

LAKE AINSWORTH COASTAL MANAGEMENT PROGRAM

Community Drop-in Session #1
20th November 2018, Lennox
Head SLSC



AIMS OF COMMUNITY DROP-IN SESSION

- **Introduce the project**
- **Provide an overview of methodology timing, and progress**
- **Get input from the community on:**
 - **Values and uses of Lake Ainsworth**
 - **Current issues/concerns**
 - **Ideas for management**
- **Encourage input via the Community Survey now open**

PROJECT BACKGROUND AND AIMS

- *NSW Coastal Management Act 2016* and the *NSW Coastal Management Manual*.
- 5-stage process in *Coastal Management Manual*.
- This CMP will supersede the current *Lake Ainsworth Management Plan (2002)*.
- The goal: provide the long-term strategy for Lake Ainsworth.



Coastal Management Act 2016 No 20

Current version for 1 July 2018 to date (accessed 16 November 2018 at 10:51)
[Status information](#)



Status information

Currency of version
Current version for 1 July 2018 to date (accessed 16 November 2018 at 10:51)
Legislation on this site is usually updated within 3 working days after a change to the legislation.

Provisions in force
The provisions displayed in this version of the legislation have all commenced. See [Historical Notes](#)

Does not include amendments by:
Transport Administration Amendment (Transport Entities) Act 2017 No 12 (not commenced)

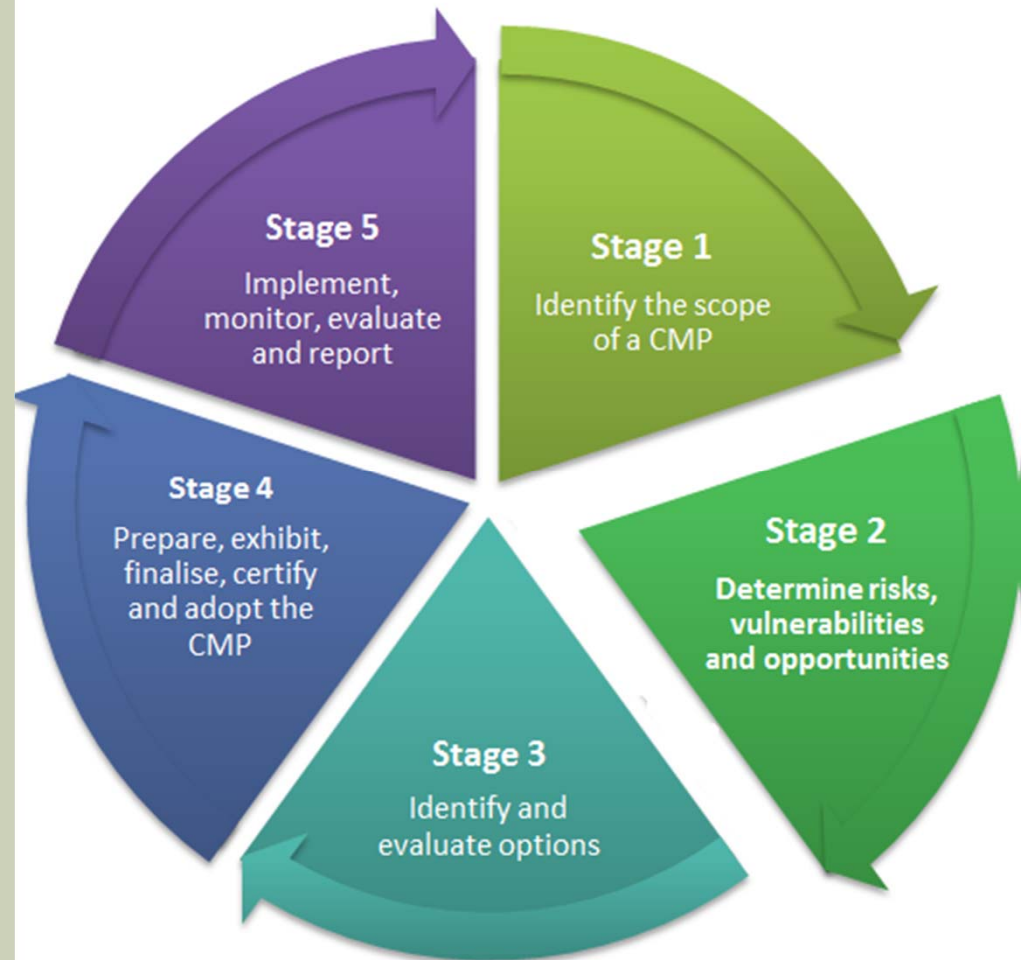
Responsible Minister
Minister for the Environment

Authorisation
This version of the legislation is compiled and maintained in a database of legislation by the Parliamentary Counsel's Office and published on the NSW legislation website, and is certified as the form of that legislation that is correct under section 45C of the *Interpretation Act 1987*.

File last modified 1 July 2018.

CMP STAGES AND PROGRESS

- **Stage 1** – Scoping Study (complete)
- **Stage 2** – Detailed Studies & Stakeholder Engagement (current)
- **Stage 3** – Development of Management Actions
- **Stage 4** – Preparation of CMP Documentation and Public Exhibition

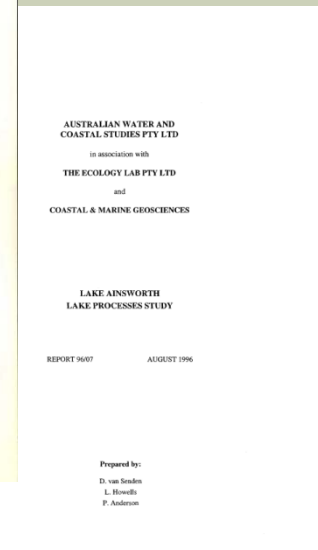
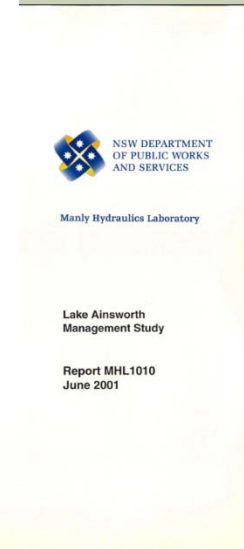
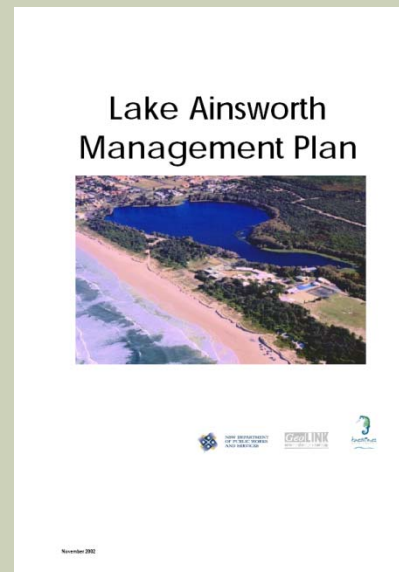


