management of our urban waterbodies.

#### The Problem

Waterbodies provide a range of social, environmental and economic values and/functions such as: aesthetics, amenity, park landscape, ecological habitat and flood management. They are also under considerable pressure due to urban runoff with some in a degraded condition, or are at risk of deteriorating, with declining water quality and aesthetic values, fish kills, algal blooms, failure of hydraulic structures and infestations of noxious weeds.

#### The Task

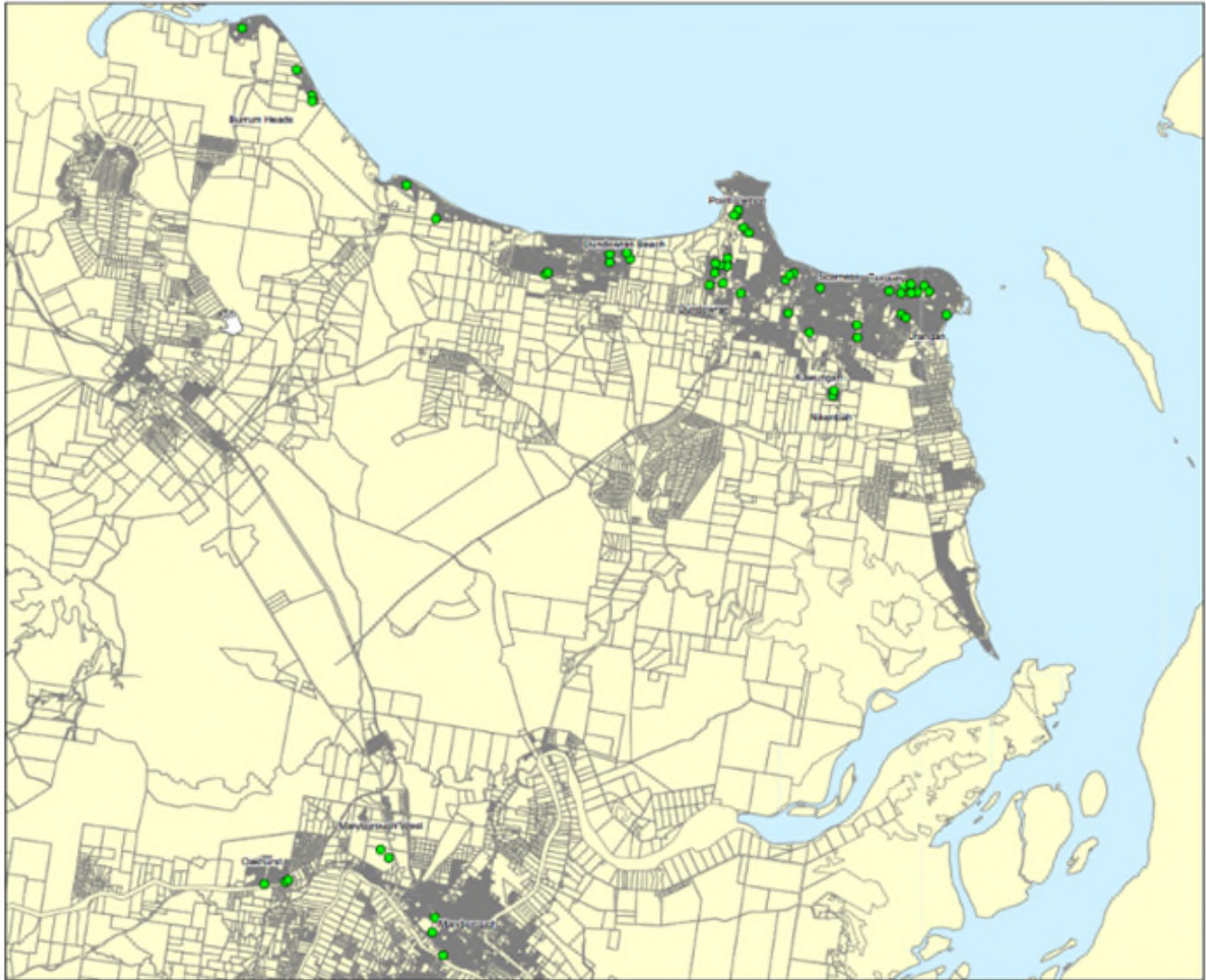
Council appreciates your time in taking part in this survey and providing your feedback. The management of this large asset base is very challenging, so we want to know what's important to you to help inform how Council manages these numerous assets which provide a range of values to the community.

#### Survey Prize!

If you would like to go into the draw to win a **Samsung, 10.1", 32GB Tablet**, please enter your contact details at the end of the survey, when prompted. ([Terms and Conditions](#) located under the **Document Library** heading on the Project page.)



## Fraser Coast Waterbody Locations



Next



\* 1. How often have you visited or been to a waterbody in the last 12 months? (Please select the most appropriate option) 

- Daily
- 2-3 times a Week
- Weekly
- Fortnightly
- Monthly
- 6 Monthly
- Not at all
- Other (please specify)

\* 2. What was the purpose of your visit? (Please select all applicable options) 

- walking or jogging
- walking dog/s
- wildlife viewing/bird watching
- playing/ spending time with my children/family
- Other (please specify)

\* 3. How close do you live to the nearest waterbody? 

- property directly adjoins or faces a waterbody
- within walking distance
- within a short driving distance (less than 5km)
- 5km or more
- I am a visitor to the region

Prev

Next




\* 4. The following areas of concern are common issues associated with urban waterbodies.

To what extent are the following areas of concern to you? 

	No concern	Limited concern	Neutral/ No opinion	Concerned	Very concerned
Risk of injury or drowning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Health risks (pollution or pathogens)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Drainage and flooding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sediment and organic matter build up	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Odour	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Algal or blue green algae blooms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
High turbidity (i.e murky water)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Aquatic weeds	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Exotic fish species	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Terrestrial weeds (on land)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Erosion of bank edges	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Water bird populations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fish kills (including from low dissolved oxygen, excessive depth)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Are there any areas of concern to you that were not listed above? (please specify)



5. Which of the following actions do you believe are important or not important in addressing the above areas of concern? 

