# **Instructionally Related Activities Funds Request Spring 2018**

▼ Submitter	
Submitter Name	
Linda O'Hirok	
Submitter Email	
linda.ohirok@csuci.edu	
▼ 1. Basic Details	
Activity Title	
ESRM 463 Owens Valley Field Trip March 2-4, 2018	
Activity/Event Date	Date Funding Needed By
March 2-4, 2018	January 15, 2018
Previously Funded?	
○ No	
• Yes	
▼ Previously Funded Proposal	
	Dramagal # (if Irmanum)
Semester/Year Spring 2017	Proposal # (if known) 0859
Spring 2017	
Report submitted for previously Funded Activity?	
O No	
Yes	
Please upload a copy of the report	
ira-report-0859 ESRM 463 Owens Valley Field Trip-2017.doc	<u>x</u>
Additional Report #1	
Additional Report #2	
Additional Report #3	
Additional Proposers	
Additional Proposers	
Academic Program(s)/Center Name(s)	
ESRM	

Estimated total Cour	rse Fee revenue
\$1500	
Amount Requested f	rom IRA
\$\$4460	

Estimated Number of	Students Participating
25	

### 2. Brief Activity Description

Describe the activity and its relationships to the educational objectives of the students' program or major

#### **Brief Activity Description**

#### DESCRIPTION OF THE ACTIVITY;

The students in ESRM 463 Water Resources Management will participate in a four-day field trip (March 2-4, 2018) 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, June Mountain Overlook, 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 Bill Deane and Lori Dermody, biologists 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 Stotko 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 talk 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 discuss 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. The viable agricultural community in the Owens Valley was effectively eliminated. To protect the Mono Lake ecosystem, the Mono Lake Committee brought suit against the City of Los Angeles. In 1983, the California Supreme Court enforced the Public Trust Doctrine over water resources and ruled that the state has an obligation to protect Mono Lake, which required reconsideration of past water allocation decisions. The City of Los Angeles had to provide water for the environment. After 100 years, the controversy is still unresolved and vigorously debated.

Students will visit critical water supply facilities (aqueduct and reservoirs) for the City of Los Angeles and restoration sites, and discuss factors affecting reliability, safety, quality, quantity, and cost of water resources with respect to mitigate environmental impacts.

The field trip will address the goals and objectives of Water Resources Management. Students will present posters and provide demonstrations at the 5th Annual Water Symposium 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.

Funding Request for Water Resources Management Owens Valley Field Trip for 27 students and faculty March 2-4, 2018 The least expensive and I believe most advantageous place to stay is at the White Mountains Research Center in Bishop (operated by UCLA) which will significantly reduce our lodging costs from lodging in Bishop (from \$2475 to \$1350), and a bonus will be that experts on staff will be available for lectures.

Lodging: White Mountains Research Center @ \$25/night for 2 nights

27students/faculty \$ 1350

Two nights lodging for the bus driver at Rodeway \$ 250

Food: Staying at the WMRC is four miles from Bishop so students will not have to access to restaurants and food markets in Bishop. Fortunately, they will not have access to bars. Therefore I request a food allocation of:

Transportation: Roadrunner \$ 3300

Supplies for CSUCI Madrona Water Symposium \$ 250

\$ 5960

minus Course Fee \$ 1500 IRA Funds \$ 4460

## 3. Learning Outcomes and Relation of IRA to Course Offerings

All IRAs must be integrally related to the formal instructional offerings of the University and must be associated with scheduled credit courses.

- 1. Please list all classes that directly relate to the proposed activity.
- 2. For each class listed, describe in detail how exactly the IRA activity will be integrated with the class's activities, how often/ on what expected date(s), and to what extent

#### **Learning Outcomes and Relation of IRA to Course Offerings**

ESRM 463 Water Resources Management

Learning outcomes for the course:

- -understand the concepts and principles of water and watershed management and how land use affects streamflow, soil loss, water quality, and habitats
- -specify and quantify the important components of water management systems
- -describe the effects of alternative practices on system behavior, particularly Best Management Practices
- -understand the water distribution history and watershed political boundaries to evaluate potential distribution

I have learned that students are passionate and want to comprehend 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 have experienced requires that students understand these complicated issues