HISTORY: 2002 MANAGEMENT PLAN AND RELATED STUDIES

- 2002 Lake Ainsworth Management Plan
- 2001 Management Study
- 1996 Processes Study

Related documents:

- 2016 Coastal Zone Management Plan
- 2005 Crown Reserve Master Plan
- 2017 Water Quality Snapshot
- 2007 Vegetation Management Plan



STAGE 1 SCOPING STUDY

- Complete and available for download at:
www.hydrosphere.com.au/lakeainsworth
- Background information
- Identifies current issues and opportunities
- Existing management arrangements
- Risk assessment
- Knowledge gaps
- Scope of detailed studies required



Lake Ainsworth Coastal Management Program

Stage 1 – Scoping Study



18-009
August 2018

KEY ISSUES IDENTIFIED

■ Coastal Hazards

- Climate Change, ocean shoreline recession breakthrough and saline intrusion
- Wave run-up and dune overtopping
- Foreshore erosion of the Lake
- Localised freshwater flooding

■ Water Quality

- Continued blue-green algae blooms
- Nutrient enrichment
- Enterococci (risk to human health)
- Altered lake hydrology and water balance
- Spills and contamination
- Stormwater impact on Lake Ainsworth



1999 flooding (Source: BSC)



2008 BGA bloom (Source: BSC)

KEY ISSUES IDENTIFIED

- **Flora and Fauna**
 - Exotic aquatic fauna
 - Aquatic weeds or unnatural growth
 - Terrestrial weeds
 - Riparian vegetation
- **Public Uses**
 - Foreshore access and public safety
 - Cars and public safety
 - Car parking adequacy for current and future demand
 - Amenity and enjoyment
 - Aesthetic quality
 - Public Education
- **Land management responsibility**



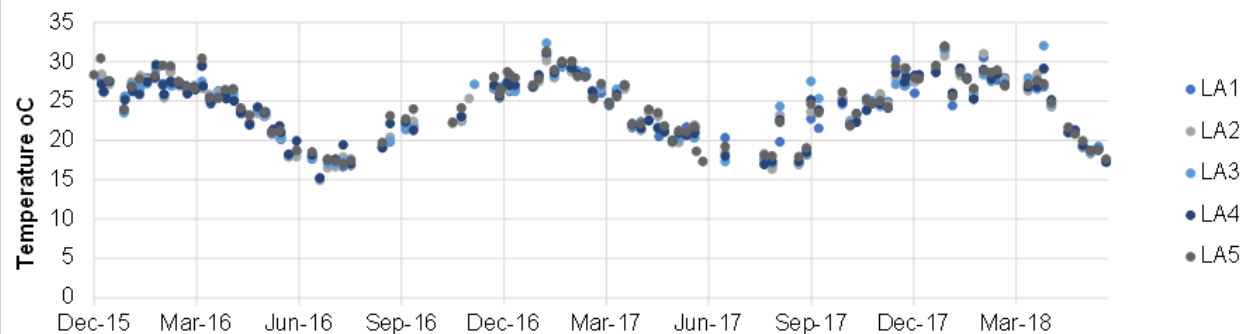
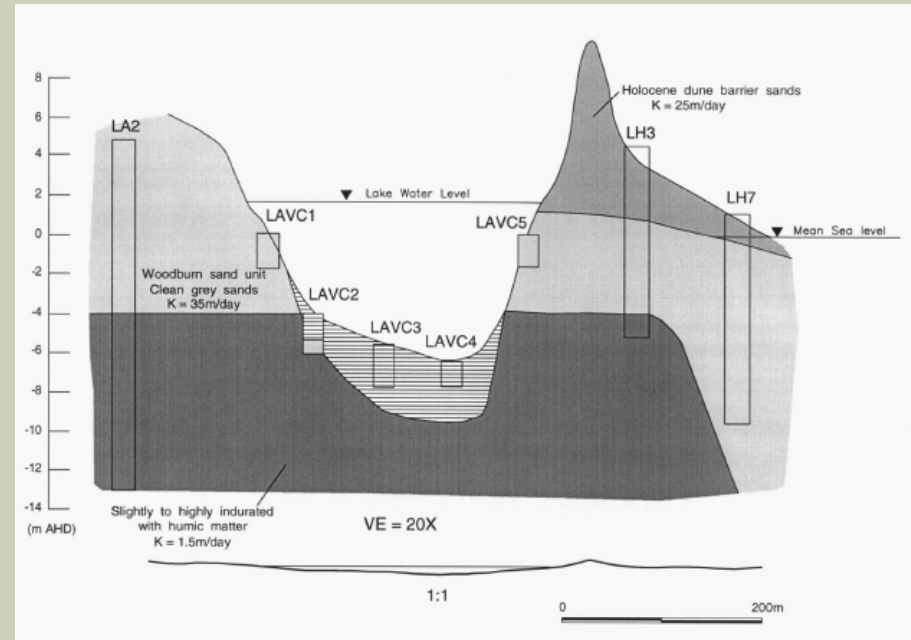
Cane Toad (Source: sbs.com.au)