	Not Important	Limited Importance	Neutral/ No opinion	Somewhat Important	Very Important
Modify waterbody edges for safety (edge barriers, vegetation, fencing or profiling bank edges)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reduce depth of waterbody (increase flushing time, improve safety)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Treat upstream stormwater	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Create wetlands	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fill in isolated pockets or stagnant areas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Drain waterbody (removal of sediment and/or weed species)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Manage water bird populations, including reduced waterbird feeding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Establish and maintain submerged water plants within waterbody	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>





Establish and maintain emergent water plants along waterbody margins	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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Stabilise bank erosion including re-profiling and/or repairing areas of bank erosion and revegetating using native species	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
--	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

Manage exotic fish species	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
----------------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

Are there any actions you think are important that weren't listed above? (please specify)

**6. Out of the above actions, which are the top 3 priorities you want to see implemented?** 

	Actions
Priority 1	<input type="text"/>
Priority 2	<input type="text"/>
Priority 3	<input type="text"/>

Other or Comment (please specify)



7. If you would like to comment on either of the **Draft Waterbody Management Plans** for **Ululah Lagoons** or **Lowlands Lagoons (Anembo Lakes)**, please continue the survey.

Yes

No

Where are they located?



Prev

Next



## Draft Waterbody Management Plans (Optional)

\* 8. Would you like to comment on **Ululah Lagoons (Maryborough) Draft Waterbody Management Plan?**

Yes

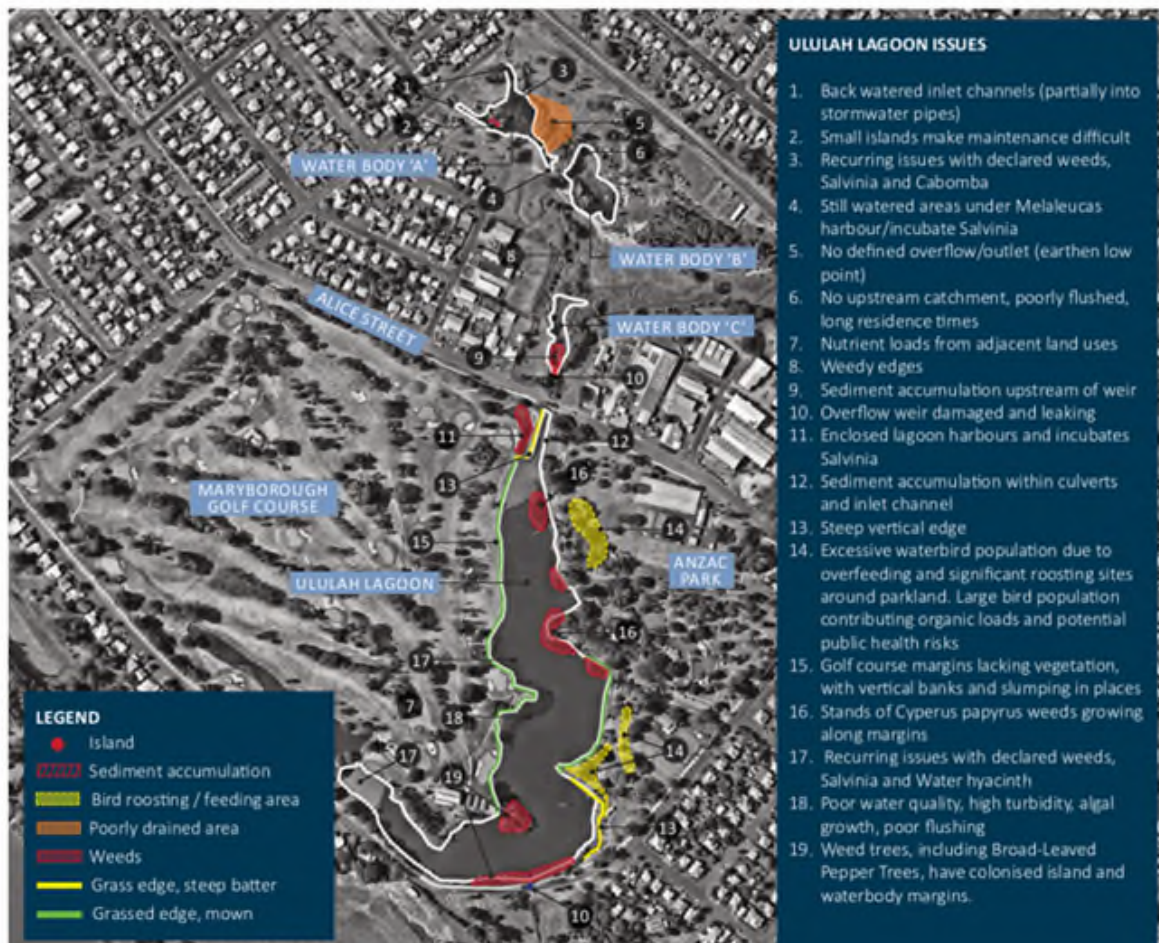
No

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## Draft Waterbody Management Plan - Ululah Lagoons

### The Issues - Ululah Lagoons, Maryborough





9. Issues have been identified through a condition assessment of the Ululah Lagoons system.  
**Please tell us in the comment box below if we have missed anything?**

- a) Backwater/still water areas (submerged pipes, harbour weeds i.e. Salvinia);
- b) Small islands difficult to maintain;
- c) Lack of overflow point for drainage (some locations);
- d) Weedy bank edges (including weed trees);
- e) Sediment accumulation in pipes and channels;
- f) Excessive water bird population contributing to poor water quality and potential public health hazard;
- g) Nutrient runoff into waterbody from fertilisers/adjacent land uses;
- h) Presence of aquatic weeds;
- i) Poor water quality – high turbidity, algal growth, low flushing rate

**The Actions - Ululah Lagoons, Maryborough**





10. What do you think of the potential actions to address these issues? 

	Disagree	Somewhat disagree	Neutral/ No Opinion	Somewhat agree	Agree
Infill backwater areas and plant shallow areas with emergent water plants to improve water quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Remove small islands	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improve drainage structures (overflows, weirs)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Remove declared and targeted weed species	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Re-vegetate backwater and weedy areas with native species	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Educate on and discourage water bird feeding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Establish 1.5-3m vegetated buffer to water edge to improve safety and reduce water quality impacts from birds and runoff	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Re-profile bank edges and revegetate with native submerged and emergent water plants	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stabilise eroded areas (rock or other)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Modify unsafe steep edges to make them safer (fencing or landscaping)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reduce water levels by 100-150mm to enable better management and planting to waterbody margins.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Are there any other actions not mentioned that you would like to suggest?



