

**TWEED SHIRE COUNCIL  
MEETING TASK SHEET**

**User Instructions**

If necessary to view the original Report, double-click on the 'Agenda Report' blue hyperlink above.

**Action Item - COUNCIL MEETING Thursday, 12 December 2013**

Action is required for Item **34** as per the Council Resolution outlined below.

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**TITLE:** **[CNR-CM] Integrated Water Cycle Management Strategy - Draft for Public Exhibition**

**Cr M Armstrong  
Cr W Polglase**

**RESOLVED** that Council

1. Notes the contents of the Draft Integrated Water Cycle Management (IWCM) Strategy.
2. Publicly exhibits the Draft Integrated Water Cycle Management (IWCM) Strategy for an extended period from 6 January to 21 March 2014, to provide adequate time for the community to review and provide submissions.
3. During the exhibition period, Council holds a number of public information sessions with venues to service Tweed Heads, Banora Point, Kingscliff, Pottsville, Murwillumbah, and Uki.
4. In addition to advertising in the Tweed Link, Council promotes these public information sessions through advertising in local print media including, but not limited to, the Tweed Border Mail, The Tweed Coast Weekly, The Tweed Valley Weekly, and the Tweed Sun."
5. Receives a final Integrated Water Cycle Management (IWCM) Strategy for adoption once submissions have been considered and addressed.

The Motion was **Carried**

**FOR VOTE - Unanimous**

## Agenda Report

**TITLE:** [CNR-CM] Integrated Water Cycle Management Strategy - Draft for Public Exhibition

**SUBMITTED BY:** Water

Valid



**Supporting Community Life**



**Caring for the Environment**

### **LINKAGE TO INTEGRATED PLANNING AND REPORTING FRAMEWORK:**

2	Supporting Community Life
2.3	Provide well serviced neighbourhoods
2.3.2	Provision of a secure, high quality and reliable drinking water supply services which meets health and environmental requirements and projected demand
4	Caring for the Environment
4.3	Maintain and enhance Tweed's waterways and its catchments
4.3.1	Manage water resources sustainably and minimise impact on the environment by achieving more integration of water supply, wastewater and stormwater services

### **SUMMARY OF REPORT:**

Integrated Water Cycle Management (IWCM) is the integrated management of water supply, sewerage, stormwater, and catchment activities within a whole of catchment strategic framework and provides a long term focus for their integrated delivery.

At its meeting of 24 January 2012, Council adopted a detailed process to review the existing IWCM Strategy. A significant component of this process was to provide multiple opportunities for stakeholder and community input into the IWCM review process.

An initial draft of the new IWCM Strategy has now been produced that:

- Identifies the issues that have the greatest impact on Council and the community in meeting the objectives of IWCM;
- Proposes a number of Management Approaches to deal with those issues

The draft IWCM Strategy reveals that the feasibility and timing of proposed IWCM actions is dependent on the availability of financial and human resources, and attempts to set clear expectations by assigning priorities with consideration of the limited internal resources available.

The process adopted in January 2012 required Council to publically exhibit the Draft IWCM Strategy and consider and address submissions before its finalisation.

### **RECOMMENDATION:**

**That Council:**

- 1. Notes the contents of the Draft Integrated Water Cycle Management (IWCM) Strategy.**
- 2. Publically exhibits the Draft Integrated Water Cycle Management (IWCM) Strategy for an extended period from 6 January to 21 March 2014, to provide adequate time for the community to review and provide submissions.**
- 3. Receives a final Integrated Water Cycle Management (IWCM) Strategy for adoption once submissions have been considered and addressed.**

## REPORT:

**Note:** *For brevity this Council report lists the key issues with limited commentary and discussion. Issues should be considered in conjunction with the draft Integrated Water Cycle Management (IWCM) Strategy document (Attachment 2) to ensure context is fully appreciated."*

### **Background**

Integrated Water Cycle Management (IWCM) is the integrated management of water supply, sewerage, stormwater, and catchment activities within a whole of catchment strategic framework and provides a long term focus for their integrated delivery.

In December 2006 Council adopted its IWCM Strategy defining the catchment, water resource and urban issues faced by Council and outlined a broad strategy for the future. Strategic Actions have been reported on annually since, with the last update to Council in March 2012 and the last revision of 21 IWCM actions adopted by Council in February 2011. The NSW Office of Water has praised Tweed's unique revision and reporting process and has suggested the approach could be used by Councils to improve monitoring and reporting on IWCM progress.

