



<http://www.csuci.edu/ira/index.htm>

**Application**  
**Instructionally Related Activities Funds Request**  
**2012-2013 Academic Year**  
**DEADLINE: Fall and Academic Year 3/31/12**  
**Spring 2013 deadline is 10/31/12**

Applications must first be sent to the appropriate program chair. Chairs will then recommend and route them to the Dean's Office for review and authorization. The Dean's Office will then forward them to the IRA Committee for consideration.

**Activity Title:** Water Resources (ESRM 463) and Water and Conflict in the West (Univ 298)  
**Joint** Field Study

Project Sponsor/Staff (Name/Phone): Don Rodriguez (x8494), Tracylee Clarke (x3305), Sean Kelly (x3309), Linda O'Hirok (x2696)

**Activity Title:**

Project Sponsor/Staff (Name/Phone):

Activity/Event Date(s):

Date Funding Needed By:

*\*\*Please Note that for Fall Requests the earliest that you will be notified of funding availability will be early June 2012 and for Spring Requests early January 2013.*

**Please check if any of the following apply to your IRA:**

- |                                                 |                                                                                                                                                           |
|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Equipment Purchase     | <input checked="" type="checkbox"/> Field Trip                                                                                                            |
| <input type="checkbox"/> Event                  | <input type="checkbox"/> Participant data collection for public dissemination, i.e. interviews/surveys that result is a journal/poster session/newsletter |
| <input type="checkbox"/> IT Requirements        | <input type="checkbox"/> Risk Management Consultation                                                                                                     |
| <input type="checkbox"/> International Travel   | <input type="checkbox"/> Late Submission                                                                                                                  |
| <input type="checkbox"/> Space/OPC Requirements |                                                                                                                                                           |
| <input type="checkbox"/> Infrastructure/Remodel |                                                                                                                                                           |
| <input type="checkbox"/> Other _____            |                                                                                                                                                           |

Previously Funded: YES NO Yes, Request # \_\_\_\_\_

\*If previously funded, please attach copy of IRA Report

Does your proposal require IRB (Institutional Review Board) approval: Yes No

Assessment submitted for previously Funded Activity: YES NO

Academic Program or Center Name and Budget Code:

Date of Submission: October 31, 2012

Amount Requested: \$9,200  
 (Should match item 2. E. on page 4)

Estimated Number of Students Participating: American Water Association field trip 43 students 4 adults (ESRM 463 and University 298). Metropolitan Water District field trip (3-days room and board) 23 students and 1 adult (ESRM 463).

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**Conditions and Considerations**

**Equipment Purchase**-If requesting large equipment, Project Sponsor must show proof of correspondence with OPC Administration. In addition, all other purchases must follow Procurement Guidelines.

**Events**-For a large event, consultation with the events coordinator is recommended.

**Participant Data Collection for Public Dissemination**-If Project Sponsor proposes to conduct research with human participants then it may be subject to IRB (Institutional Review Board for the Protection of Human Subjects) review. It is the Project Sponsor's responsibility to inquire with the IRB **prior** to IRA application submission to determine if the project is exempt from IRB review so that funding is not delayed. Please indicate on the cover page if your project is exempt from IRB review.

**Field Trip**-If approved, Identified Risks of Participation and Release Agreement must be submitted for each student to the Program Office (Public Folders-HR Forms).

**IT Requirements**-Requires proof of correspondence and approval from IT Administration

**International Travel**-Requires International Travel application be submitted to Center for International Affairs.

**Risk Management Consultation**-Requires proof of correspondence with Risk Management.

**Space/OPC Requirements, Infrastructure/Remodel**-Requires proof of correspondence with OPC Administration .

**Late Submission** - Requires explanation for emergency funding.

**Fiscal Management:** Project Sponsor's program will be responsible for all costs incurred over and above what is funded through the IRA award and will be responsible for seeing that any revenue that is intended to offset the amount of the IRA award is transferred accordingly.

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**Requirements and Signatures**

Please provide the following in your application:

1. **Brief Activity Description.** Describe the activity and its relationship to the educational objectives of the students' program or major.

These field trips will compliment two courses, Water Resources (ESRM 463) and Water and Conflict in the West (UNIV 298-SPIRaL Grant), an interdisciplinary course. The goal of these courses is to introduce students to the complicated distribution of Southern California's water supply systems and the challenges faced in delivering this vital resource. Approximately half of water that Southern California uses has traveled hundreds of miles from either the Colorado River or Northern California. Conflicts involving water quality and availability among water users are part of our regional history and our relationships with Canada and Mexico, with which we share water resources. Students in both ESRM 463 and UNIV 298 will participate in a one-day field trip to visit critical water supply facilities of local water purveyors in Ventura County and discuss the issues affecting reliability, safety, quality, quantity and cost of water resources. The trip includes visiting the Lake Bard Treatment Plant, Freeman Diversion Facility, the City of Oxnard Groundwater Recovery Enhancement and Treatment Desalter Plant, and Casitas Dam. Only ESRM 463 will participate in a three-day field trip which offered by the Metropolitan Water District, a regional water wholesaler, and is designed to show the Metropolitan Water District's 242-mile Colorado River Aqueduct. Facilities and sites include the pumping plant on Lake Havasu, Diamond Valley Lake, Lake Matthews Terminus Reservoir, Copper Basin, Parker Dam, and the Whitsett Intake Pumping Plant. Lectures and discussions will present historical and current water issues from statewide and local perspectives. Students will be exposed to the policies, conflicts, and science associated with water in the west.

2. **Relation to 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. Please list all classes that relate to the program proposed.