\* 11. Would you like to comment on **Lowlands Lagoons (Anembo Lakes), Torquay - Draft Waterbody Management Plan?**

Yes

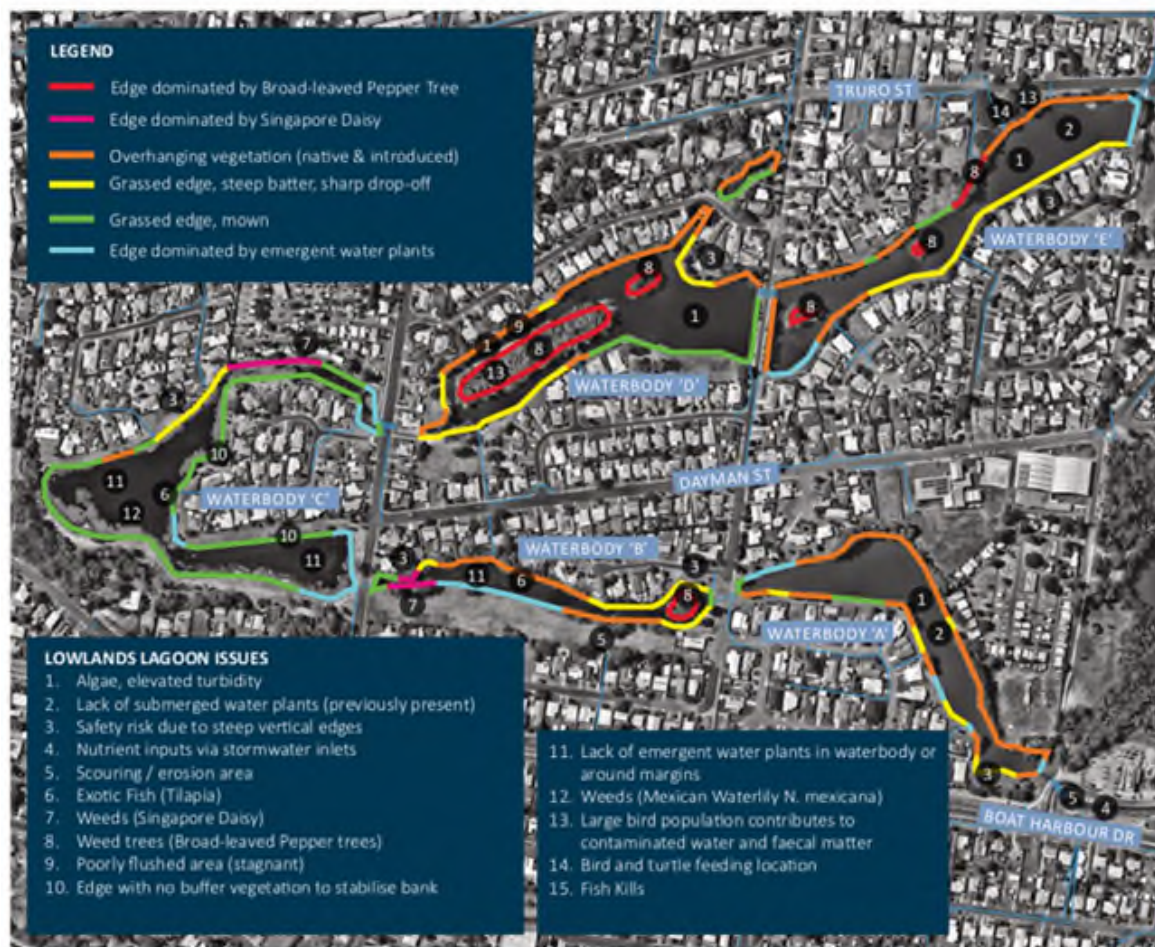
No

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## Draft Waterbody Management Plan - Lowlands Lagoons (Anembo Lakes), Torquay

**The Issues** - Lowlands Lagoons (Anembo Lakes), Torquay





12. Issues have been identified through a condition assessment of the Lowlands Lagoons (Anembo Lakes) system. **Please tell us in the comment box below if we have missed anything?**

- a) Algal blooms and turbidity (murky water);
- b) Lack of submerged water plants;
- c) Safety risk due to steep vertical edges;
- d) Nutrient runoff into waterbody from adjacent land uses/stormwater;
- e) Scour and erosion;
- f) Exotic fish species (Tilapia);
- g) Terrestrial weeds (Singapore daisy, Broad-leaved Pepper trees);
- h) Stagnant, poorly flushed areas;
- i) Lack of waterbody edge buffer vegetation;
- j) Aquatic weed infestations (Mexican waterlily);
- k) Excessive water bird population contributing to poor water quality and potential public health hazard
- l) Bird and turtle feeding
- m) Fish kills

### The Actions - Lowlands Lagoons (Anembo Lakes), Torquay





13. What do you think of the potential actions to address these issues? 

	Disagree	Somewhat disagree	Neutral/ No Opinion	Somewhat agree	Agree
Undertake batter safety risk assessment and implement actions to improve public safety	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Re-profile eroded batters and stabilise edges;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Establish vegetation buffers, especially along steep mown edges;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Establish a bird management plan to reduce waterbird numbers;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discourage water bird and turtle feeding;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Re-establish emergent and submerged native water plants throughout the waterbodies to manage nutrient content;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Removal of broad leaf pepper tree and Singapore daisy;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Staged removal of Mexican waterlily;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Infill Anembo Drive inlet, stabilise channel and revegetate batter;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Remove islands to reduce bird roosting habitat and improve water mixing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Are there any other actions not mentioned that you would like to suggest?






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## All about you

For the purposes of reporting we will collect some brief information about you. No information is collected which is personal or enables identification of individuals.

14. What is your age bracket? 

- Under 18
- 18-64
- 65+

15. What is your current residency status? 


- owner occupancy
- renting
- visitor to the region

16. How long have you been living in your current residency? 


- less than 6 months
- less than 12 months
- less than 5 years
- 5 years to 10 years
- 10 years or greater
- Not applicable



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17. **SURVEY PRIZE!** Would you like to go into the draw to win a **Samsung, 10.1", 32GB Tablet?** [Terms and Conditions](#) are located on our project page - under the **Document Library** heading. 

