

### **Instructionally Related Activities Funds Request Spring 2015**

Signed in as: gina.dossin | Signout

Workflows

**Current Tasks** 

My Workflows

My History

### IRA Funds Request for Owens Valley Field Trip for Water Resources Management (ESRM 463)

### **Instructionally Related Activities Funds Request Summary**

Project Sponsor	Linda O'Hirok	
Activity Title	Owens Valley Field Trip for Water Resources Management (ESRM 463)	
Activity/Event Date	April 3-5, 2015	
Date Funding Needed By	February 1, 2015	
Previously Funded?	Yes	
Semester/Year	Spring 2013	
Proposal #	0530	
Report submitted for previously Funded Activity?	Yes	
Report submitted for previously Funded Activity	OHirokirareport05301.pdf	
Additional Report #1		
Additional Report #2		
Additional Report #3		
Additional Proposers		
Academic Program(s) / Center Name(s)	Environmental Science and Resource Management	
Estimated total Course Fee revenue	n/a Proposing course fee for 2015-2016	
Amount Requested from IRA	\$5430	
Estimated Number of Students Participating	25	
Conditions and Considerations	Field Trip	
Brief Activity Description	The students in ESRM 463 Water Resources Management will participate in a three-day field trip (April 3-5, 2015) to the Owens Valley to explore the environmental and social impacts of the City of Los Angeles (LA DWP) extraction and transportation of water via the LA Aqueduct to that city. The trip will include visiting Owens Lake, the Owens Valley Visitor Center, Lower Owens Restoration Project (LORP), LA DWP Owens River Diversion, Alabama Gates, Southern California Edison Rush Creek Power Plant, Mono Lake and Visitor Center, Rush Creek Restoration, Paiute Reservation Restoration Pond, and Bristlecone Pine Forest.  In preparation for the field trip, students will read their textbook and watch the film Cadillac Desert about the history of the City of Los Angeles, its	

explosive population growth in the late 1800's, and need to secure reliable sources of water. The trip will include lectures on historical and current water and environmental issues in the City of Los Angeles and the Owens Valley, and discussions on policies, politics, conflicts, conflict resolution, the Public Trust Doctrine and the environment, science and climate change.

The guest presenters include Jeff Nordin, a biologist from LA DWP, and Michael Prather, an Inyo County Water Commissioner, who will show us the Lower Owens River, diversion, and Alabama Gates, and speak about the history of Owens Valley and the controversies of dewatering and restoration. Larry Freilich from Inyo County Water Department and Steve Smith from the Southern California Edison Rush Creek Power Plant will discuss energy, climate change, and the restoration of the Owens River. Bartshe Miller from the Mono lake Committee, will give us a tour of Mono Lake and Rush Creek restoration and talked about the lowering of Mono Lake and its fragile ecosystem, the Public Trust Doctrine, and the California Supreme Court decision to protect Mono Lake. Hillary Behr, an AmeriCorp intern at the Bishop Paiute Tribe Reservation will show us the restoration pond to protect the endangered Owens Valley pup fish. Lastly, we will tour the ancient Bristlecone Pines and discussed how the 4000 year old trees provide us with historical evidence of climate change.

The class will receive a summary of the history of water exploitation in the Owens Valley. For example, in 1900, William Mulholland, Chief Engineer for the City of Los Angeles, identified the Owens River, which drains the Eastern Sierra Nevada Mountains, as a reliable source of water to support Los Angeles' growing population. To secure the water rights, Los Angeles secretly purchased much of the land in the Owens Valley. In 1913, the City of Los Angeles completed the construction of the 223 mile, gravity-flow, Los Angeles Aqueduct that delivered Owens River water to Los Angeles. As the population continued to grow, Los Angeles mined the groundwater in the Owens Valley and constructed a second aqueduct to siphon water from the Mono Basin. The catastrophic environmental consequences of dewatering the Owens Valley and Mono Basin resulted in devastation of the Owens Lake ecosystem and significant lowering of Mono Lake.

