WSRA Grant: Final Report

November 5, 2015

Water Diplomats: University Students & the State Water Plan: Education, Outreach &

Public Engagement

Applicant: Metropolitan State University of Denver One World One Water Center for

Urban Water Education and Stewardship

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Amount of Grant: \$28,875

MSU Denver's One World One Water Center for Urban Water Education and Stewardship (OWO) along with faculty at Colorado Mesa University in Grand Junction, CSU in Ft. Collins. CU Boulder, CU Denver, the School of Mines and MSU Denver collaborated during the Spring of 2015 to plan a weekend of water education events, lectures and workshops tailored for students to learn about Colorado water law, hydrology, climate, and weather, culminating with an overview of the new State Water Plan. OWOW took the lead in arranging the details for this conference during the weekend of September 18-20, 2015 in Denver at MSU. The different faculty members at the six different universities contacted students in April of 2015 to inform them of the conference and the application process. More than 40 students applied by May 1. The conference had a limit of 30 students so a wait-list was developed after the first 30 students applied. Each student had to send in an essay with their application as well a \$20 application fee. By August 1, the first 30 students who applied were accepted.

The students were invited to spend the weekend in Denver, to learn all about water issues facing the state, and the State Plan. The students knew that they would be staying at the hotel on the MSU Denver campus, attending lectures across the city and that the weekend would culminate with each student working on a presentation on the State Water Plan to take back to their campuses and communities. Each student applied for a work-study stipend that would be paid after they returned a report to OWOW on their respective presentations in their communities.

The students arrived Friday, Sept 18 by 6 pm at the Marriott Springhills Suite Hotel on the MSU Campus. The students registered for the weekend, signing waivers and supplying the documentation needed for mileage reimbursement and payment of their work-study stipend. At registration, the students received a backpack with a water bottle, flash drive, notebooks and pertinent materials for the weekend's presentations. The flash drive was loaded with multiple resources that included reports from CWCB, links to the Colorado Water Plan, all the power points used by the faculty over the weekend and videos such as the South Platte Basin's State Plan video. They received copies of CFWE's Colorado Water Law publication as well as the Headwaters issue focused on the State Plan. Additional articles were also provided.

After dinner and introductions, Tom Cech, Director of OWOW, gave an overview of the weekend, goals and objectives. Dr. Elizabeth (Lisa) McVicker, Associate Professor at MSU Denver, then presented on Colorado Water Law and the State Water Plan. Dr. Gigi Richard from Colorado Mesa University ended the evening with a presentation on hydrology, climate and weather and the impacts on Colorado's water supply. Nona Shipman of OWOW and Hannah Holm of the Colorado Mesa University Water Center answered questions.

On Saturday, the students met in the hotel lobby for a morning of activities and lectures. The students were divided into three groups for a "scavenger hunt," every "find" was related to water studies and the state plan. One group started at Confluence Park where Tom Cech and Jeff Shoemaker of the Greenway Foundation lectured and fielded questions. One group started at Union Station where the Colorado Foundation Jennie Geurts guided talked about Colorado water issues and education. One group started at Coors Field where an employee from EarthForce spoke on history and water issues from a scientific point of view. Each group then rotated to the other locations over the course of the morning. (The grant included a \$1000 contribution to each of these three groups, each of which offered their time and expertise not only during the conference but to help with preparations as well.)

At 12:30, all the students met at the Wyncoop Brewery where lunch was served and a speaker from the Colorado Chapter of the American Water Resources Association spoke to the students about her experience finding a career in water administration, about AWRA and its benefits, and answered questions. After lunch and the AWRA talk, the students took a tour of the sustainable brewery operations at Wyncoop.

The students reconvened on Saturday evening back at the hotel for dinner, additional discussion, and a workshop. The students divided into five groups and worked on their ideas for their presentations as a team. Faculty and staff assisted with this group work. Hannah Holm presented on how the Colorado River Basin Roundtable approached the State Plan and Lisa McVicker reviewed the highlights of the South Platte Basin and Metro Basin Basin Implementation Plan and how this figured into the State Plan.

On Sunday morning, the students met again in the same lecture room at the hotel and each team presented on the highlights of their work from the night before. The plans for the presentations they intended to make were clear and on-point. Faculty, staff and other students made suggestions.

The students departed by noon on Sunday, each student aware that they needed to present to a class or community organization about Colorado water issues and the State Plan and submit a report summarizing their presentations by November 1 in order to earn their full work-study stipend. The students were complimentary about the weekend and each expressed gratitude for having been included.