- YES (please enter your contact details below)
- NO

18. Thank you for taking the time to fill out this survey. If you would like to receive updates, **please enter your contact details here.** 

<b>Name</b>	<input type="text"/>
<b>Email Address (preferred)</b>	<input type="text"/>
<b>Address (optional)</b>	<input type="text"/>
Address Line 2	<input type="text"/>
Town/Locality	<input type="text"/>
State	<input type="text"/>
Postal Code	<input type="text"/>
<b>Phone Number (Survey Entrants)</b>	<input type="text"/>



## 7.2 FACT SHEET

#3930665

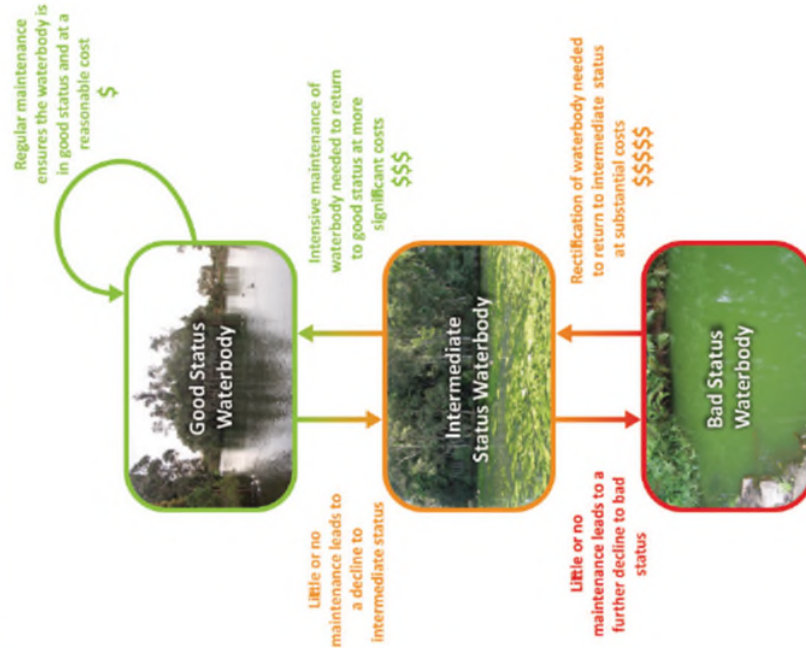
01

# FRASER COAST WATERBODY MANAGEMENT FRAMEWORK



### Goal

Council's goal for Fraser Coast waterbodies is to protect and enhance their values and functions, reduce risks associated with open water, and to optimise the effort involved in the sustainable management of these assets.



Proactive waterbody maintenance compared with reactive waterbody maintenance (Source: Waterbody Management Guideline, Water By Design, 2013)

### INTRODUCTION

#### What is a waterbody?

Fraser Coast Regional Council (FCRC) manages urban (constructed/artificial) waterbodies, which provide a range of social, environmental and economic values and/functions such as; aesthetics, amenity, park landscape, ecological habitat, flood management and supporting surrounding property values.

Urban waterbodies are also under considerable pressure due to urban runoff. Many waterbodies are in a degraded condition, or are at risk of deteriorating, with declining water quality and aesthetic values, fish kills, algal blooms, failure of hydraulic structures and infestations of noxious weeds.

#### Project Background

FCRC has developed a Draft Fraser Coast Waterbody Management Framework in order to strategically manage the 54 waterbodies across the region covering 120 hectares and 45 kilometres of shoreline. In conjunction with the Framework, two of the highest priority large waterbody systems were selected for the development of Draft Waterbody Management Plans (Ululah Lagoon, Maryborough and Lowlands Lagoon (Anembo Lake, Torquay)). The Framework and Plans will help Council to develop a draft Strategy for the management of our urban waterbodies.



Don't miss your opportunity to have your say on the future of our urban waterbodies, visit [www.frasercoast.qld.gov.au](http://www.frasercoast.qld.gov.au) for more information and complete the online survey which closes on **9 December 2019**.



### What is a 'healthy' waterbody?

A 'healthy' waterbody has good water clarity and supports a range of aquatic habitats including open water, emergent and submerged native water plants. Generally healthy systems occur where the following conditions occur:

- Typically <1m-2m (max). This allows native plants to establish which play an important role in removing nutrients and providing habitat for native fauna. Shallow systems tend to be more resilient and stable compared with deep systems, which reduces the risk of fish kills.
- Has a relatively large catchment (with ideally limited urban runoff). This ensures that the water within the system does not become stagnant and allow nutrients to build up. It also helps ensure water levels stay 'topped-up' with relatively clean water.



### What is an 'unhealthy' waterbody?

An unhealthy waterbody typically has poor water quality resulting from high nutrient levels. Common symptoms of an unhealthy waterbody include:

- Lack of native water plants (emergent and submerged)
- May have floating scums or appear pea-soup green from blue-green (cyanobacterial) blooms or filamentous algae.
- The surface of the waterbody can become overgrown with aquatic weeds (such as floating plants like Salvinia). These plants can grow rapidly utilising excess nutrients within the water.
- Fish kills are more prevalent in unhealthy systems due to low oxygen levels. This can occur when the waterbody 'turns-over' releasing low-oxygen water trapped in the deeper areas.



### Why do urban waterbodies go from healthy to unhealthy over time?

Waterbody condition can decline and there are a range of reasons why the appearance of your local waterbody may change over time. Generally the key reason is the gradual accumulation of nutrients that can result in a transition from 'healthy' to 'unhealthy' waterbodies. Nutrients can build up due to urban stormwater inflows that contain organic matter and pollutants. These nutrients fuel algae and bacteria growth.



