

Morris

Groundwater dynamics – long history of limited resource/overdraft/conservation efforts
 CO River water- once a new, ‘unlimited’ supply, now it, too requires conservation strategies

Saarinen

Public awareness of desert – different over time, and different in Tuscon v. Phoenix
 Private landscapes: tell a story of Tuscon urban-desert relations over time
 The interplay of National versus local norms – what drives change? What sustains it?

Water 2025: Values

There are many new players at the water mgmt table
 Solutions are to be found at the end of a process, can’t just directly to an end step
 There is commonality among individuals about values that can only be discovered when the discussion starts at values; not at positions or solutions.

Burmil

Aridity and scarcity are two attributes that greatly influence human-society relations
 There needs to be a broader discussion about water that includes the full value of water to humans.
 Water has many aesthetic attributes: sound, reflection, light, color, formless

Colby

What mean by the statement about water management- “there are 2 Arizonas”?
 Ways science not integrated into management policies (groundwater overdraft)
 Climate change – likely increase water supply variability
 All water transfers have impacts- some intended, some not

Curry Rosato - outreach and education

Storm drain system connects directly to creeks without treatment/cleanup
 Why Educate? * raise awareness * behavior changes * create lifelong stewards *regulations require it
 What are tools? media-partnerships-steam teams-school programs-workshops-neighborhood programs
 (adopt-a-stream)-activity books-events

Megan Monroe- tracking microbial contaminants

Water quality in streams varies through time and location.
 Water quality in streams is regulated, and can be put on a Fed list if it doesn’t meet standards.
 Outfalls (that carry stormwater) are important sources of contaminants.
 No one indicator for water quality is sufficient- need multiple indicators.

Kathy Kambic- water and landscape

Three types of landscape through history-much like Worsters hydraulic societies
 Cumulative effects of land use and landscape change are important
 A solution to sustainability of humans on the land lies in water
 Our use and management of land (and water) conveys our values

Economics and Water

Economic signal is clearer in a 'closed system' like the Northern CO WDistrict or Australian 'cap and trade'.

Cost/benefit a good tool but must be clear what is internal to the process and what is external.

Price may not equal value.

Productivity of water increasingly important.

sample questions and those from mid-term

1. Name one thing you learned about water management in another western state, and give an example of what it might offer Colorado?
2. List two specific strengths of the prior appropriation doctrine, and two specific weaknesses. Explain the reason why they are considered strengths or weaknesses.
3. Oasis-desert-urban landscapes. Give an example of this relationship, and discuss why the awareness level of 'living in a desert' is important to western water management.
4. Many authors spoke of the built-in tension with a 'common pool' resource like water. Describe that tension, and suggest methods that could be used in managing a common pool resource?
5. Climate change is occurring in the west. Name *three* ways it is likely to impact water resources in the next century.
6. What is 'consumptive use' of water and why does it matter for the future of the west?
7. The ownership in the Colorado-Big Thompson project has changed dramatically in the past 50 years. What does this change illustrate and why is it important?
8. A typical way of problem solving can be illustrated as: Problem -> Solution. The Water 2025:Values project described a more thorough process. Briefly describe, in outline or graphic form, that more thorough process for groups working towards solutions.
9. Science and uncertainty. Several authors have described the importance of science to the successful management of western water resources. Describe what science *can* bring to western water management, and also what it *cannot* do.
10. Explain at least three reasons why urban water providers promote water conservation?