## 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
March 2-4, 2018

### Date Funding Needed By
January 15, 2018

### Previously Funded?
- [ ] No
- [x] Yes

### Previously Funded Proposal

<table>
<thead>
<tr>
<th>Semester/Year</th>
<th>Proposal # (if known)</th>
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<tbody>
<tr>
<td>Spring 2017</td>
<td>0859</td>
</tr>
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### Report submitted for previously Funded Activity?
- [ ] No
- [ ] Yes

Please upload a copy of the report

- [x] [ira-report-0859 ESRM 463 Owens Valley Field Trip-2017.docx](ira-report-0859 ESRM 463 Owens Valley Field Trip-2017.docx)

### Additional Reports
- Additional Report #1
- Additional Report #2
- Additional Report #3

### Additional Proposers

### Academic Program(s)/Center Name(s)
ESRM
<table>
<thead>
<tr>
<th>Estimated total Course Fee revenue</th>
<th>$1500</th>
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<tr>
<td>Amount Requested from IRA</td>
<td>$4460</td>
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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 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
- 27 students/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:
- $15/day/person $ 810
- 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
past as well as their creativity towards water conservation.

Students will also have exams, class exercises, field exercises, and oral presentations.

5. Activity Budget

Please enclose a complete detailed budget of the entire activity. Indicate specific items that you are requesting IRA to fund.

You should use either the Regular Activity budget (for events on campus) or -- if your event involves any travel-- you MUST use the IRA Travel Budget Form.

You can download both of the IRA Excel Budget sheets at http://www.csuci.edu/ira/application.htm.

Activity Budget
ira-travel-budget-form-ay17-18.xlsx

6. International Trips

If your event is an international trip submitted through the Center for International Affairs, you must include copies of:

1. Complete Center for International Affairs/ UNIV 392 proposal
2. The program budget as submitted to the Center for International Affairs (to ensure congruency between the two budgets)
3. as well as a copy of the course syllabus

Center for International Affairs Budget

Copy of Center for International Affairs Proposal

Course Syllabus

Certification
☐ I certify that students attending this trip are not previous or repeat attendees of a prior International UNIV 392 Trip

7. Sources of Activity Support

Please list the other sources of funding (including course fees), and exact expected amounts of additional support for the activity. Please indicate if there are no other sources of funding

Other Sources of Funding
ESRM 463 Course Fees of $1500

8. Promoting Participation

What is your intended audience and how do you intend to market this to your students?
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.

9. Sustainability

Sustainability

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

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

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 CIA budget and course syllabus in your IRA application. Must utilize the University's Foreign Travel Insurance
Program (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 passive audience member) will require consultation with Risk Management. Requires proof of correspondence with Risk Management.

- **Space/Facilities Services Requirements**: Consultation and coordination with Facilities Services is required.

**Acknowledgement**

- I acknowledge that I have reviewed and accepted the Conditions and Considerations herein. Please check off boxes as appropriate.

### Chair Review

**Recommendation**

- I recommend approval of the IRA Funds Request described on this page
- I DO NOT recommend approval of the IRA Funds Request described on this page

**Comments**

<table>
<thead>
<tr>
<th>Signature</th>
<th>Date</th>
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<tbody>
<tr>
<td>Sean Anderson</td>
<td>Oct 18 2017</td>
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### Dean Review

**Recommendation**

- I recommend approval of the IRA Funds Request described on this page
- I DO NOT recommend approval of the IRA Funds Request described on this page

**Comments**

<table>
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<tbody>
<tr>
<td>Marion Adler</td>
<td>Oct 23 2017</td>
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