### What are submerged, emergent and floating water plants?

- **Submerged** – plants that grow completely underwater
- **Emergent** – plants that grow partly below and partly above the water surface, usually along the water's edge
- **Floating** – plants that grow entirely on the water surface



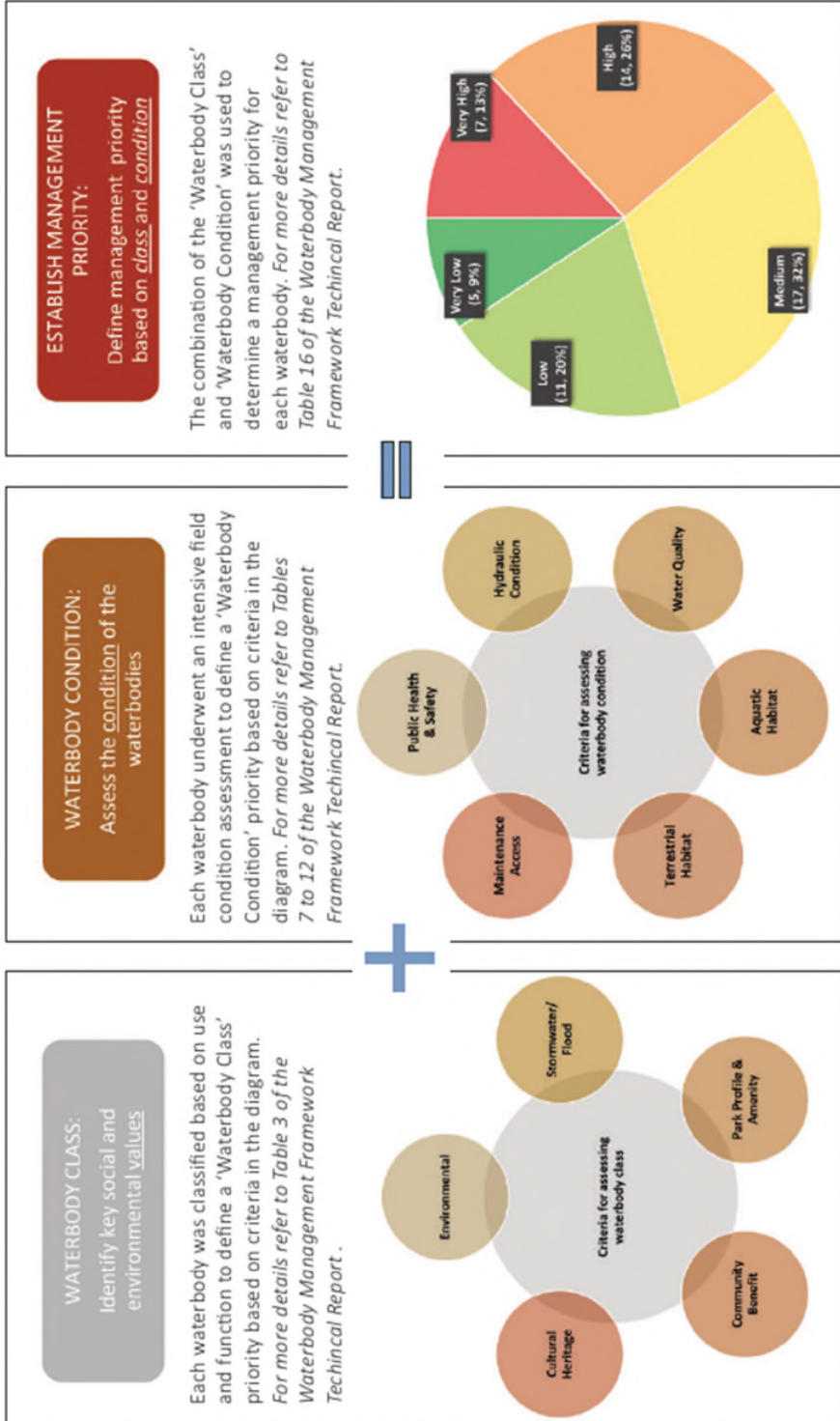
# APPROACH TO MANAGING WATERBODIES



03

## Approach to developing the Waterbody Management Framework

In recognition of the values and potentially significant management costs associated with urban waterbodies, Council is aiming to proactively manage its urban waterbody assets. Due to limited resources, Council's efforts need to be prioritised. As such, Council is developing a management framework that identifies the values and condition of its urban waterbodies in order to prioritise and efficiently manage the systems as shown below.



## Individual Waterbody Management Plans

Council has started to develop individual waterbody management plans for some of its high priority waterbodies. The draft Plans (Lowlands Lagoons and Ululah Lagoons) are examples of the potential management actions that could be rolled out to address similar issues for other urban waterbodies.



# WATERBODY PRIORITY ACROSS THE FRASER COAST



04

### Common Waterbody Issues:

- Regardless of priority, some common issues observed in waterbodies include:
- Risk of injury or drowning;
  - Health risks (pollution or pathogens);
  - Drainage and Flooding;
  - Sediment and organic matter build up;
  - Odour;
  - Algal or blue green algae blooms;
  - High turbidity (i.e. murky water);
  - Aquatic weeds;
  - Exotic fish species;
  - Terrestrial weeds (on land);
  - Erosion of bank edges;
  - Water bird populations;
  - Fish kills (including from low dissolved oxygen, excessive depth)

### Common Management Responses can include:

- Modify waterbody edges for safety (edge barriers, vegetation, fencing or profiling bank edges)
- Reduce depth of waterbody (increase flushing time, improve safety)
- Treat upstream stormwater
- Create wetlands
- Fill in isolated pockets/stagnant areas
- Drain waterbody (removal of sediment and/or weed species)
- Manage water birds, including reduced waterbird feeding
- Establish and maintain submerged and emergent water plants within waterbody and along margins
- Stabilise bank erosion including re-profiling and/or repairing areas and revegetate with native species
- Manage exotic fish species

### Map of Waterbody Management Priority

The following maps illustrate the location and management priority of council managed waterbodies on the Fraser Coast.