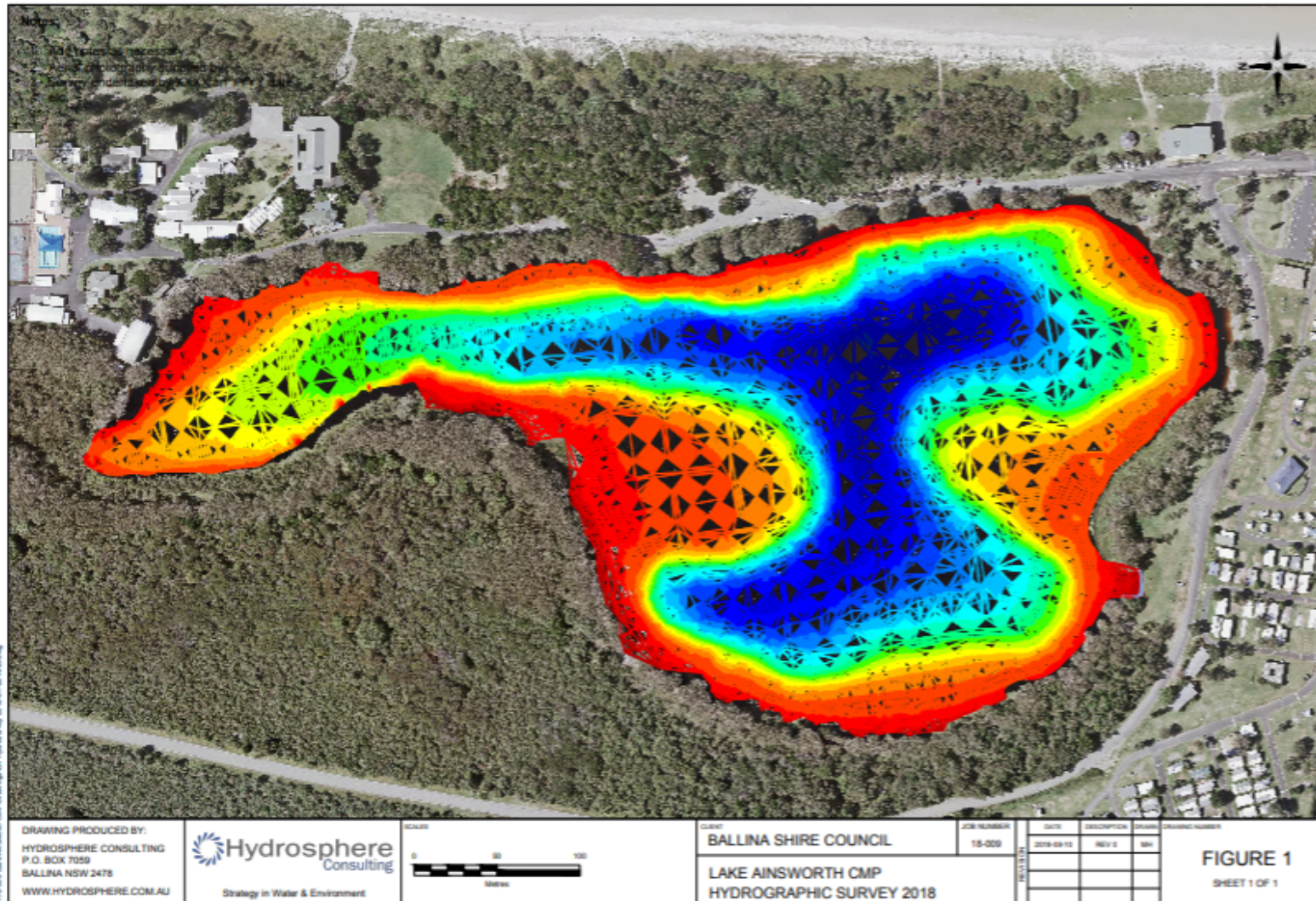
Foreshore erosion

STAGE 2 DETAILED STUDIES

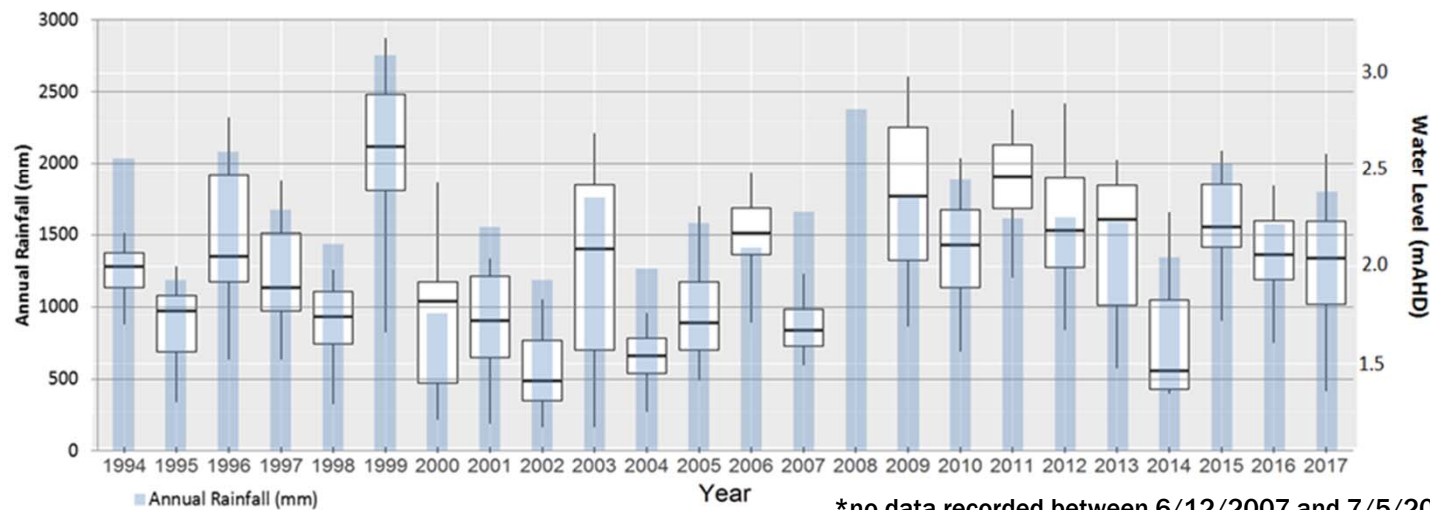
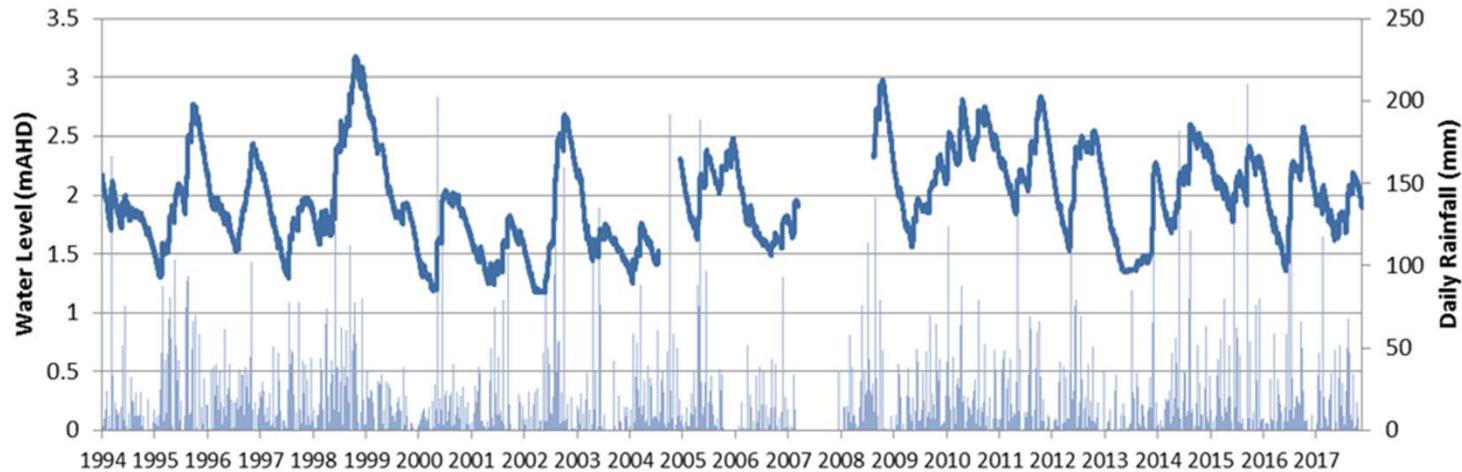
- Nutrient and blue green algae processes assessment
- Hydrology/Groundwater Assessment
- Foreshore Erosion Risk Assessment
- Riparian Vegetation Assessment
- Aquatic Fauna Assessment
- Aquatic Weed Management



