

Edward McCorkindale

705 La Veta Dr. NE, Albuquerque, NM 87108 • Phone: 413.885.7479 • emccorkindale@unm.edu

Academic Overview: Student, Research Assistant

- Professional graduate student in water resources and public administration, with focuses in hydroscience and dispute resolution, and conducting institutional/policy analysis research.
 - Seeking opportunities for transitioning to and applying for PhD programs in ecology, environmental science and management, and environmental policy. Research interests include wildfire management policy, payment for ecosystem services, conflict and dispute resolution, and institutional analysis.
-

Education

University of New Mexico, Albuquerque, NM, Dual Masters of Water Resources and Public Administration (Fall 2015), Current GPA: 4.12

Selected Courses

Completed

- Water Resources – Contemporary Issues
- Water Resources – Models
- Water Resources – Field Problems
- Climate Dynamics
- Hydrogeology
- Program Evaluation
- GIS – Water Resources
- River Restoration
- Practice of Negotiation and Public Dispute Resolution
- Strategic Policy Analysis and Implem
- Freshwater Ecosystems

- Public Budgeting and Finance
- Fact Finding and Arbitration
- Environmental Policy and Nat Res Man
- Graduate Teaching I
- Public Management & Policy
- Institutional Development & Behavior
- Physical Hydrology

In-Progress

- Designing Applied Research
- Research Methods for Public Managers
- Independent Study: Institutional Analysis of Irrigation in New Mexico (Proposed)

Project and Writing References (Unpublished)

- “Modeling of Future Water Balance in the Middle Rio Grande” (J. Hollberg, E. McCorkindale, and G. Rodriguez). WR 571, Fall 2012. *Grade: A+*. [Link](#)
- “Watershed Assessment of the Gila River, the San Francisco River, and Tributaries” (group writing assignment). WR 573, Summer 2013. *Grade: A+*.
- “Review of Published Literature on Utilizing Conflict Resolution in Program Evaluation.” PADM 522, Fall 2013. *Grade: A+*. [Link](#)
- “Review of Published Literature on Disturbance-Adapted Ecosystems: focus on southwestern region of the United States.” CE 598, Spring 2014. *Grade: A+*. [Link](#)
- “A Review of a Case Study in Requirements of the Americans with Disabilities Act.” PADM 525, Summer 2014. *Grade: A+*. [Link](#)
- “Group Facilitation as an Investigative Problem-Solving Technique (Self-Assessment #7).” PADM 590, Fall 2014. *Grade: A+*. [Link](#)
- “Review of Hydrologic and Sediment Changes after the 1988 Yellowstone National Park Fires.” WR 576, Spring 2015. [Link](#)

University of Massachusetts, Amherst, MA, B.S., Natural Resource Studies (2009)

Selected Courses

- Intro to Microeconomics
- Marxian Economics
- Natural Resource Economics
- Intro to Econometrics
- Calculus I, II, and III
- Physics I and II
- Chemistry I
- Intro to Ecology
- Biodiversity
- Wildlife Conservation
- Ecosystem Management
- Human Dimensions of Nat Res Man
- Dynamics and Man of Wildlife Pop
- Intro to Political Theory
- American Politics
- American Foreign Policy
- Environmental Policy
- Comparative Politics
- Public Administration
- Int'l Environmental Politics and Policy
- Intro to Statistics for Life Sciences
- Intro to Spatial Information Technology
- Introduction to GIS and GIS Lab

Academic Experience

Water Resources Program, UNM, *Research Assistant* (0.50 FTE), 2014 – 2015

Teaching Assistant for WR 572 “Models”

- Course Description: Practical aspects of the different technical models used by water resource professionals: hydrological, economic, ecological, etc. Students use models to solve problems. Emphasis on oral, written and graphic communication.
- Guided and troubleshoot use of system dynamics modeling ([PowerSim](#)).
- Tutored and graded homework assignments involving surface water, groundwater, and economic numerical and conceptual models.

Other Tasks

- Research of funding and governance mechanisms for watershed restoration in New Mexico.
- Revisions and updates to the Water Resources Program website.
- Informal mentoring and advising for students in the Water Resources Program.

UNM Shared Knowledge Conference, Poster Session (Competitive), “*Linking Forests to Faucets: Investigating Alternative Approaches for Securing Long-Term Funding for Watershed Restoration in New Mexico.*” 4/23/2015

Peer Mentorship, Project for New Mexico Graduates of Color, *Mentor*, 3/2015 – Present

Student Simulation Competition, Network of Schools of Public Policy, Affairs, and Administration, *USC Price, Los Angeles, CA*, 2/28/2015

This daylong event brought together [graduate students at NASPAA schools](#) to analyze a current [health policy problem](#) and present their solutions to a panel of [judges](#). The competition featured the ReThink Health simulation, which required students to apply the skills they have learned in the classroom and implement systems thinking. This was a transformative experience for students and they showcased their leadership skills, critical thinking abilities, and collaborative decision making.

Human Dimensions of Coastal and Marine Ecosystems Program, University of Massachusetts, Amherst, *Research Assistant*, 2008 – 2009

Responsibilities

- Worked with Masters and PhD researchers to organize several research surveys related to utilization of recreation resources in the Florida Keys.
- Maintained records of returned survey responses and regularly checked for and corrected discrepancies between actual returns and record of returns.
- Assisted with survey mailing for a PhD dissertation research project.

Grants

FY2015 Student Water Research Grant, New Mexico Water Resources Research Institute (September 2014 – June 2015); Faculty Advisor: Robert Berrens, UNM. Title of Project: “Linking Forests to Faucets: Investigating Alternative Approaches for Securing Long-Term Funding for Watershed Restoration in New Mexico.”

Due to a mix of inter-related human and natural factors, such as climate change, drought, beetle damage, 20th century fire suppression policy and associated fuels build-up, and the expansive growth of the Wildland-Urban Interface (WUI), many montane forests in New Mexico (NM) and elsewhere in the western United States (US) have become increasingly susceptible to high-severity wildfires. Critical sources for public drinking water systems often originate in montane forests, where wildland fires can alter hydrologic systems, and degrade watersheds, while creating significant runoff, debris, and water quality impacts downstream. As the impact of high severity wildfires expands significantly beyond the proximal burn area, the scale of institutional arrangements does not match and old rules for forest management and wildfire risk mitigation often fail. Recent efforts in New Mexico have sought to bring together land owners and managers, water users, and other stakeholders to address forest management and watershed restoration at these new regional scales. Current forest and watershed efforts are not sufficient to affect high wildfire risk. A critical issue is the creation of sustainable, long-term funding mechanism for financing greatly expanded watershed restoration efforts to mitigate wildfire risk.

There have been a number of recent efforts in Middle Rio Grande of NM, and surrounding forests and watersheds of northern New Mexico targeted at securing funding and increasing the rate of forest and watershed restoration to mitigate the risk of high severity wildfires. These efforts have happened at several different scales. In the 2015 New Mexico State Legislature, several bills regarding watershed restoration were advanced, but eventually failed.

The objective of this research is to conduct a policy analysis of the feasibility, appropriate scale, and advantages and disadvantages of the primary alternative institutional arrangements for securing long-term funding for NM watershed restoration. Borrowing heavily from the work of institutional scholar and Nobel laureate Elinor Ostrom, we apply a theoretical framework for looking at interconnected social-ecological systems (SES), the development of these policy problems, and the efforts to address them.

Training and Certifications

University of New Mexico, Academic Integrity & Research Ethics, Albuquerque, NM, Certification in Responsible Conduct of Research (1/9/2015; 4 years)