Following is a summary on each student who has submitted his or her report to date; this includes: his or her major, institution and presentation. These students came from a broad range of disciplines, were both graduate and undergraduate students, and, as has been mentioned, from six different institutions.

An attachment to this email includes **each** student's full report. Out of the 30 students that were accepted, 29 attended (one student was ill and did not attend). Out of the 29 who attended, one student was unable to present, and therefore was only paid for attending the workshop (\$150). Two students had deaths in their families or other events that prevented them from presenting before November 1. We are allowing them to submit their reports by the end of November.

Water Diplomats: Summary (See detailed reports as well as power points, posters and flyers in the other attachments accompanying this report).

- 1) Emilie Abbott; Environmental Engineering, CSU. Emilie and several of her classmates from CSU formed a joint panel and presented to students and clubs in their respective departments (civil/environmental engineering and sociology.)
- 2) James Bright; Environmental Science, Pollution Control, Political Science; CO Mesa University. Presented in his class "Water and Waste Water Treatment."
- 3) Brent Brouillard; Civil and Environmental Engineering Graduate Student; CO School of Mines. Wrote an article for the College Newspaper (The Oredigger). The link to the article is in his report.
- 4) Josie Carlson; Mechanical Engineering; Partnership program between CU Boulder and CO Mesa University; presented to a group of ranchers who are part of a reservoir company in the headwaters of the Yampa River.
- 5) Lisa Cherry; Environmental Engineering Science Graduate student; CO School of Mines; presented to two student groups: the kayak club and the outdoor rec. department.
- 6) Mark Domingo; Psychology major; CO Mesa University. Presented to the International Student Alliance.
- 7) Jonathan Dubinsky; Engineering and Applied Science; PhD student; CU Denver. Presented to the Rio Grande Conservation Roundtable Meeting at their monthly meeting. He also presented to a student organization, Engineers for a Sustainable World.
- 8) Katherine Ebeling; Geochemistry graduate Student; CO School of Mines; presented to CO School of Mines graduate students all with a strong interest in climate change.
- 9) Noelle Fillo; Environmental Engineering and Ecological Engineering; CSU; presented to a CSU class entitled "Colorado Water 101: Wicked Problems." Panel discussion.
- 10) Zachary Jones; Civil and Environmental Engineering; CO School of Mines; presented to a lab group of professors and graduate students.
- 11) Chelsea Champ Lopez; Environmental Sociology; CSU; participated in CSU panel with fellow CSU students.
- 12) Hannah Love; Sociology; CSU; participated in CSU panel with fellow CSU students.
- 13) Wiley Lucas; Earth and Atmospheric Sciences; MSU Denver; Presented to a student group: Future Water Walkers.
- 14) Will McDonald; Environmental Science Restoration Ecology; CO Mesa University; presented to a group of people gathered to watch "The Primary Source," a movie about the largest tributary to the Amazon. Group was sponsored by CO Mesa University Sustainability Council.
- 15) Samantha Mikesell; Land Use; MSU Denver; wrote an article for her company's newsletter; she works for an environmental equipment company in Denver.

- 16) Christopher Pack; Environmental Science, Ecosystem Restoration; Watershed Science Minor; CO Mesa University; presented to his Environmental Science / Ecosystem Management Lab class.
- 17) Kameron Paige; Social Work; CO Mesa University; presented to his Speechmaking class.
- 18) Maryann Pournasiri Poshtiri; Environmental Engineering and Sustainability; CU Denver; presented to a group of engineering students at CU Denver, all with various degree programs.
- 19) Tony Tran; Civil Engineering graduate student; CU Denver; presented at a neighborhood block party in his neighborhood in Aurora.
- 20) Kate Wellens; Environmental Studies; CU Boulder; presented to a class in the education department: Teaching and Learning Earth Systems.
- 21) Ben Wise; Geography and Environmental Science graduate student; CU Denver; Ben wrote an article and paper for a class publication.
- 22) Nathan Yudnich; Civil Engineering and Construction; MSU Denver; pesented to the MSU Denver Water Association of Student Stewards Urban Program; plans to also have a radio discussion on Metro's radio station.
- 23) Zaira Ventura; Environmental Science; MSU Denver; presented with Nathan; see above.
- 24) Joel Miscall; Chemistry/Math; MSU Denver; presented to 15 of his colleagues in his former job at Naked Juice during their monthly safety meeting.
- 25) Andrea Gonzalez; Computer Information Sciences; MSU Denver; Andrea will write an article for the OWOW monthly newsletter.

Thank you. Lisa McVicker 720-480-9290