NSW Office of Water (NOW) best practice guidelines require Councils to review their IWCM Strategy every six to eight years. In January 2012, Council determined the IWCM review should expand the NOW requirements to better align with Council's broader IWCM responsibilities across the entire Tweed catchment, and to consider community concerns that the previous IWCM Strategy was too focussed on urban water issues. The review was to use independent consultants to identify emerging issues and review existing programs to:

- Ensure the long-term future direction is appropriate, considering the current or emerging challenges facing Council and the community desires for future water cycle management;
- Ensure consistency with the *NSW Best-Practice Management of Water Supply and Sewerage Guidelines* (DWE, 2007);
- Identify opportunities to enhance IWCM implementation across all relevant Council functions;
- Maximise the benefit of the IWCM process by ensuring the strategy is appropriate and cost-effective, the community are fully engaged and that all aspects of the Shire's water resources are considered; and
- Ensure that Council policy keeps pace with changing circumstances and new information through a process of continual improvement.

### **The process**

At its meeting of 24 January 2012, Council adopted a detailed process the review should follow. The process involved:

- Seeking input to a consultant's brief from stakeholders and the community
- Engaging a consultant to undertake the work (local consultants "Hydrosphere" were engaged by Council at its June 2012 meeting)
- Production and public exhibition of a Background Paper identifying key IWCM issues (presented at a workshop to Council in November 2012)
- Gathering feedback from the community through over 600 random telephone surveys and a further 400 targeted surveys and submissions
- Utilising responses to the Background Paper and Community survey to draft the IWCM Strategy
- Placing the draft IWCM Strategy on public exhibition [*the focus of this report*]
- Accept submissions, finalise the IWCM Strategy, and forward to NOW for approval

### ***Stakeholder involvement***

Consultation activities undertaken as part of the IWCM review built on the activities already undertaken by Council as part of the implementation of existing IWCM actions. The objectives were to engage the wider community in the IWCM review and establish the community priorities for water cycle management. The mechanisms used to establish current stakeholder values and priorities were the statistically significant telephone survey (of 616 households), an online/hard copy survey and written submissions. The key findings of the consultation process are:

- Council should implement a balanced approach to reducing water usage and increasing water availability. However there is significant support for continuation of demand management initiatives;
- A continuous supply of drinking water is a priority but also important to the community are maximising stormwater and wastewater re-use, maintaining the natural environment in river and catchment areas and encouraging households to reduce their water consumption;
- Maintaining clean water in the Tweed River system is a high priority;
- Council should be most supportive of protection of the water supply, followed by natural habitat and water quality protection and improving the quality of treated water water/urban stormwater runoff;
- There is no clear mandate on a preferred approach to augmenting future water supply with the community evenly divided between four suggested approaches (more household rebates for water saving devices, construction of another drinking water supply, greater use of recycled water and behavioural change/further education). Approximately half the community supports the use of alternative water sources (rainwater tanks, stormwater reuse and treated wastewater);
- The responsibility for maintaining the health of rivers should be shared by all ratepayers; and
- Many respondents were supportive of the implementation of integrated water management solutions and the need for increased inter-departmental cooperation within Council.

Furthermore, a project steering committee made up of representatives from across Council's divisions has been involved in providing information to the consultants, reviewing documents, determining priority actions and confirming resourcing and funding requirements. Participants include staff from the Water, Natural Resource Management, Planning and Infrastructure, Recreational Services, Environmental Health, Design, and Planning Reforms units.

### ***Draft Strategy***

An initial draft of the new IWCM Strategy has now been produced. The draft IWCM Strategy:

- Identifies the issues that have the greatest impact on Council and the community in meeting the objectives of IWCM;
- Proposes a number of Management Approaches to deal with those issues.

### ***IWCM Issues***

The review of the IWCM Strategy identified current and emerging IWCM issues that Council and the community will face over the next 30 years. A number of the issues are related to Council's desire to pursue greater integration of water cycle management responsibilities and cross-divisional cooperation. Some issues would not have been identified in a traditional (urban only) IWCM approach but are underlying factors that logically influence Council's approach to water management. A number of the issues also relate to future or

emerging issues such as climate change and increasing regulation where information has become more available since previous IWCM reviews were undertaken.

The key issues identified are presented in five broad categories:

#### **Administration and Governance:**

- Issue 1: IWCM principles, responsibilities and priorities are not fully implemented across all Council units
- Issue 2: There is a need for informed and transparent decision-making and better management of community expectations
- Issue 3: There is a need for defensible and robust population forecasts
- Issue 4: Uncertainty regarding the preferred Tweed district water supply augmentation option creates confusion regarding land use planning
- Issue 5: The implications of private industry involvement in town water supply and wastewater management are unclear, particularly with regard to regulation and Council responsibilities
- Issue 6: Asset management planning
- Issue 7: Climate change implications need to be integrated into planning for urban water services, catchment management and natural resource management
- Issue 8: High energy consumption and greenhouse gas emissions
- Issue 9: Best-Practice Compliance
- Issue 10: Improved data collection and reporting procedures would facilitate adaptive forecasting of demand and assist with community education

