



The University of Sydney

GEOS3018/3918

Rivers: Science, Policy & Management

Lecturers: Dr Mel Neave
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Classes: Lectures: 10:00 – 12:00 in Carslaw 173
Practical Classes: 14:00 – 16:00 in Madsen 333

Objectives

The objective of this Unit of Study is to introduce students to the complex and competing issues that surround river management. What do we know about rivers and how can we apply that knowledge to improve management decisions? Why do we undertake river management initiatives and what are we hoping to achieve by implementing particular management strategies? What types of river rehabilitation options are available and how do they work? Who decides how rivers should be managed and how are these decisions implemented? And who benefits from all of this? These issues and more will be explored within the context of this Unit. The overall goal is to gain some understanding of the multi-faceted nature of river management, from social, political and scientific perspectives.

Assessment

Global River Essay	10%
Issue Paper	30%
Seminar Presentation & Participation	30%
Final Exam	30%

Fieldwork

There is no scheduled field trip for GEOS3018, although site visits may be recommended during the semester. If and when these occur they will not be compulsory and students unable to attend will not be penalized. Advanced students (GEOS3918) will be expected to complete an individual research project that may require self-directed fieldwork.

Lecture & Practical Outline

	Topics (subject to modification)
River Ecogeomorphology	
Week 1	What do we mean by river management?
Week 2	Catchment hydrology & morphology
Week 3	The river and its landscape
Week 4	River banks and riparian vegetation
Week 5	Aquatic ecosystems
Week 6	Water quality
River (& Water Resource) Policy in Australia	
Week 7	Federal
Week 8	The States
Week 9	Local councils
River (& Water Resource) Management in Australia	
Week 10	What is the aim?
Week 11	What are the issues?
Week 12	Who is doing the work?
Week 13	So....What have we learned?