Water Resource Management (ESRM 463) This course will have representation of students from ESRM, Political Science, Biology, Political Science, Communication, and Business.

Water and Conflict in the West (UNIV 298). This course will have representation of students from ESRM, Political Science, Communication, and Business. This course is worth 3 GE credits and fulfills various GE Requirements.

3. **Relation to 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. Please list all classes that relate to the program proposed.

Water Resources Management (ESRM 463) addresses water management principles focusing on surface and groundwater hydrology; water conservation, and watershed development; water quality measurement and monitoring; water and wildlife/fisheries; and water sustainability, conflict, and water law. Students evaluate the implications of increasing water demands of municipalities, agriculture, industry and ecosystems on a limited resource with respect to increasing and shifting populations and climate change.

Students from the Water Resource Management course (ESRM 463) will act as peer mentors to the interdisciplinary teams in University 298. Students from ESRM 463 will provide the following expertise to their undergraduate peers:

- Understanding the concepts and principles of water and watershed management and how land use affects streamflow, soil loss, water quality, and habitats
- Specifying and quantifying the important components of water management systems
- Describing the effects of alternative practices on system behavior, particularly Best Management Practices
- Predicting the external effects of water management practices
- Identifying the scientific, social, and humanistic aspects of water management
- Identifying, locating, evaluating, synthesizing, and presenting current research and information on water managing issues
- Defining water management problems, identifying possible causes and proposing solutions, and evaluating proposed solutions from the perspectives of both environmental science and resource management
- Collecting, organizing, analyzing, interpreting, and presenting quantitative and qualitative data

Water and Conflict in the West (UNIV 298) is an intensive interdisciplinary, team-taught course that addresses the complexities of watershed science, policy, communication, and conflict. The approach taken in this course focuses on the integration of environmental science and resource management into public policy decisions and a deeper understanding of the conflicts over watershed management and resource allocation. Students will gain hands on experience and learn about contentious issues relating to water quality, rights appropriation, use, storage and conservation and their implications for water management conflict resolution and collaborative water policy development in the west. Through community service projects, guest speakers from the community, case study analysis and simulations, field trips and class projects, students will gain a thorough understanding of the complexities of water conflict in the West. Students will keep personal journals that: Articulate connections between the represented disciplines-watershed science, communication, conflict resolution, public policy, resource management and environmental history.

Students in both Water Resources Management and Water Conflict in the West and will be required to present posters and provide demonstrations of the hydrologic cycle and water quality monitoring at a Water Symposium (designed by CI students), for the University Prep Middle School that formulate connections between theory taught in the classroom and concepts covered during these extensive field experiences for a middle school audience that integrates concepts across disciplines. Posters will articulate:

- factors influencing water availability on the southern California coast and the impact of limited/polluted water resources on biodiversity/ecological integrity of this region
- policy as the art of possibility that requires adjustments on the part of various stakeholders to get broad political support
- the role of language and dialogue in escalation, maintenance, and resolution of water policy conflict and public water policy making
- the process steps of environmental conflict resolution regarding water issues in Southern California
- how water resource conflicts span across national borders, and engage the U.S. with Canada and Mexico

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 a report will be due at the end of the semester.**
5. **Activity Budget.** Please enclose a complete detailed budget of the entire Activity **bold** specific items of requested IRA funding. (Page 4)
6. **Sources of Activity Support.** Please list the other sources of funding, and additional support for the activity.
7. **Acknowledgment.** Project Sponsor and Program Chair acknowledge that they have reviewed and accepted the Conditions and Considerations detailed on page 2.

Signatures and Dates

Project Sponsor	Date
Program Chair/Director	Date
Academic Affairs AVP	Date

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ACTIVITY BUDGET FOR 2012-2013

1. Operating Expense Budget

A. Supplies	_____
B. Vendor Printing	_____
C. In-State Travel	<u>AWA sponsored one-day trip</u> <u>(ESRM 463 and UNIV 298)</u> <u>\$2000</u>
D. Out-of-State Travel	_____
E. Equipment Rental	_____
F. Equipment Purchase	_____
G. Contracts/Independent Contractors	_____
H. Honorarium	_____
I. OPC Chargeback	_____
J. Copier Chargeback	_____
K. Other (Please Specify)	<u>Metropolitan Water District 3-day trip</u> <u>(Only ESRM 463)</u> <u>23 students and 1 adult room and board</u> <u>\$7,200</u>
TOTAL Expenses	<u>\$9,200</u>

2. Revenue

A. Course Fees	_____
B. Ticket Sales	_____
C. Out of Pocket Student Fees (exclusive of course fees)	_____
D. Additional Sources of funding (Please specify And indicate source)	_____
Total Revenue	_____
<b>E. Total Requested from IRA</b>	<u>\$9,200</u>

- Describing the effects of alternative practices on system behavior, particularly Best Management Practices
- Predicting the external effects of water management practices
- Identifying the scientific, social, and humanistic aspects of water management
- Identifying, locating, evaluating, synthesizing, and presenting current research and information on water managing issues
- Defining water management problems from the perspectives of both environmental science and resource management
- Identifying possible causes and proposing solutions to water management problems from the perspectives of both environmental science and resource management
- Evaluating proposed solutions to environmental problems from the perspectives of both environmental science and resource management
- Collecting, organizing, analyzing, interpreting, and presenting quantitative and qualitative data
- Making use of current, technological tools in the collection, organization, analysis, and interpretation of data

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Signatures and Dates

LINDA O'HIROK

10/31/12  
Date

DON RODRIGUEZ

10/31/12  
Date

KAREN CAREY

10/31/12  
Date

ORIGINAL  
SIGNATURE  
PAGE  
- NOT  
RE-SIGNED -