# Learning Outcomes and Relation to IRA to Course Offerings

The field trip will address the goals and objectives of Water Resources Management. Students will present posters and provide demonstrations at the 3nd Annual Water Symposiums for Madrona Elementary School and Redwood Middle School in Thousand Oaks, to formulate connections between theory taught in the classroom and things seen and concepts covered during the field trip. Students will demonstrate that they understand the factors influencing water availability in the Southern California and particularly Los Angeles, understand the concepts and principles of water and watershed management, can specify and quantify the important components of water management systems, can define water management problems, can predict external effects, can identify possible causes, and propose and evaluate solutions from both environmental science and resource management perspectives. They will also articulate the process steps of environmental conflict resolution and how the conflicts span borders and a understanding of the role of language and dialogue in policy development. The Owens Valley field trip will provide students an opportunity to understand the objectives of the City of Los Angeles, as well as the politics/negotiations required to accomplish these goals, and negotiate water quantity and quality for their constituents and protect the environment.

Specific Learning Outcomes include:

- -understanding the links between ecosystem goods and services and human well-being
- -evaluating the role of politics in conflict resolution specific to water as a limited resource
- -appreciating the effects of community engagement and stewardship
- -recognizing the impacts of climate change on society and ecosystems

#### Description of Assessment Process

I will assess their learning by evaluating their posters and process demonstrations at the Water Symposium, as well as giving a written exam. They will provide an evaluation/reflection of their experiences related to the field trip as well as presentations and interactions with elementary and middle school students. I have been quite impressed by the application of concepts they had learned as well as their creativity towards water conservation.

I have learned that students are passionate about and understand issues related to water. And they recognize that climate change and overpopulation need to be addressed to adequately conserve and equitably distribute this vital resource. In particular, the unprecedented drought we are currently experiencing requires that students understand these complicated issues and are able to articulate their concerns and consequences.

### **Activity Budget**

### OwensValley2015travelbudget042814.xlsx

#### CIA Budget

|-

#### **CIA Proposal**

|-

### Course Syllabus

\_

### CIA Certification

I am submitting a course fee request for Water Resources Management (ESRM 463) for \$25/student. If approved the course fee would not be

### Other Sources of Funding

implemented until the 2015-2016 academic year.

At present, I am requesting that IRA fund 100%, \$5430, of the Owens Valley Field Trip.

## Target Audience/Student Marketing

The target audience is 25 students in Water Resources Management (ESRM 463) and the Owens Valley Field Trip is a required component of the course. ESRM majors and minors comprise the majority of the student population. But there are many students from other disciplines (Biology, Chemistry, Communications, and English) interested in understanding water resources availability, quality, distribution, and the politics that inevitably determine where the water goes and what it costs. Students recognize the importance of this topic during this unprecedented period of extreme drought and many are seeking employment in water resources fields.

### Bring Benefit to Campus

One goal of this course is to provide outreach opportunities to local elementary and middle schools. Our CSUCI ESRM 463 students are the mentors and organize the Annual Water Symposium for Madrona Elemetary School and Redwood Middle School students where our students design demonstrations and hands-on activities to educate (and engage) younger students about water resources, water issues, pollution, and conservation practices. The benefit of these outreach activities to the CSUCI campus is that it provides awareness for students, teachers, staff, administrators, and often parents from our nearby schools that CSUCI is our local four-year public institution of higher learning and CSUCI is investigating topics important to our community and sharing what we have learned to better able all of us to make educated decisions. Increasing the visibility of CSUCI outside of campus is invaluable. I have found that our activities and the Water Symposium off-campus lead to many discussions about CSUCI and our mission. Our students are not only educating the public about important issues but are also effective CSUCI ambassadors promoting community partnerships.

### Sustainability

The sustainability of our water resources is essential to our communities and ecosystems. The impact of climate change on our water resources must be addressed to develop a sustainable plan. Students learn about the limitations of our water resources globally, regionally, and locally, and investigate how CSUCI is continually working to reduce fresh water consumption, plant drought tolerant vegetation, and utilize recycled water. The effect of climate change on our future water resources Sustainability also includes the restoration of Long Grade Creek where ESRM 463 students will participate in planting, monitoring, and maintenance of the restored stream.

Program Chair/Director	sean.anderson
Academic Affairs AVP	karen.carey
Acknowledgement	I acknowledge that I have reviewed and accepted the Conditions and Considerations herein. Please check off boxes as appropriate.

### **Program Chair/Director Approval**

Approval	_	
Name	_	
Date/Time	_	
Validation	_	

### **Academic Affairs AVP Approval**

Approval	_
Name	-
Date/Time	-
Validation	-

CI Home	Emergency Management   Legal Notice   Policies
	One University Drive - Camarillo CA 93012 USA - Phone: (805) 437-8400 © 2014 CSU Channel Islands. All rights reserved.