

**NSW LEGISLATIVE ASSEMBLY
STANDING COMMITTEE ON PUBLIC WORKS**

**INQUIRY INTO INFRASTRUCTURE PROVISION
IN COASTAL GROWTH AREAS**

**Submission by
Australian Water Association
31 May 2005**

Executive Summary

- The impact on water infrastructure of the shift towards denser coastal urban areas is a problem, as that leads to more dwelling units, but no increase in population. This results in greater water consumption and increased sewage discharges, but without a larger population base.
- Tourism can lead to major impacts on water infrastructure, but without enabling greater levels of state government support.
- Several councils feel that NSW State Government support for their water planning and infrastructure needs has been promised but not delivered.
- Much water infrastructure has significant early costs, which are hard to meet through normal mechanisms.
- There is a lack of NSW State Government agencies' coherence relating to water infrastructure issues – which makes coastal councils' work all the more difficult.
- Although integrated water cycle management (IWCM) is a useful tool in developing sustainable water management systems, it has been imposed in a rigid fashion by DEUS and is thus not as helpful as it should be.
- A combination of commonwealth and state funding support would enable more coastal councils to introduce improved, more sustainable water management practices, including reuse (water and biosolids), alternative sources and nutrient reduction.

Introduction

This submission has been prepared by the Australian Water Association, based mainly on input from several NSW coastal councils, members of the NSW Water Directorate. It addresses only water infrastructure, not any other facets. Each of the Inquiries terms of reference is addressed, using the same numbering system.

1. Key coastal population growth and urban consolidation trends in NSW

This issue has, no doubt, been addressed well and in detail in many other submissions, so it is not exhaustively dealt with here. However, it is important to note that there is a strong move to consolidation (brownfield) development, more intense for communities closer to the coast. Among other factors, property values seem to be driving this trend. In Bellingen Shire, for example, negligible population growth has been coupled with sustained dwelling increases of 2%.

The net result is a drop in population, but an increase in housing stock, which has a major impact on water consumption patterns. Recent research has confirmed the intuitive impression that the second occupant of a dwelling only adds 80% to total water consumption, not 100%. This is logical, since many basic water-using activities are relatively insensitive to the number of occupants in a dwelling.

Several towns, such as Byron Shire, have significant tourist activity, often associated with major events such as festivals – these impose a substantial burden on all infrastructure, including water. Tourism revenue seldom reflects the overall impact on services, so is hard for coastal councils to sustain.

2. Short and long-term needs of coastal communities for basic (water) infrastructure

Funding mechanisms for infrastructure are often based on population, which does not reflect the increased needs resulting from tourism peaks. A more flexible approach would be beneficial.

Councils accept primary responsibility for implementing necessary water infrastructure, but are being hampered by the State Government failing to issue increased water extraction licences. Firm promises from the State Government for:

- Water sharing plans for each resource
- A credit scheme for appropriately treated return flows to the environment
- A review of volumetric entitlements, set on the basis of 2000 demands, to be completed after five years, using the ‘reasonable entitlement model’ have all failed to materialise. In fact, actual outcomes have been:
 - The State Government is now requiring users to do all the work of quantifying resources and identifying safe yields and environmental flows
 - Recent advice from DIPNR has been that a return credits scheme would not be developed until 2007, if ever
 - The development of an Integrated Water Cycle Management Plan is a prerequisite for any increase in volumetric entitlements, regardless of the outcome of a ‘reasonable entitlement model’.

The challenge for some councils in providing infrastructure is that, despite a long planning horizon, much of the necessary expenditure is 'front-end heavy', which places a major burden on council finances. Enhanced levels of State Government support could help to relieve that burden.

3. Coordination of commonwealth, state and local government strategies to deliver sustainable coastal growth and supporting infrastructure

Coastal councils do not believe that the State Government is delivering coherent, whole-of-government policies, so the relevant agencies (DEC, DIPNR, DEUS, Health, CMAs) tend to have conflicting goals.

It is felt that the Integrated Water Cycle Management (IWCM) Best Management Practice Guidelines from DEUS are being rigidly enforced, despite not having enough support from affected councils. A glaring omission in IWCM is stormwater, which is not addressed at all by DEUS, but which needs attention.

A compounding problem for some councils (eg Byron Bay) is the fact that the Country Towns Water Supply and Sewerage Support Scheme has been dialled back, dramatically cutting the quantum of funding support for coastal councils.

An example of inconsistencies among agencies is reuse: DEC and Health are at odds over reuse criteria, especially potential aquifer injection initiatives. Another example is environmental and return flows: both DIPNR and DEUS encourage environmental flow provisions, but local water utilities are penalised for discharging even the highest quality of used water to streams. The view of councils is that they should receive credits for putting water back into rivers, in appropriate quality and quantity.

4. Best practice methods to plan, manage and provide (water) infrastructure to coastal growth areas

Although it is accepted that an Integrated Water Cycle Management (IWCM) approach is the most apt for addressing water infrastructure, there are several challenges and impediments facing coastal councils in NSW:

- Tourist pressures from Queensland are impacting northern councils, but there is no obligation for Queensland to provide any support to compensate
- Few councils have adequate resources to tackle IWCM adequately
- The costs of construction are, at present, very high, and that makes it very difficult to keep up with infrastructure provision
- Guidelines for IWCM implementation have only recently been introduced, but are weak on stormwater, which is a critical area

Some coastal councils feel that, for IWCM to be successful, they should be able to combine water, sewerage and stormwater in a single rate base; perhaps a Water Cycle Fund? A combination of commonwealth and State funding should be provided to enable coastal councils to seriously address several initiatives, including:

- Water reuse projects, dual reticulation initially, but ultimately indirect potable reuse
- Stormwater harvesting and beneficial use
- Biosolids (properly treated sewage sludge) reuse schemes
- Nutrient reduction projects

Coastal growth areas offer considerable potential to achieve more sustainable outcomes, by taking a truly holistic approach to planning, design and implementation. IWCM has to be just part of an overall approach to sustainable urban resource management. Although it should be a given, there is insufficient acknowledgment and action of the fact that all urban activities and infrastructure are intimately interconnected – transport impacts on water; landuse impacts everything; housing style affects energy, water and social well-being, etc.

Sustainability is the overall goal but it is generally acknowledged that there is no definitive end-point for a sustainable community; so it involves a journey in a desired direction, but no clear destination as such. Australia has the technology and know-how to make a major step in the direction of sustainability in coastal development areas; given the will and coherent government support. However, there are even bolder steps (eg decentralised systems, urine separation, energy recovery, etc) which should be taken by some adventurous communities, to act as demonstration sites for future developments to follow.

5. Management of social, environmental and economic considerations associated with (water) infrastructure provision in coastal growth areas

Town planning efforts need to be effectively linked to infrastructure planning – a self-evident requirement for well resourced councils, but a challenge for smaller organisations.

Although environmental considerations are typically given due consideration at the planning stage, they are not as consistently driven to completion in the implementation phase of development. The critical nature of many coastal ecosystems makes this issue all the more important.

Affordability of housing in coastal areas is a social issue which is looming now, and the cost of water infrastructure makes that all the more challenging.

Developments should not proceed until all necessary funding for infrastructure has been assured; coastal councils have to be cautious about accepting developments which wish to cut corners in order to secure early approval, under the rubric of ‘encouraging development’.