HYDROGRAPHIC SURVEY

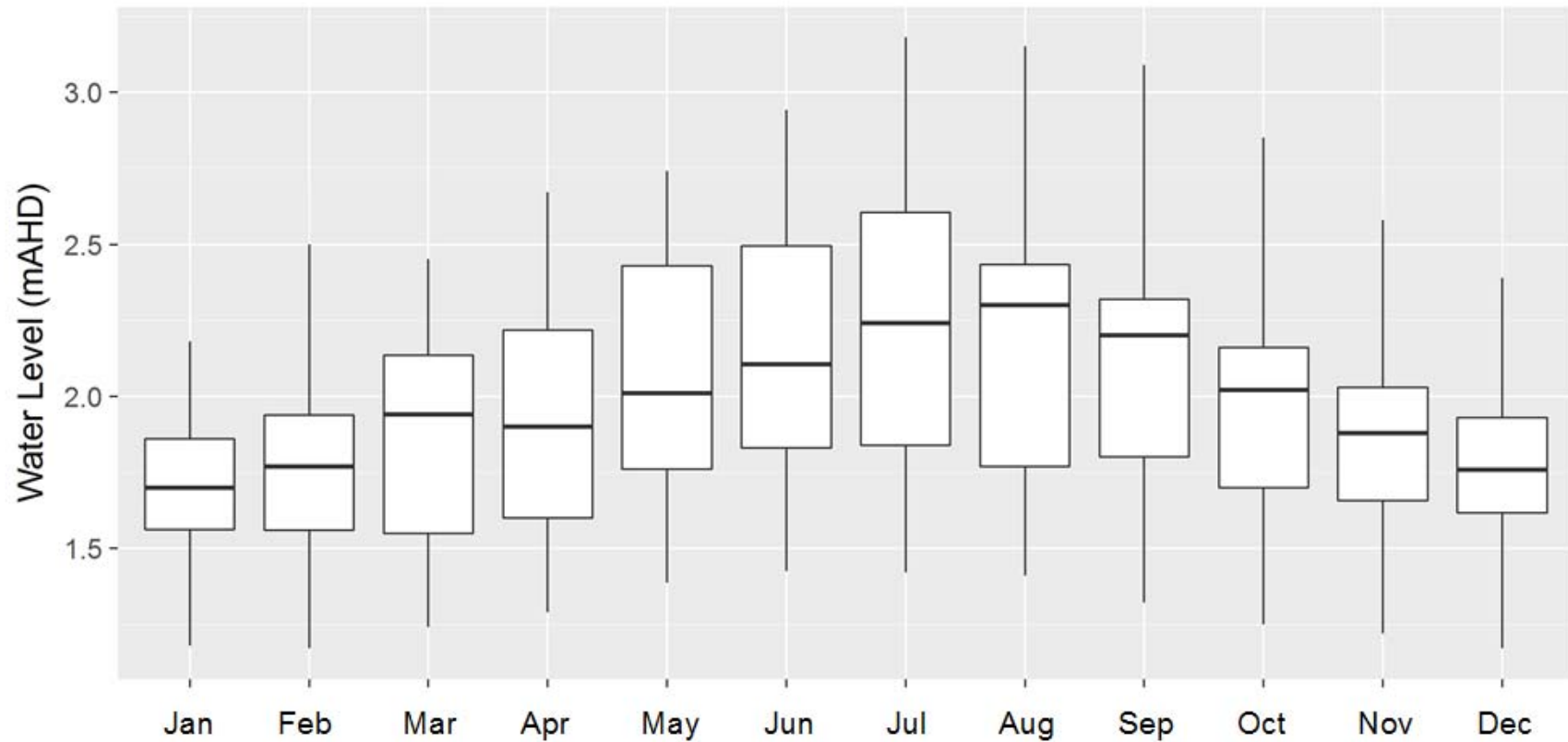


DATA LOGGER WATER LEVEL 1994-2017



*no data recorded between 6/12/2007 and 7/5/2009.