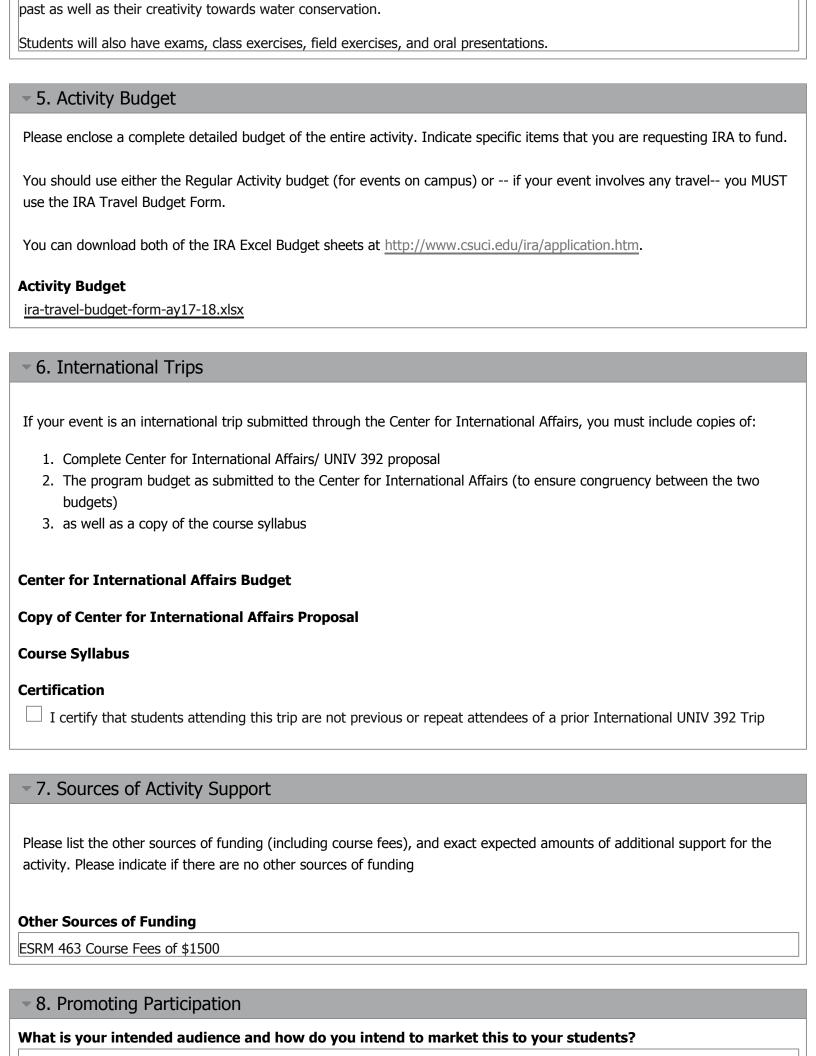
# 4. Activity Assessment

Describe the assessment process and measures that the program will use to determine if it has attained its educational goals.

Please note that a report will be due at the end of the semester.

#### **Description of Assessment Process**

I will assess their learning by evaluating their posters and process demonstrations at the CSUCI Madrona Water Symposium, as well as giving a written exam. I have been quite impressed by the application of concepts students have learned in the



The primary target audience for ESRM 463, Water Resources Management, and this activity are ESRM students with a focus in Resource Management as well as Environmental Science. However, students from a variety of majors such as Biology, Communication, English, Business, Political Science, and even Art enroll in this course.

There will always be a need and thus careers for those with expertise in water resources management. Understanding water resources issues, especially water quantity and quality as well as ensuring a balance among water resources for the environment, human consumption, industry, and agriculture are essential to sustain society.

#### If this is an event that is off campus, how do you plan to bring back the benefit of this event to campus?

These activities, the Owens Valley field trip and the CSUCI Madrona Symposium, provide students the opportunity to interact with water distribution managers, biologists, hydropower engineers, and those who want to preserve the integrity of the environment for nature's sake. Students see firsthand the impacts of mismanagement, the demise of Owens Lake, and mitigation, judicial restrictions on diverting water from Mono Lake.

The CSUCI Madrona Water Symposium provides CI students the opportunity to share their knowledge of water issues by providing specific demonstrations and explanations to Madrona and Redwood Middle School. CI students must understand the processes and issues to be able to clearly present it to elementary and middle school students. The objective is to engage and mentor the younger students so that they will not only understand processes and linkages but more importantly to motivate and excite them to continue to explore the "world of water". Please see attached video event.

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If appropriate, indicate how the content or delivery of the project promotes sustainability at CI.

Sustainability
There will always be a need and thus careers for those with expertise in water resources management. Understanding water resources issues, especially water quantity and quality as well as ensuring a balance among water resources for the environment, human consumption, industry, and agriculture are essential to sustain society.
▼ 10. Approval and Acknowledgement
Program Chair/Director
Anderson, Sean S
Dean
Meriwether, James H
Conditions and Considerations
Artist/Performer/Speaker Fees & Honoraria: On the Activity Budget, please indicate whether the vendor's price was
set by you/CI Representative, or is a fee that was set by the vendor.
Large Event: For a large event, consultation with the campus Event Coordinator's office at (805)437-8548 is required.
Field Trip: Sponsor must comply with all policies found at:
http://www.csuci.edu/rm/programs/academic-field-trip-guidelines-and-forms.htm. If approved, Identified Risks of
Participation and Release Agreement must be submitted for each student to the Program Office (Public Folders-HR Forms).
Involves Human Subject Data Collection for Public Dissemination -Requires IRB Approval : If Project Sponsor
proposes to conduct research with human participants, the proposal may be subject to Institutional Review Board for the
Protection of Human Subjects (IRB) review. All research that involves any type of interaction with human subjects - from
simple surveys to complex biomedical procedures - must be reviewed and approved by the IRB prior to starting the research.
Data for "Public Dissemination" indicates interviews/surveys that result in a journal/poster session/newsletter, etc.
IT Requirements: If your activity has IT requirements, coordination with and approval from IT Administration is
required.
International Travel: Requires International Travel application be submitted to Center for International Affairs. Include
copy of CTA budget and course syllabus in your IRA application. Must utilize the University's Foreign Travel Insurance

rogram (FTIP) and follow all International Travel Guidelines listed at: http://www.csuci.edu/rm/insurance/foreign-travel.htm  Risk Management Consultation: Events that involve or engage students directly with a performer or artist (i.e. in a			
workshop or other than as a pa correspondence with Risk Mana	sive audience member) will require consultation with Risk Management.	Requires proof of	
	<b>Requirements</b> : Consultation and coordination with Facilities Services is	required.	
Acknowledgement			
I acknowledge that I have a appropriate.	eviewed and accepted the Conditions and Considerations herein. Please c	heck off boxes as	
▼ Chair Review			
Recommendation			
	e IRA Funds Request described on this page		
O I DO NOT recommend appr	val of the IRA Funds Request described on this page		
Comments			
Sean Anderson	Oct 18 2017		
▼ Dean Review			
Recommendation			
<ul> <li>I recommend approval of th</li> </ul>	e IRA Funds Request described on this page		
O I DO NOT recommend appro	val of the IRA Funds Request described on this page		
Comments			
Marion Adler	Oct 23 2017		