

# AGEN 7007 WATER PLANNING, POLICY AND GOVERNANCE

**Credit Points** 10

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**Description** The growing pressure on water resources is leading to new and more interconnected challenges of water planning, policy and governance. There have been new developments in water management in the last two decades to cope with the challenges through the introduction of new disciplines, new techniques, new language, and new thinking. In planning, policy and governance of water resources, we need to incorporate ecology, economics, and other social sciences along with water engineering as part of solution to the challenges of water management. This unit will focus on the understanding the complexity water planning, policy and governance and understand how water sustainability can be achieved in integrated and meaningful way in different sectors, scales and landscapes. The topics to be covered include the following: water resources development; monitoring and protection of water resources; adaptive water management; water demand management; national and international water policy; water economics; institutional arrangements; water law; water rights; property regimes; hydro-diplomacy; trans-boundary water issues; national and international water allocation agreements and treaties; water conflict resolution; public participation, consensus building and confidence building; water trading; water politics; water security; water resources management, policy and governance in socially and environmentally sensitive areas and regions.

**School** Science

**Discipline** Agriculture, Environmental and Related Studies, Not Elsewhere Classified.

**Student Contribution Band** HECS Band 2 10cp

Check your fees via the Fees ([https://www.westernsydney.edu.au/currentstudents/current\\_students/fees/](https://www.westernsydney.edu.au/currentstudents/current_students/fees/)) page.

**Level** Postgraduate Coursework Level 7 subject

**Restrictions**

Must be enrolled in a post-graduate program

## Learning Outcomes

After successful completion of this Subject, students will be able to:

1. Analyse the issues and challenges of water planning, policy and governance at the national and international levels and in different sectors, scales and landscapes.
2. Evaluate the role of water monitoring and adaptive water management in the implementation of water policy and governance.
3. Reflect on the importance of water rights, water laws and water trading in sustainable water management.
4. Apply social hydrology and the hydro-social cycle to a professional water context, especially appraise gender equity, diversity and social inclusion (GEDSI) challenges for equitable water access.

5. Discuss Indigenous and traditional water knowledges and practices; and communicate effectively, respectfully and succinctly to a range of diverse stakeholders.

## Subject Content

The subject comprises of four major topic areas:

### 1. Water planning for sustainability

Water resources planning is critical to ensure that we can meet future water need for drinking, agriculture, industry and environment sustainably. In this workshop we will examine estimating future water demand, evaluating possible new sources of water, protecting water sources, and addressing climate change and increasing water demand in the planning process. We will also examine how we can bring together a myriad issues, interests, and stakeholders through a planning process that can result in a evidence-based, cost-effective, and an environmentally sound water plan that will lead to sustainable water use at the local, regional and national levels.

### 2. Water policy for sustainability

The increasing complexity of global water challenges requires careful consideration water policies that are implementable and lead to sustainable water use. To address the increasingly complex water challenges the world is facing, we need water policy approaches and innovative methods that link theory and practice, management and policy.

### 3. Water Governance for sustainability

Water governance plays a vital role in sustainable water use and development. Population growth, economic development and other factors have raised the water demand, but water availability is becoming unstable and climate change has further exasperated the situation. Water scarcity leads to not only environmental pressures but also social tensions since water resources are distributed unevenly across countries, regions and social groups. Students will learn about integrated approaches to water management and governance to facilitate cooperation and exchange of views, enable communication between specialists and practitioners, and provide new water governance skills and competencies required in water practitioners.

### 4. Managing water for sustainable development

Sustainable water management requires using water in a way that meets current, ecological, social, and economic needs without compromising the ability to meet those needs in the future. This topic will examine managing water beyond jurisdictional boundaries and their immediate water supply operations, and managing water collaboratively while seeking resilient and sustainable regional solutions that minimise risks to people and their environment. The areas of managing water for sustainable development to be considered are agriculture, industry, domestic water supplies, and ecosystems.

The water and sustainable development will be further examined in terms of the development leading to healthy people, increased prosperity, equity, protected ecosystem and resilient communities.

## Assessment

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

Type	Length	Percent	Threshold	Individual/ Group Task	Mandatory
Portfolio	3000 words or equivalent content	35	N	Individual	N

Peer Review	3000 words	35	N	Individual	N
Debate	15 minutes	30	N	Group	N