LAKE WATER LEVEL INTER-ANNUAL VARIATION (ALL YEARS 1994-2018)

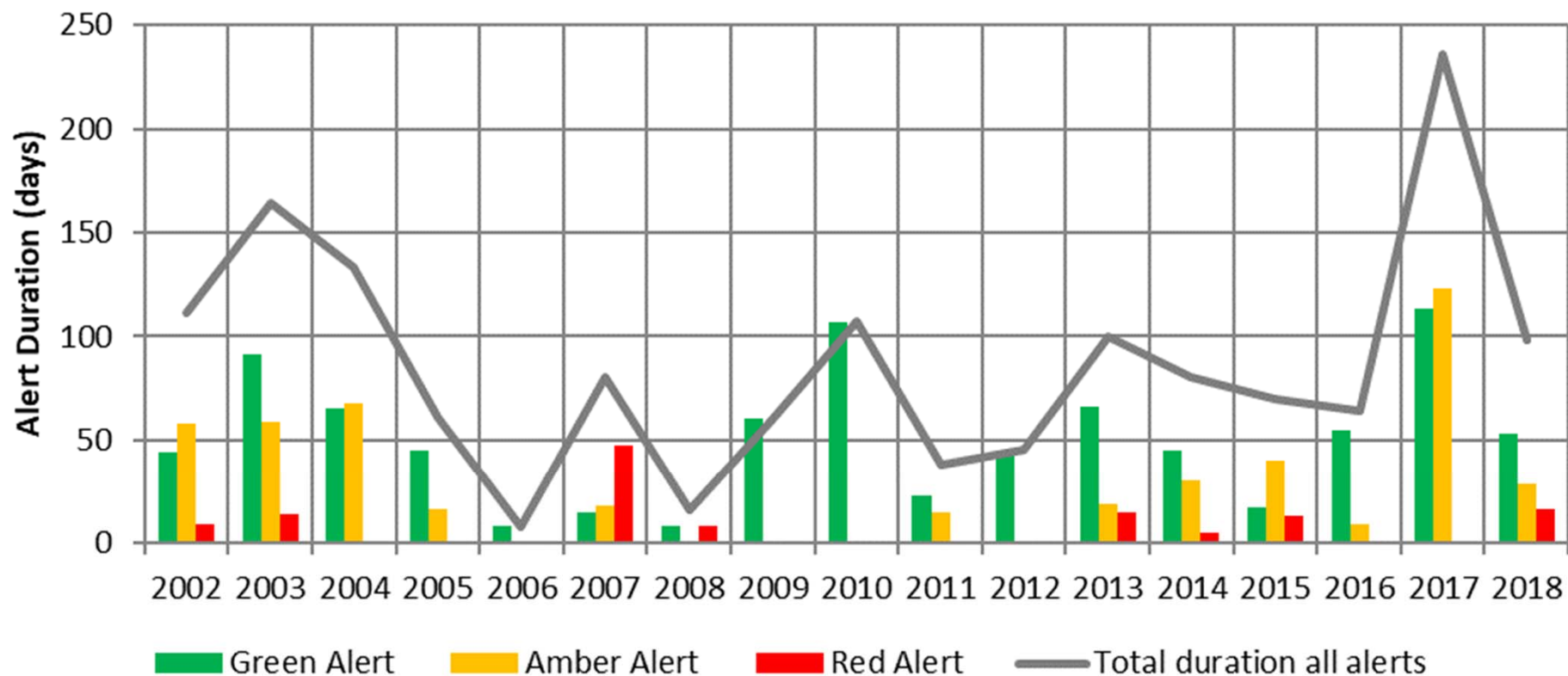


WATER QUALITY SAMPLING

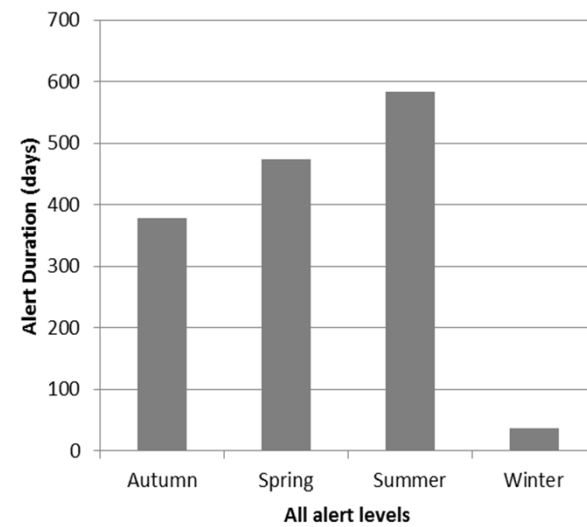
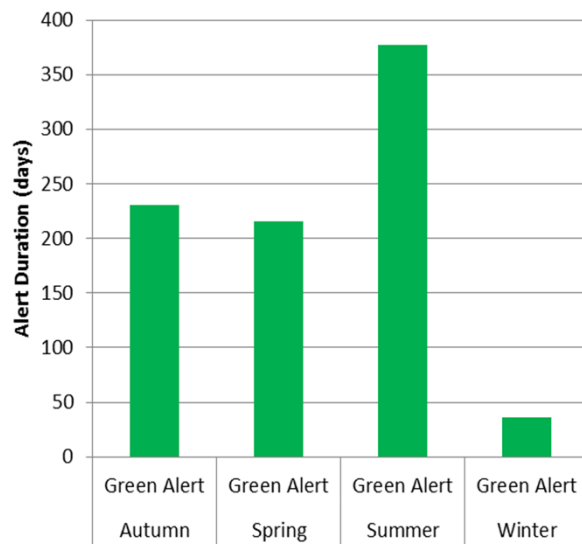
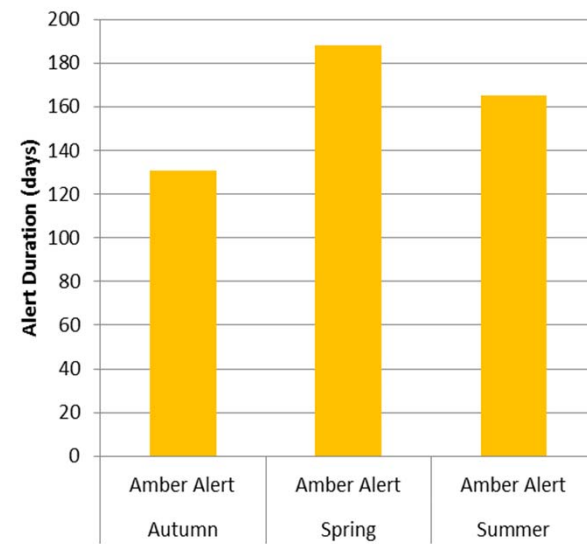
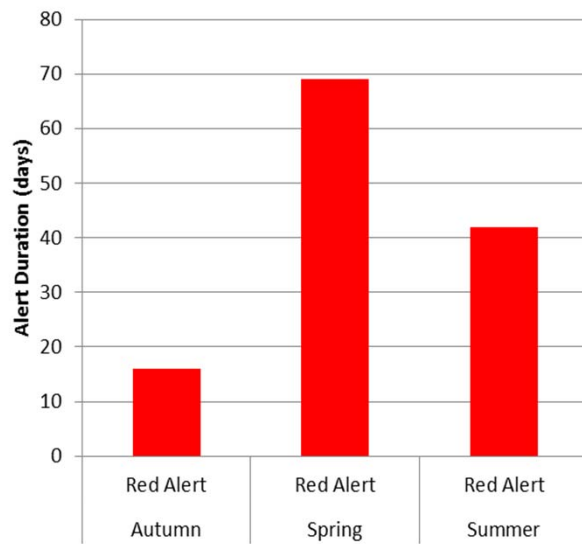
- 5 water quality sites
- In-situ sampling of physico-chemical parameters and surface sampling for lab analysis (e.g. nutrients, enterococci, chlorophyll a)
- Current sampling regime commenced Dec 2015 (3 years data to date)
- BGA sampling since 1992
- Enterococci since 2002