#### **Urban Town Water Supply:**

- Issue 11: There is currently no mechanism to promote retrofit of rain water tanks or installation of large rainwater tanks in new development
- Issue 12: Council's 2013 target for non-revenue water is not likely to be achieved
- Issue 13: Augmentation of the Tweed District Water Supply will be required in future due to population growth although the timing and additional supply required are unclear
- Issue 14: The drinking water catchments are impacted by current and historical land use and development
- Issue 15: As a precaution the Uki WTP is shut down during dirty water events
- Issue 16: Drought contingency and water supply emergency management measures need to be further developed

#### **Urban Wastewater Management**

- Issue 17: The opportunities for development (urban expansion) outside of the wastewater service areas is limited by the capacity of Council's infrastructure and the environment
- Issue 18: Licence requirements for pH and suspended solids at Uki Wastewater Treatment Plant need to be reviewed.
- Issue 19: Council and the community have a desire for increased water recycling but there are significant barriers to implementation of recycled water schemes within the Tweed Shire
- Issue 20: There is a high cost of sustainable biosolids management

#### **Urban Stormwater Management**

- Issue 21: Increased emphasis on water sensitive urban design will require more integrated Council responsibilities, increased community education and increased staff capabilities and funding
- Issue 22: Existing Council development controls do not fully address the residual load of urban stormwater on downstream sensitive waterways

- Issue 23: Existing subdivision erosion and stormwater controls and resources are not adequate for the rainfall and rate of development experienced in the Tweed.

### **Catchment Management**

- Issue 24: There is a need for a holistic catchment management strategy for the Shire
- Issue 25: There is limited integration between urban and rural strategic land use planning
- Issue 26: The effective management of on-site sewerage systems within the Shire is limited by the available resources

### **Management Approaches**

The draft IWCM Strategy identifies a broad range of management options to address the IWCM issues based on the nature of the issue and the work that has already been undertaken.

The draft strategy acknowledges that key challenges that Council faces in addressing these issues are:

- Finding cost effective ways to deal with the issues;
- Assigning priorities, given the different perspectives and perceptions of the issues and competing demands for funds in an environment where costs need to be fully justified to a broad spectrum of interest groups;
- Ensuring continuity of business through changing circumstances such as climate change; and
- Increasing regulatory requirements.

The options have therefore been bundled into three implementation levels to assist Council in determining the resourcing and funding requirements to achieve IWCM goals and objectives, and in particular to enable the community to understand the limitations and priorities impacting on their successful implementation. These levels are:

- Level 1: Fully funded actions already underway or planned by the existing 2006 IWCM Strategy.
- Level 2: Unfunded actions that are the minimum required to meet the NOW guidelines. These actions are in addition to those identified in the 2006 strategy and are required to address new issues that have arisen since 2006 (eg due to changing circumstances, changes in regulation, subsequent phase to 2006 actions, etc)
- Level 3: Unfunded actions designed to address wider catchment management objectives that reflect globally recognised standards of best practice and align with Council's broader IWCM responsibilities across the entire Tweed catchment (these issues and actions are outside the traditional NOW urban-water guidelines)

Level 3 (the Total Water Cycle Management Scenario [TWCM]) requires significant additional investment but would enable TSC's IWCM objectives to be achieved. The greatest environmental benefit and community support are also expected to be achieved with Level 3. However, given the increased benefits come at a significantly increased cost compared to level 2, a staged approach to TWCM is required.

Implementation of the Level 2 actions will achieve full compliance with NSW Office of Water guidelines, and provides a strong basis for further broadening the scope of Council's decision making to encompass the full water cycle.

The aspirational target would be to achieve the TWCM approach in the medium-term (within 5 to 10 years); however this will not be achieved until funding sources are identified.

Implementation Level: IWCM Objective:	<b><u>LEVEL 1</u></b> <b>Current Strategy</b>	<b><u>LEVEL 2</u></b> <b>Meet NOW guidelines (Increased urban water cycle integration)</b>	<b><u>LEVEL 3</u></b> <b>True IWCM objectives (catchment and urban water cycle management fully integrated)</b>
Implementation of a total water cycle management approach	No	Partial (drinking water catchments)	Yes
Identification and incorporation of community priorities	On a project basis	Improved	Further Improved
Provision of mechanisms for integration between the activities of the Council units that have a role in water cycle management	Achieved for some activities	Achieved for urban water activities	Yes
Compliance with the NSW Office of Water best-practice guidelines	Substantial	Full	Full compliance plus increased focus on total water cycle management
Cost (additional to existing budget, not including capital items arising from studies etc.)	<b>\$0 (current budget)</b>	<b>additional \$3,800,000 over 10 years *</b>	<b>additional \$9,100,000 over 10 years **</b>

\* in addition to existing IWCM program. Unfunded amount comprises suggested OSSM resources and unconfirmed programs such as the rainwater tank rebate.

