

Syllabus - Water Policy in Arizona and Semi-arid Regions, Spring 2026

ENVS 596B, Cross-listed as GEOG, HWRS, LAW and PLG 596B
The University of Arizona

Course Description

This course focuses on current water policy from a multi-disciplinary perspective. Through readings, research, lectures, discussions, and presentations, the student is exposed to major, current water resource issues facing Arizona and other parts of the West - and world - and policies to address them. Professor Megdal and guest lecturers draw upon their experiences to demonstrate the development, analysis, and implementation of real-world water policy. Professor Sharon B. Megdal, who has real-world policy making experience, updates the course each year to offer students the most current look at water policy at the local, state, regional, and international levels. This course is designed to prepare students to analyze and engage in water policy matters no matter what the student's ultimate professional/geographic focus. Enrollment in this graduate course is limited to facilitate student participation and interaction.



Dr. Megdal with Water Policy Students Mira Busch, Kirsta Romero-Cardenas, Shalini Kadinappulige, and Marcy Nadel at the 2026 WRRC Conference. Image: Mitchell Masilun

Reflections: On 20 Years of Teaching Water Policy

by Sharon B. Megdal
May 29, 2026

In May 2026, the 20th installment of my graduate [water policy course](#) was in the books. When I returned to the University of Arizona in February 2002 as Water Resources Research Center Associate Director and Extension Specialist, teaching university students was not part of my official job description. Extension faculty typically focus their educational activities in the community rather than through university-level instruction. However, due to our desire to share our experience in real-world water management, in Spring 2005 fellow faculty member Kathy Jacobs and I team taught a new graduate course, "Arizona Water Policy." We designed a course dedicated to exploring current real-world water management and policy. After team teaching it again in 2006, I assumed sole responsibility for the course in 2007. Except for my sabbatical years 2012 and 2020, each Spring I have taught the course, which I retitled in 2018 as "Water Policy in Arizona and Semi-arid Regions" to capture the course's connection to other water-challenged parts of the world.

Each year, I start out the course lecturing and leading discussion, after which classes feature guest speakers representing a diversity of expertise and experience. The primary course deliverable is a policy connected research paper on a topic chosen by the student. Although it is not possible to cover every current topic in a single semester, in 2026 we benefited from guest lectures by experts exploring the following topics: Native Nations' water rights and water management; environmental perspectives, groundwater recharge, Salt River Project projects and priorities; Central Arizona Project, Colorado River water conditions, and the Central Arizona Groundwater Replenishment District; the role of the Arizona Water Banking Authority; the Transboundary Aquifer Assessment Program; agriculture in the Yuma area and the Willcox Active Management Area; municipal water provision and management; and multiple aspects of the work of the Arizona Department of Environmental Quality. We learned about Tucson's water management during our field trip to Sweetwater Wetland, about which I wrote in [my most recent Reflections essay](#). Several students

took advantage of the opportunity to attend the [2026 WRRC Annual Conference](#) to hear the many experts speak about water and the tech, mining, and energy industries.

By design, enrollment is open to graduate students from any program; there are no course prerequisites. Part of the excitement for me as we begin each semester is discovering the interests and backgrounds of the students. Each student contributes to the interactive course experience through participating in discussions and presenting their research results to the class. Paper presentations educate fellow students and me on timely issues. Topics this semester included rural and urban water management, efforts to treat emerging and unregulated contaminants, the role of Tribal Nations in responding to low Colorado River flows, water quality implications of uranium mining, and more.

It is gratifying that guest speakers are willing to give their time to educating the next generation of water professionals and leaders. Speakers routinely express their appreciation of the students' active engagement and penetrating questions, and the students greatly appreciate learning from them.

As I reflect, I am very glad that I added teaching this graduate policy course to my professional activities. Each Spring, I learn from the students and the speakers. Like the students, I benefit from the up-to-date content shared. And I carry class lessons and discussion into my own engagement and outreach activities. In fact, I use the slide from the first class meeting that lists the various factors impacting water policy and management in almost every presentation I make. Indeed, the legal framework and public values are highly determinative of the state of water policy and management in Arizona and elsewhere. Context includes the water cycle, geography and jurisdictional settings, and the complexity of the wicked water problems we collectively seek to address.

Students are asked to fill out course evaluations each semester. While I have not yet seen their anonymous feedback shared through the survey portal, I was heartened by unsolicited notes of thanks students wrote to me at the end of the semester, a sampling of which I provide below.

Water policy and management reflect many determining factors

- Resource Availability
- Location of water demands and supplies
- Economics
- • Historic and Current Legal/Institutional Framework
- The nature of involvement of multiple governmental and non-governmental entities, including the extent of centralized versus decentralized decision making
- • Politics of Area
- Public values and socio-cultural factors
- Historical context
- Information
- Etc...

Importance of Context

Megdall, Graduate Water Policy class, January 16, 2026

“Thank you for all the work you put into getting outside speakers. It made the class really special...”

“Thanks so much for an excellent kickoff to grad school.”

“Thank you for sharing your experience and connecting us with so many water experts.”

“We are so lucky to have these amazing speakers that range so many sections of the water realm.”

“This class has been immensely rich in knowledge, connecting us students to your vast network.”

“This has been one of my favorite classes I’ve ever taken.”

Among the most satisfying aspects of teaching this class is observing former students' professional advancement and accomplishments. In fact, two of this semester's guest speakers took this class when they were graduate students. Educating the next generation of water professionals and leaders is what university education is all about. With another semester in the books, I am pleased to have contributed to student understanding of complex water challenges and opportunities to address them.