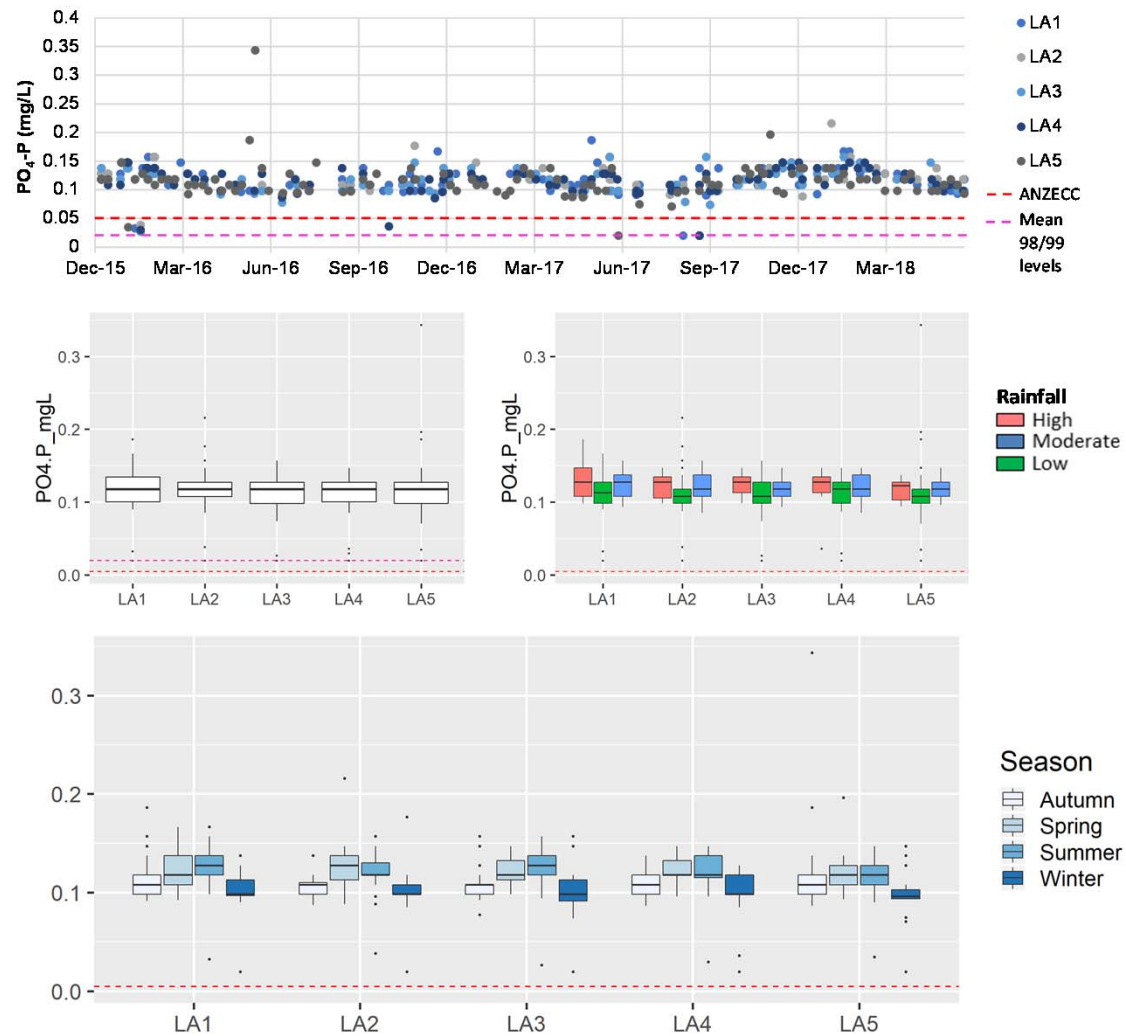
BLUE GREEN ALGAE ALERTS OVER TIME



- Any alert - average of 86 days/yr (24%).
- Red alerts - average 7 days/yr (2%), 2007 47 days (13%)