# LOWLANDS LAGOON WATERBODY MANAGEMENT ISSUES



05





# LOWLANDS LAGOON POTENTIAL MANAGEMENT ACTIONS



06



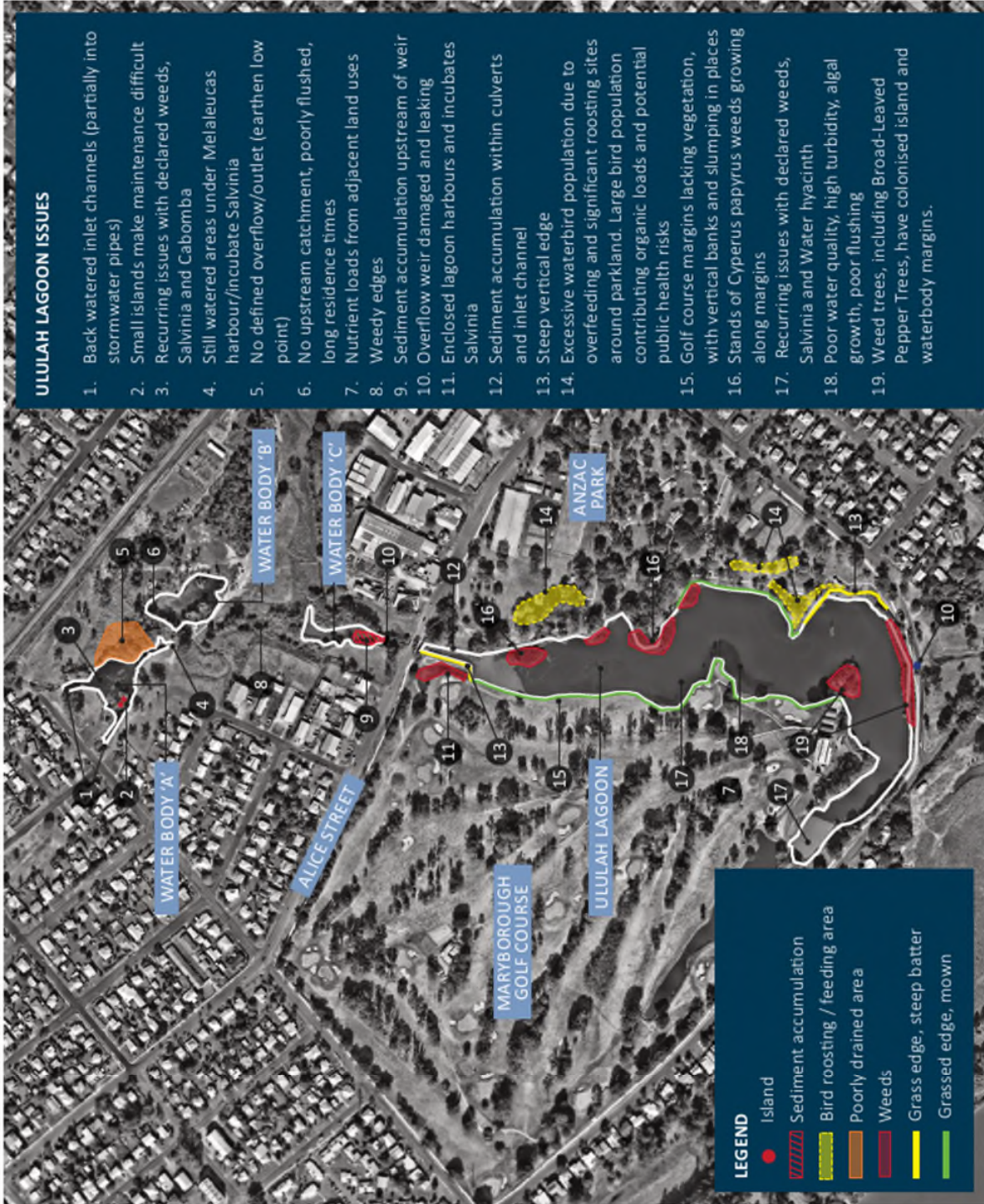




# ULULAH LAGOON WATERBODY MANAGEMENT ISSUES



07

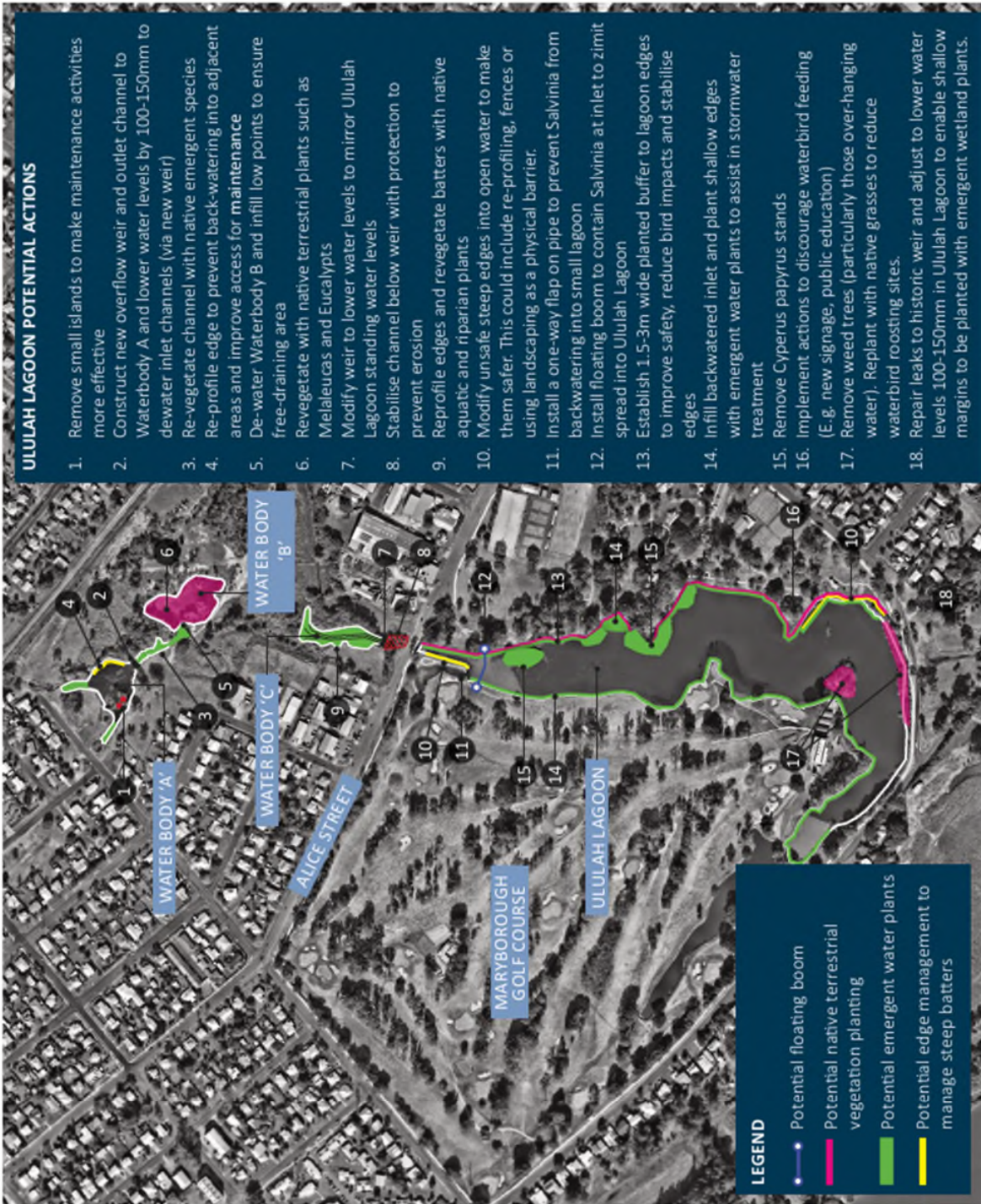




# ULULAH LAGOON POTENTIAL MANAGEMENT ACTIONS



08





## 7.3 ENGAGEMENT HUB (PROJECT WEBPAGE)

Link: <https://frasercoast.engagementhub.com.au/draft-fraser-coast-waterbody-management-framework>



### Draft Fraser Coast Waterbody Management Framework

#### Project Overview



#### Overview

Fraser Coast Regional Council (FCRC) manages fifty-four (54) urban (constructed/artificial) waterbodies, which provide a range of social, environmental and economic values and/functions such as: aesthetics, amenity, park landscape, ecological habitat and flood management.

Urban waterbodies are under considerable pressure due to urban runoff and other factors. Many waterbodies are

in a degraded condition, or are at risk of deteriorating, with declining water quality and aesthetic values, fish kills, algal blooms, failure of hydraulic structures and infestations of noxious weeds.

The **Draft Fraser Coast Waterbody Management Framework** has been developed in order to strategically manage the 54 waterbodies across the region (with a combined surface area of 120 hectares and 45 kilometres of shoreline). In conjunction with the Framework, two (2) of the highest priority and largest waterbody systems were selected for the development of **Draft Waterbody Management Plans** (Ululah Lagoons, Maryborough and Lowlands Lagoons (Anembo Lakes), Torquay). These Waterbody Management Plans are considered pilot projects and may be progressively developed for other high priority waterbodies in the future. So far, key issues and potential actions have been identified; however, community feedback is being sought before progressing the detailed management plans.

#### Factsheet

A brief overview of the **Draft Strategy and Draft Waterbody Management Plans** have been summarised in our **factsheet**, however further information can also be found in the detailed **technical reports** available in the **Document Library**.

#### HAVE YOUR SAY! (CLOSED 11:59pm Monday 9/12/19)

Council invited community feedback in regards to the **Draft Waterbody Management Framework**, by conducting a variety of activities, including survey, submissions and stakeholder onsite sessions. The community also had the opportunity to provide more specific feedback about the **Draft Waterbody Management Plans** for **Ululah or Lowlands Lagoons**.

#### SURVEY CLOSED

Latest News

Timeline

#### What do I need to know?

Waterbodies



Community Engagement



The Framework and Plans



View all

#### What's On

No upcoming event found.

#### Document Library

Draft Framework and Plans



Factsheet



Survey Terms and Conditions



Timeline



#### For more information

##### Contact Information

If you would like to contact the Project Team please email: [enquiry@frasercoast.qld.gov.au](mailto:enquiry@frasercoast.qld.gov.au) or to speak to a Project Team member by phone call: 4190 5742.

View