\*\* includes Level 2 actions.

The resourcing and funding requirements of the management options consider:

- No major capital expenditure expected in next 10 years (however, new investigations may recommend future capital expenditure as part of the ongoing IWCM implementation)
- A focus on implementation of actions to achieve IWCM objectives:
  - further investigations
  - development of strategies
  - provision of additional human resources
  - additional funding

### ***IWCM Implementation***

The draft IWCM Strategy reveals that the feasibility and timing of proposed IWCM actions is dependent on the availability of financial and human resources, and attempts to set clear expectations by assigning priorities with consideration of the limited internal resources available. It also attempts to remain flexible to access potential sources of external funding which may become available in future.



The draft IWCM Strategy contains information on all of the issues, scenarios, costings, resourcing and possible funding sources. This should be seen as the aspirational IWCM objective, however the draft strategy also attempts to clarify:

- what is actually achievable within the IWCM timeframe
- which actions will be focussed on, and which may need to be put on hold

In reality, only the Level 1 and Level 2 actions that Council is able to fund will form the basis of IWCM actions in the short to medium term. To achieve full IWCM implementation, the remaining unfunded Level 2 and Level 3 actions would be the focus of a medium to longer term program. However it is proposed these be tied in to development of Council's Environmental Sustainability Strategy (ESS) and the overall resourcing, funding and priorities set by this program. The ESS is in the early stages of development and an initial framework is expected to be completed in 2014. It is envisaged this would allow priorities to be set in 2015, which in turn would provide direction on the feasibility of unfunded IWCM Level 2 and Level 3 actions.

It is considered that this transparent approach is important in ensuring all issues are identified and considered, but that it is also clear what can be achieved and how Council will assign priorities.

The proposed ten year implementation program has a total budget cost of \$8.99 million (current dollars) with approximately \$1.9 million required in the first three years (refer Attachment 1).

### ***Ongoing IWCM Strategy timeline***

In summary, the key steps are:

- Immediate:
  - Recommend Public exhibition period
  - Workshop with Councillors
- Finalisation:
  - Public exhibition of draft IWCM Strategy (Dec 2013 - Feb 2014)
  - Finalisation of IWCM Strategy
  - IWCM Strategy adoption
  - Community roadshows to explain and promote IWCM Strategy outcomes
- Proposed Implementation:
  - Level 1 and 2 (partial): As per the proposed strategy timetable
  - Level 2 (partial) and 3: As determined by Council's Environmental Sustainability Strategy (ESS), and refined by ongoing annual reviews of IWCM Action implementation currently undertaken by the Water Unit

### **OPTIONS:**

Council can:

1. Choose not to exhibit the Draft IWCM Strategy, however this deviation from the process adopted in January 2012 is likely to cause community concerns and may jeopardise approval by NSW Office of Water (NOW).
2. Continue to follow the process it adopted in January 2012 by publically exhibiting the Draft IWCM Strategy for the minimum period of 28 days from 6 January to 3 February 2014.
3. Continue to follow the process it adopted in January 2012 by publically exhibiting the Draft IWCM Strategy, but provide more time for the community to review and provide submissions during an eight week period from 6 January to 3 March 2014.

### **CONCLUSION:**

It is recommended Council adopts Option 3:

Continue to follow the process it adopted in January 2012 by publically exhibiting the Draft IWCM Strategy, but provide more time for the community to review and provide submissions during an eight week period from 6 January to 3 March 2014, and then consider and address submissions in the final IWCM Strategy.

**COUNCIL IMPLICATIONS:**

**a. Policy:**

Depending on the final implementation of actions identified in the IWCM revision, it is likely further policy development will be required across the full range of water, wastewater, catchment management, stormwater, environment and health functions of Council.

**b. Budget/Long Term Financial Plan:**

The IWCM revision relates to Council's core business as a Local Water and Wastewater Utility, but also its broader water cycle objectives through the Level 3 actions. A significant commitment of resources and finances will be required over the next 10 years to implement the full suite of IWCM actions identified in this review. The estimated funding over the next 10 years for Level 2 actions from the Water and Sewer Funds is \$2.2M, with approximately \$1.5M from the General Fund. For Level 3 actions over the next 10 years, an additional \$400k is required from the Water and Sewer Funds, plus approximately \$5M from the General Fund. The draft strategy outlines actions for implementation, together with estimated costs and resourcing requirements.

**c. Legal:**

Not Applicable.

**d. Communication/Engagement:**

**Inform** - We will keep you informed.

**UNDER SEPARATE COVER/FURTHER INFORMATION:**

Attachment 1.	Proposed 10 year implementation program outline (ECM 3183760)
Attachment 2.	Draft IWCM Strategy (ECM 3221704)

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