

# Jessica L. Lowrey

Western Water Assessment

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## **EDUCATION**

**M.S. Environmental Studies**, 2004. University of Colorado, Boulder, CO. **Cumulative G.P.A. 3.87**  
Thesis: Evaluation of the process and utility of science/policy assessments and development of criteria guiding the Western Water Assessment in effectively conveying scientific information to local water resources decision makers.

**B.S. Natural Resource Management**, 1999. University of Maryland, College Park, MD.

**Relevant coursework:** Water Resources: Water Law; Water Resources, Development and Management (Engineering and Economics); Hydrology; Applied Stream Ecology; Biology; Chemistry; Physics.

Policy: Policy, Science and the Environment; Decision Process; Data Analysis.

## **COMPUTER SKILLS**

MS Access, MS Excel, MS PowerPoint, MS Word, Adobe Framemaker, Corel Presentations, ArcView GIS, SPSS statistical package, Web site development including HTML.

## **WATER RESOURCES EXPERIENCE**

**7/04 – Present Professional Research Assistant, *Western Water Assessment, NOAA-CIRES Climate Diagnostics Center, University of Colorado, Boulder, CO.***

- Conduct extensive research on complex water resource policies in Colorado while gathering basic information about the water supply systems of municipal water providers and analyzing their vulnerability to drought.
- Communicate complex water and climate issues involving multiple stakeholders as the designer, writer and editor of a monthly Intermountain West Climate Summary for water managers in Colorado, Wyoming and Utah.
- Facilitate communication between scientists and water managers by organizing meetings and presentations.
- Edit and produce content for the Western Water Assessment website, and several brochures explaining Western Water Assessment research for the public, municipal water managers and agricultural water users.
- Maintain an Access database of contact information for all of Western Water Assessment's stakeholders.
- Strong interpersonal skills from working as a team on research projects and product development.
- Strong written and oral communication skills in both public outreach and scientific settings.

**5/03 – 8/03 Summer Intern, *Water Resources and Treatment Division of the Public Works and Utilities Department, City of Westminster, CO***

- Researched and analyzed the programs, policies and procedures of the Westminster water resources collection and treatment system operation.
- Analyzed the complex economic, political and scientific water quality issues surrounding the continued protection of Standley Lake, the water supply reservoir of Westminster, Thornton and Northglenn.

- Developed a series of policy questions for engaged parties to rank and answer before making decisions regarding their drinking water source.
- Researched and analyzed data on tap fees and rate structures for several metro Denver cities and prepared graphic results using Excel.
- Proposed internship and developed the research plan for the above projects.

### **Academic Research Projects**

#### **Land Use Planning As a Water Demand Management Tool in Colorado Springs, Team Research Project.**

- Assessed current water management policy issues in Colorado Springs.
- Developed a conservation policy to enforce outdoor water use restrictions for new single-family residences.

#### **A New Idea for Water Storage in Northern Colorado: Case Study of the Proposed Seaman Reservoir Expansion, Team Research Project.**

- Established a set of economic, engineering and environmental policy evaluation criteria for a water storage expansion project.

#### **Westminster Water Use Restrictions 2003: An Evaluation of the Intelligence Decision Process, Individual Research Project.**

- Researched and evaluated Westminster Water Resources Department's process of selecting and utilizing information as they developed a conservation policy proposal for water use restrictions.

#### **Analysis of Seven Qualities that Affect the Reliability, Resiliency and Vulnerability of Water Supply Systems of Cities in the Colorado Front Range, Individual Research Project.**

- Created a quantitative vulnerability assessment framework useful to Colorado water managers in assessing the ability of their city's current or future water supply system to withstand a meteorological drought.

#### **A Case Study of Two Groundwater Aquifers in the Western United States: High Plains Aquifer and Madison Aquifer, Independent Study Project.**

- Evaluated and compared hydrological features, water supply capabilities and current environmental impacts of two Western aquifers.

#### **Effects of the Lyons Wastewater Treatment Discharge on the Water Quality and Benthic Invertebrate Distribution of the St. Vrain River, Team Research Project**

- Performed a scientific analysis of water quality of the St. Vrain using several chemical and biological parameters.

### **COLLEGIATE ACTIVITIES**

Organized a Professional Advisory Committee for Environmental Studies graduate students to facilitate mentoring relationships between students and professionals to improve the structure and content of our graduate education.

### **PROFESSIONAL ORGANIZATIONS**

Colorado Section of American Water Resources Association

Colorado Lake and Reservoir Management Association- Conference Committee.

**OTHER WORK EXPERIENCE**

**Biological Technician, Joshua Tree National Park, CA.**

**Interpretive Park Ranger, Wind Cave National Park, SD.**

**Education Director, ECO Recycling Yard, University of Maryland.**

**Volunteer Research Assistant, Patuxent Wildlife Research Refuge, MD.**

**Environmental Day Camp Counselor, Stonybrook-Millstone Watershed Association, NJ.**

**OTHER SKILLS AND HOBBIES**

Yoga, Backpacking, Wildlife and Plant Identification, Snowboarding, Cross Country Skiing, Mountain Biking.

Volunteering with Boulder County Project Work Together and Greenwood Wildlife Rehabilitation Sanctuary.