## 7.4 SOCIAL MEDIA

Council posted two Facebook posts during the engagement phase (22 November and 29 November 2019). The posts reached 11,467 people and 897 people engaged with the post (collectively).


**Fraser Coast Regional Council**  
November 22, 2019 · 🌐

Do you visit or live near the Ululah Lagoon or Anembo Lakes?  
We want to hear from you.

Free walking tours and info sessions will be held on Saturday 30 November to discuss issues and outline how we manage these waterbodies.

See here for details - <http://bit.ly/draft-waterbody-management>

🗳️ If you would like to provide feedback on our draft plans take the survey here:  
<http://bit.ly/waterbody-survey>



👍👍 23


14 Comments 8 Shares

**Fraser Coast Regional Council**  
November 29, 2019 · 🌐

📌 Council will be hosting info sessions and walking tours of Ululah Lagoon and Anembo Lakes tomorrow (Saturday 30 November) to discuss issues and outline how we manage these waterbodies.

There is no need to register for the drop-in sessions or walking tours.

- 📍 Ululah Lagoon drop-in session will be located near the Ululah Carpark (Cheapside Street entrance) from 8am - 11am, with guided walking tours at 9am and 10am.
- 📍 Anembo Lakes drop-in session will be located on Ann Street, between Dayman Street and Boat Harbour Drive from 1pm - 4pm, with guided walking tours at 2pm and 3pm.



👍 25

2 Comments 10 Shares



## 7.5 MEDIA RELEASE



## MEDIA RELEASE

21 November 2019

### Have your say on Fraser Coast's urban waterbodies

Free walking tours and drop-in information sessions will be held to outline how the Fraser Coast Regional Council manages its urban waterbodies.

The walks and sessions are part of a study to develop the Draft Fraser Coast Waterbody Management Framework to strategically manage the 54 waterbodies across the region.

"The initial focus is to develop Draft Waterbody Management Plans for Ulujuh Lagoons, in Maryborough and the Lowlands Lagoons (Anembo Lakes) in Hervey Bay," Cr Stuart Taylor said.

"These are two of the largest systems under Council management. If the management plans are successful they will become the models to develop plans for other waterbodies.

"Before we develop detailed management plans, we would like community feedback on the draft plans."

Fraser Coast Regional Council manages 54 urban (constructed) waterbodies with a combined surface area of 120 hectares and 45 kilometres of shoreline.

"The waterbodies provide a range of social, environmental and economic functions from parks and open space, habitat for a range of native animals and form a part of the region's flood management," Cr Taylor said.

"However, they are under considerable pressure due to urban runoff and other factors. Many are degraded or are at risk of deteriorating further, which could lead to declining water quality, algae blooms and noxious weeds."

To find out more about the Draft Fraser Coast Waterbody Management Framework visit <https://frasercoast.engagementhub.com.au/draft-fraser-coast-waterbody-management-framework> to complete the survey go to <https://www.surveymonkey.com/r/FCRCWaterbodyFramework>

Responses to the survey are due in by 9 December.

