



How to Learn More?

Read the Report

You may view the detailed document at

- Council's Administration Centre
- Bellingen Shire Library Branches at
 - Maam Gaduying (Meeting Place) Park, Hyde Street, Bellingen
 - Pine Street, Dorrigo
 - Bonville Street, Urunga
- Council's website

The document will be available until the 7th of December.

Attend a Community Information Session

Bellingen Shire Council will be holding an information session on Thursday 6th December 2012, starting at 6:00PM at the Council Chambers.

Have your Say

Council is seeking specific feedback from the broader community on the project; you are encouraged to provide your comments by:

- attending the Community Information Sessions
- completing by sending a letter
 - by post to Council
 - the submission boxes at Council's Administration Centre or Libraries
- Electronically by email to council@bellingen.nsw.gov.au or through the "Have your Say" form on Council's webpage with the Subject "IWCM Feedback"

Please ensure that your feedback is received by the 7th of December 2012



Integrated Water Cycle Management Strategy

Planning and managing the Shire's water for the next 30 years

Bellingen Shire Council has engaged NSW Public Works to prepare an Integrated Water Cycle Management Strategy to plan and manage water supply and sewerage for the Shire over the next 30 years.

Integrated Water Cycle Management (IWCM) is a formal requirement of the NSW Government's Best-Practice Management of Water Supply and Sewerage Guidelines. Without the IWCM, the Shire will not have a plan to secure future water supply for times of drought and to meet future population growth. The IWCM is also used as a tool to ensure legislative requirements are met.

Council has placed the draft IWCM Strategy on public exhibition to give the community an opportunity to provide feedback. This information sheet provides a summary of the document's key findings and conclusions.

What is Integrated Water Cycle Management (IWCM)?

IWCM is a way of planning and managing the urban water system (water supply, sewerage and some stormwater) as a whole rather than managing the components in isolation. This ensures the best possible use of water, while minimising impacts to the environment and other water users. It is based on the following steps:

1. Understanding the issues facing the Shire's urban water system (the IWCM Concept stage completed in 2007)
2. Identifying and assessing possible measures to address these issues
3. Identifying a preferred overall scenario that involves a combination of measures and solutions

The outcomes of the draft IWCM include:

- more efficient water use
- reduced environmental impacts from water extraction, urban drainage and treated wastewater
- a preferred scenario which provides the most cost effective set of solutions to solve all of the issues



The Issues

The issues identified in the 2007 IWCM Concept included:

- Catchment
 - Rising sea levels increase risk of salt water intrusion of the Bellingen aquifer
- Water Resources
 - Poor water quality in the Lower Bellinger River
 - Potential for Bellingen aquifer water extraction license to change
- Lower Bellingen Water Supply
 - Annual demand exceeding the licensed extraction limit
 - Peak day demand exceeding the licensed daily extraction limit and the reservoir capacity in some areas
 - Raw water quality is monitored too infrequently
- Dorrigo Water Supply
 - Water quality monitoring does not meet guideline recommendations
- Bellingen Waste Water
 - Peak summer loads on treatment plant approaching capacity
 - Biosolids are not reused
- Urunga Waste Water
 - High numbers of overflow events were recorded in 2005 and 2006
- Dorrigo Waste Water
 - Treatment plant effluent quality not compliant with license
 - Treatment plant loads approaching capacity
- Villages
 - Onsite wastewater systems (for example septic tanks) are potential contributors to faecal contamination of groundwater and surface water



Addressing the Issues

The issues have been / will be addressed through a mix of measures that:

- have already been undertaken
 - Bellingen aquifer extraction license has been modified and is expected to be sufficient until 2022
 - estuarine sea level rise inundation mapping
 - recommissioning of the Raleigh Reservoir
 - increased monitoring of water quality
- Council has planned to undertake including
 - construction of the new Bellingen Reservoir
 - construction of the new Dorrigo Waste Water Treatment Plant
 - augmentation of the Bellingen Waste Water Treatment Plant
 - installation of a low pressure sewage collection system at Newry Island and Atherton Drive
 - farm reuse of waste water treatment plant biosolids
- are additional actions identified during this study including
 - increased monitoring of the Bellingen water supply raw water
 - undertake and implement a Drinking Water Quality Management Plan
 - groundwater yield and climate change impact modelling
 - surface water yield modelling

Funding the solutions

Council has received state government grants to help fund:

- The Dorrigo Sewage Treatment Plant
- Leakage reduction

All other responses will be funded through Council's water and sewer availability and usage rates