

**Mediterranean-Climate Landscapes (LA/IAS C229) Spring 2009**  
**Reforming Water Management: Lessons from Europe for California**  
**Instructors: Prof Matt Kondolf and Juliet Christian-Smith PhD (Pacific Institute)**

*Curriculum development : Kristen Podolak*

*Offered as a 1-credit 'module' to students enrolled in LA222 (Hydrology for Planners)*

*Selected Wednesdays 6-8pm, location TBA*

**ENROLLMENT REQUIRES INSTRUCTOR PERMISSION**

*If interested, contact Matt (kondolf@berkeley.edu) or Juliet (jchristi2001@gmail.com) or attend FIRST MEETING WED 21 JAN 6-8pm RM 315A WURSTER*

***Relevance of this Course***

The Water Framework Directive (WFD), adopted by the European Union in 2000 and currently being implemented by its member states, represents a bold change in river management, emphasizing catchment-scale, public participatory and environmental economics approaches and requiring member states to make substantial progress towards improving water quality and aquatic ecology in their rivers by specific deadlines. For students of water resource management in the US, the WFD embodies many changes recommended for American water management for over a century, but which have generally not occurred because of institutional and political barriers. The potential application of lessons from the EU experience to California is especially timely because within the coming two years, the California legislature will consider proposed reforms to the current system of water management. These proposed reforms are spurred by intensifying water shortages for urban areas, precipitous declines in populations of native fish, and the urgent need to develop new management strategies for water and land in the Sacramento-San Joaquin Delta, the hub of the state's water system. The governor's Blue-Ribbon Delta Vision Task Force releases its final report this fall, recommending sweeping changes in land and water management in the Delta – many of which have parallels in the EU's WFD.

***Spring 2009***

In Spring 2009, this course is offered as a one-credit graduate student seminar open to students either concurrently enrolled in (or who have previously taken) Hydrology for Planners (LA222). Students will review the origins of the WFD, its elements, its implementation to date, focusing on the Mediterranean-basin countries, and comparison with water management in California. Some of the content of the LA/IAS C-229 (hereafter, "229") course will be integrated into the LA222 curriculum, such that discussions of California water policy and comparisons to WFD are of interest and presented to the entire LA222 class. In addition, the 229 course will meet for approximately six additional seminar sessions and will involve:

- 1- lectures, discussions, and readings on the WFD and the EU
- 2- preparation of a brief paper and oral presentation in which the students contrast some aspect of the WFD with the equivalent aspect of California water policy (already covered in LA222).
- 3- selecting an LA222 term project relevant to comparative study with WFD (can overlap with (2))

4- optional travel to Portugal in late-May–early-June to conduct research on WFD implementation in a workshop with Portuguese students. (Costs of student travel to Europe will be significantly subsidized by endowments administered by the Portuguese Studies Program.)

Students enrolled in 229 will build upon analytical techniques and policy background they learn in LA222 to focus on specific topics relevant to WFD implementation. LA222 involves a significant term project involving original, independent research, often conducted in teams of two or more students. For their LA222 term projects, students in 229 will choose a topic relevant to their studies of the WFD in 229. The student research papers will be compiled (with related faculty research) in a report tentatively titled *Reforming Water Management: Lessons from Europe for California*. This report will be released in July-August 2009, when it can potentially influence thinking about water reform in California.

### **General Course Description for Mediterranean-Climate Landscapes**

#### ***LA C-229 and IAS (International and Area Studies) C-229***

Comparative study of environmental conditions and human responses thereto in California and other Mediterranean-climate regions, with intensive treatment of a topic in environmental sciences, policy, planning, management, and/or landscape architecture, with application to California, Portugal, or other Mediterranean-climate regions. Students collect and analyze relevant data, synthesize, and complete technical reports, plans and designs. Each year the course involves a specific focus. (*Spring term, variable units 1-3, staff*)