"Residents can also attend one of two drop-in information sessions or go on a short guided walking tour of the Ulujuh Lagoon or Anembo Lakes," Cr Taylor said.

"The tours will be offered during the drop-in sessions and conducted by a specialist consultant who will point out and discuss issues and potential actions as well as answer any questions."

There is no need to register for the drop-in sessions or walking tours on **Saturday, November 30:**

#### Ulujuh Lagoons - Maryborough

- Drop-in session will be located near the Ulujuh carpark (Cheapside Street entrance) from 8am to 11am, with guided walking tours at 9 am and 10 am.

#### Lowlands Lagoons (Anembo Lakes) - Torquay

- Drop-in Session will be located on Ann Street, between Dayman Street and Boat Harbour Drive, from 1pm to 4pm, with guided walking tours at 2pm and 3pm.

ENDS



## 7.6 LETTER FOR LETTER BOX DROP



19 November 2019

PO Box 1943  
Hervey Bay Qld 4655

To the Property Owner

T 1300 79 49 29  
F (07) 4197 4455  
E [enquiry@frasercoast.qld.gov.au](mailto:enquiry@frasercoast.qld.gov.au)  
[www.frasercoast.qld.gov.au](http://www.frasercoast.qld.gov.au)

Dear Sir/Madam

**RE: Draft Fraser Coast Waterbody Management Framework and Draft Waterbody Management Plans - Ululah Lagoons, Maryborough and Lowlands Lagoons (Anembo Lakes), Torquay**

You have been identified as a key stakeholder in the development of Council's draft Waterbody Management Framework, because you either live near or own property close to one of fifty-four (54) constructed or artificial waterbodies that Council manages in urban areas across the region.

These waterbodies are recognised as providing a range of social, environmental and economic values and functions, but are under considerable pressure due to urban runoff and other factors.

The Fraser Coast Waterbody Management Framework has been developed in order to strategically manage the 54 waterbodies, which have a combined surface area of 120 hectares and 45 kilometres of shoreline.

In addition to the draft Framework, individual Waterbody Management Plans are being prepared for two (2) of the highest priority and largest waterbody systems, being Ululah Lagoons, Maryborough and Lowlands Lagoons (Anembo Lakes), Torquay. These Waterbody Management Plans are considered pilot projects and may be progressively developed for other high priority waterbodies in the future. So far, key issues and potential actions have been identified; however, community feedback is being sought before progressing the detailed management plans.

The attached factsheets provide an overview of the work undertaken to date; however, further information about the framework and management plans are available on Council's website, including technical reports prepared by Council's environmental specialist consultants.

### 'Have Your Say'

You are invited to 'Have Your Say' by completing an on-line survey through Council's website at <https://www.frasercoast.qld.gov.au/have-your-say> by 9 December 2019.

You are also welcome to attend one of two information drop-in sessions. Short guided walking tours of a nearby waterbody will be offered during the drop-in sessions, where one of Council's specialist consultants will point out and discuss issues, potential actions and answer questions.



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There is no need to register for the drop-in sessions or walking tours, which are scheduled to occur on **Saturday, 30 November 2019**, at the following locations and times:

**Ululah Lagoons - Maryborough**

Drop-in Session will be located near the Ululah Carpark (Cheapside Street Entrance) from 8am - 11am, with guided walking tours commencing at 9.00 am and 10.00 am.

**Lowlands Lagoons (Anembo Lakes) - Torquay**

Drop-in Session will be located on Ann Street, between Dayman Street and Boat Harbour Drive from 1pm – 4pm, with guided walking tours commencing at 2.00 pm and 3.00pm.

Council welcomes your participation and feedback relating to the Framework and Management Plans. Should you require any further information in relation to this matter, please feel free to contact Council's Coordinator Programming and Communication, Mrs. Toni Souvlis Ph. 4190 5742 or email [enquiry@frasercoast.qld.gov.au](mailto:enquiry@frasercoast.qld.gov.au).

Yours faithfully

Rosalyn Acworth

**EXECUTIVE MANAGER INFRASTRUCTURE PLANNING**

**Contact Officer: Toni Souvlis**  
**Phone: 07 4190 5742**  
**Docs: 3928857**



## 7.7 OPEN HOUSE ADVERTISING SIGNAGE AND LOCATIONS



### Ululah Lagoons Draft Waterbody Management Plan Drop-In Session & Guided Tour

Council will be conducting a drop-in information session and guided tours regarding its draft Waterbody Management Framework and more detailed draft Waterbody Management Plan for Ululah Lagoons.

**When:** Saturday, 30 November 2019

**Time:** Drop-in Session: 8.00 am - 11.00 am  
Guided Tours commence 9.00 am & 10.00 am

**Where:** Ululah Carpark (Cheapside St Entrance)

If you would like more information or to 'Have Your Say', please visit Council's website before 9 December 2019.

INFRASTRUCTURE  
SERVICES

PHONE: 1300 79 49 29  
WEB: [frasercoast.qld.gov.au](http://frasercoast.qld.gov.au)  
EMAIL: [enquiry@frasercoast.qld.gov.au](mailto:enquiry@frasercoast.qld.gov.au)





## Lowlands Lagoons (Anembo Lakes) Draft Waterbody Management Plan Drop-In Session & Guided Tour

Council will be conducting a drop-in information session and guided tours regarding its draft Waterbody Management Framework and more detailed draft Waterbody Management Plan for Lowlands Lagoons.

**When:** Saturday, 30 November 2019

**Time:** Drop-in Session: 1.00 pm - 4.00 pm

Guided Tours commence 2.00 pm & 3.00 pm

**Where:** Ann Street (between Dayman St & Boat Harbour Dr)

If you would like more information or to 'Have Your Say', please visit Council's website before 9 December 2019.

INFRASTRUCTURE  
SERVICES

PHONE: 1300 79 49 29

WEB: [frasercoast.qld.gov.au](http://frasercoast.qld.gov.au)

EMAIL: [enquiry@frasercoast.qld.gov.au](mailto:enquiry@frasercoast.qld.gov.au)



Location of corflute signage @ Ululah Lagoons (north of Alice St)



Location of corflute signage @ Ululah Lagoons (south of Alice St)





Location of corflute signage @ Lowlands Lagoons