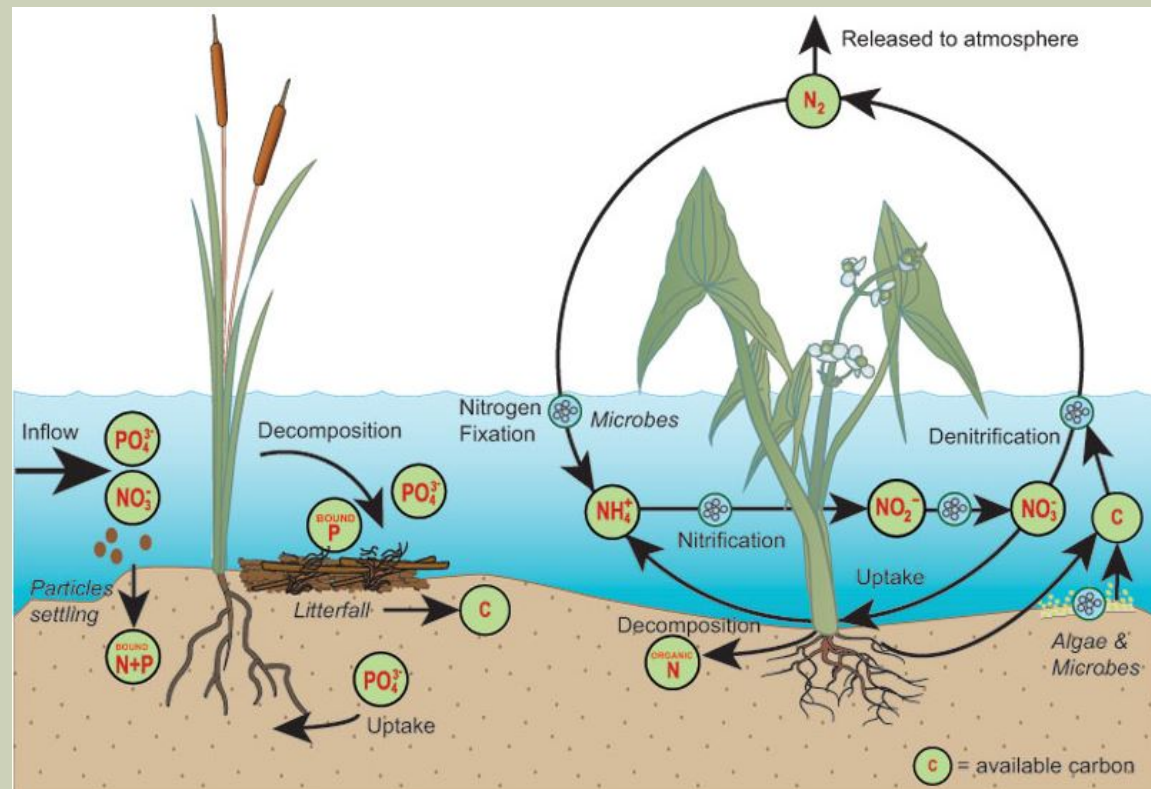


NUTRIENTS - PHOSPHATE



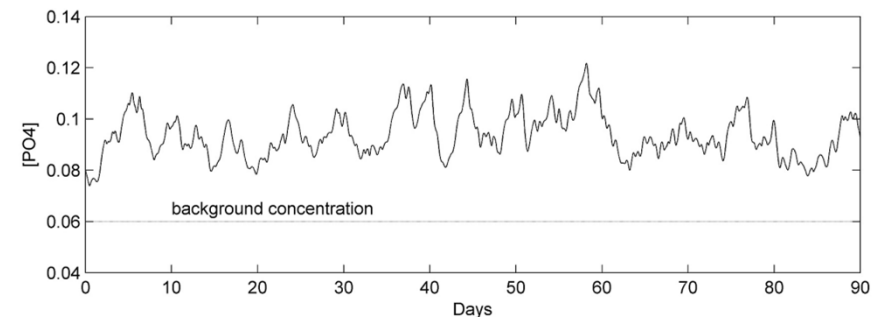
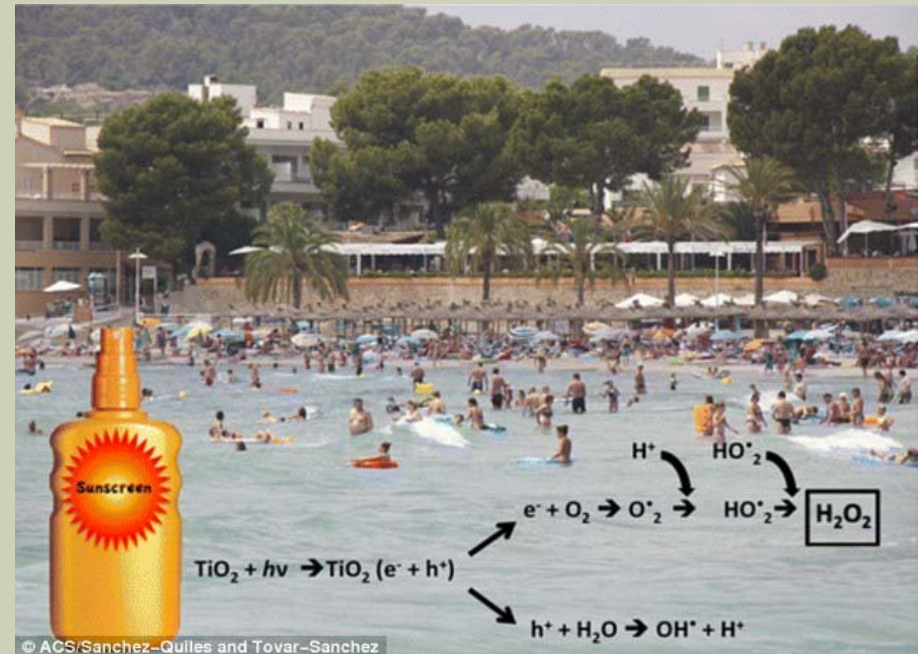
POTENTIAL NUTRIENT SOURCES

- Sediments- P source 10x runoff or groundwater
- Catchment runoff/groundwater/stormwater – fertiliser use, outdoor cleaning with soaps and detergents, lawn clippings, garden waste
- Recreational use – urine/sunscreen
- Wildlife faeces/urine (birds, mammals etc.)



SUNSCREEN POLLUTION

- Oily slicks observed at Lake Ainsworth during peak times
- Emerging issue globally (coral reef damage, EDC, fauna, bioaccumulation, nutrient enrichment)
- Rough estimates for Lake Ainsworth approx. 100-150L/yr
- Encourage alternative sun protection



(Source: Tovar – Sanchez *et al.*, 2013)

COMMUNITY ENGAGEMENT

- Project website updates
- Steering Committee meetings
- Community Connect article
- Project flyer distribution
- Formal notifications to:
 - Government Agencies;
 - Community Groups/Organisations;
 - Aboriginal Stakeholders/Agencies.
- Community Survey
- Media
- Market days
- Drop-in sessions



lake ainsworth management program

Lake Ainsworth is a freshwater coastal dune window lake located in Lennox Head within the Ballina Local Government Area. The Lake is considered a significant natural icon and is a popular destination for visitors and locals, providing a natural resource for undertaking various recreational activities.

A Coastal Management Program (CMP) for Lake Ainsworth is currently being prepared on behalf of Ballina Shire Council and the Office of Environment and Heritage (OEH) by the Ballina-based company Hydrosphere Consulting. The goal of the CMP is to provide the long-term strategy and management actions for this water-body and catchment area. This CMP will supersede the current Lake Ainsworth Management Plan.

Project Stages

Stage 1 - Scoping study – involves collation of existing information, preliminary risk assessment, implementation of community consultation portal, development of a community consultation strategy and scoping of technical studies to fill key information gaps. Indicative timeline: January 2018 – May 2018. The Stage 1 Scoping Study has been completed and submitted to OEH and Council for review and approval.

Stage 2 - Detailed studies of vulnerabilities and opportunities – involves community engagement, confirmation of key issues and concerns, field work to confirm current knowledge and completion of identified technical studies to fill key information gaps. Indicative timeline: June 2018 – May 2019.

Stage 3 - Response indication and evaluation – involves threat consequence and risk assessment, the evaluation and identification of management options and the development of management actions. Indicative timeline: May 2019 – August 2019.

Stage 4 - Finalise, exhibit, certify and adopt the CMP – involves the preparation of a Draft CMP for agency review and public exhibition, the identification of funding and final mechanisms to implement the CMP, compiling and addressing submissions from agencies and the community and finalisation of the CMP document for certification. Indicative timeline: August 2019 – February 2020.

Stage 5 - Implementation, monitoring and reporting – involves the implementation of management actions from the certified CMP by BSC and involved agencies as well as the monitoring and reporting of CMP progress. Indicative timeline: Ongoing from February 2020.

Community Engagement

There is a lot of public interest in this iconic lake and community input to this plan is critical in getting the right balance in management priorities. Community members can have their say via the:

Project webpage and communication portal
<https://www.hydrosphere.com.au/lakeainsworth>

Community survey which will be available online and as a paper copy in November 2018


Providing written submissions in response to the draft plan when it becomes available.

Community drop-in sessions will also be held during the survey period and during public display of the draft CMP.



COMMUNITY SURVEY

- Weblink: www.hydrosphere.com.au/lakeainsworth
- Paper copies available at: Council's Customer Service Centre, Lennox Community Centre and Ballina Library



Lake Ainsworth Coastal Management Program

The Lake Ainsworth Community Survey is **now open**







We want to hear from you

Start Survey.

Survey closes 5pm Friday 18th Jan 2019

A community information session will be held at the Lennox Head Surf Club from 3-6pm on Tuesday 20th Nov 2018. Community members are invited to drop-in and share your local knowledge and ideas about future management of the Lake with the project team. A short presentation will be given at 4pm.



Lake Ainsworth Survey

Hydrosphere Consulting is currently conducting a survey on behalf of Ballina Shire Council and the NSW Office of Environment and Heritage, as part of developing the Lake Ainsworth Coastal Management Program (CMP). The goal of the CMP is to provide a long-term strategy for the management of this much-loved water body.

Council has recently approved foreshore improvement works at the Lake. This work will be underway in the coming months. This survey aims to understand community opinion about all aspects of management of the Lake and the best way forward from here.

The survey takes 12-15 minutes to complete and all responses are confidential. We appreciate your time in helping us to better understand community values and opinions on the future management of the Lake.

You can complete the survey online at: www.hydrosphere.com.au/lakeainsworth or complete the paper version below.

1. What are your primary activities at Lake Ainsworth? (tick all that apply)

<input type="checkbox"/> Swimming	<input type="checkbox"/> Sailing
<input type="checkbox"/> Picnicking/BBQs	<input type="checkbox"/> Walking
<input type="checkbox"/> Somewhere to take children/kids parties	<input type="checkbox"/> Cycling
<input type="checkbox"/> Paddling activities (e.g. Canoeing/Kayaking/Boarding etc.)	<input type="checkbox"/> Exercise
<input type="checkbox"/> Bird/wildlife watching/nature appreciation	<input type="checkbox"/> Education
<input type="checkbox"/> Fishing	<input type="checkbox"/> Employment
<input type="checkbox"/> Other (please specify) _____	

2. When you visit the Lake, who do you usually go with? (tick any that apply)

☐ No one, I usually go on my own

☐ With young children (aged 0-5)

☐ With older children (aged 6-12)

☐ With teenagers (13-18)

☐ With adults

☐ Other (please specify) _____

LAKE AINSWORTH COASTAL MANAGEMENT PROGRAM COMMUNITY SURVEY 1

SURVEY OBJECTIVES

- Understand what the community values about Lake Ainsworth
- Measure level of engagement and popular uses
- Measure where the community uses the Lake
- Measure awareness and perceptions around Lake health
- Understand what the community perceives to be the issues
- Assist in prioritising future resource allocation for Lake management
- Understand community aspirations for the Lake to assist in creating a long-term vision statement for the CMP
- Understand how the above vary by selected demographics – e.g. age, gender, address



Tinted Postcard (Source: Lennox Head Heritage Committee)

STAGE 2: NEXT STEPS

- Community Survey (Nov 2018-Jan 2019)
- Stage 2 Report: Vulnerabilities and Opportunities Study (May 2019)
- Stage 3: Response Identification and Evaluation (May-Aug 2019)
- Stage 3 Report: Management Options Study (Aug 2019)
- Stage 4: Prepare Exhibit and Finalise CMP (July 2019 – Feb 2020)
- Public Display of CMP (Nov 2019)
- Community Drop-in Session #2 (Nov 2019)
- Final CMP (Feb 2020)



An aerial photograph showing a coastal town with a sandy beach and blue ocean on the left. A large, dark blue lake is nestled in the center, surrounded by dense green forest. In the foreground, there are several buildings, including a large one with a blue roof, and a swimming pool. The text "OPEN DISCUSSION" is overlaid in white capital letters on the lake.

OPEN DISCUSSION

- Questions?
- Additional information?