



PLEASE POST!

The Center for Ocean Sciences Education Excellence-West invites you, your colleagues and students, family and friends to learn more about our local algae! Admission is FREE.

"Phase Shifts, Alternative Stable States, and the Loss of Ecosystem Function in Southern California Lagoons"

Wednesday, January 21, 2009

Speaker: Dr. Peggy Fong

Professor, University of California Los Angeles

at the University of Southern California

in Philips Waite Hall (WPH) rooms B27 & B28

6:30 - 7:30 pm: Public lecture and Q&A

7:30 - 8:30pm: Educators' Session

Coastal estuaries of southern California are diverse, productive systems that provide many important ecosystem functions and services; However, an estimated 90% have been lost to development and the remaining are at risk from severe degradation. Excessive nutrient input from urban development in southern California watersheds has caused a series of shifts in the primary producer communities of our estuaries. Seagrass dominated estuaries are now dominated by massive, harmful blooms of opportunistic green macroalgae. These macroalgal blooms are stabilized by several positive feedback loops in the ecosystem. Experimental evidence strongly suggests that additional increases in nutrient supply (bottom up forcing) may result in a future shift to an estuarine community of toxic cyanobacteria with negative effects cascading up several levels of the food web. As a result of these phase shifts, important ecosystem functions of trophic support and nutrient retention have been lost, increasing "downstream" risks to our other coastal communities. In order to conserve and restore our vital coastal ecosystems, we must work to reduce nutrient inputs from our highly developed watersheds.

Dr. Peggy Fong is a professor at the University of California, Los Angeles in the Department of Ecology and Evolutionary Biology. She is co-Investigator for the UCLA part of the NSF grant for COSEE-West.

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Parking for the lecture is free for those pre-registered guests. Tell the attendant at Gate 3 (at Mc Carthy Way) that you are attending the COSEE-West lecture and you have a reservation to park in Parking Structure X.

Once in Philips Waite Hall, take the elevator to the basement (B). If you exit the north bank of elevators, turn left and the lecture hall is the third door down, just past the vending machines.

If you exit the south bank of elevators, turn right and it is the third door down, just past the vending machines. If you end up near the computer lab next to the elevators, you've gone the wrong direction.

For campus map and directions to USC, visit [www.usc.edu/about/visit/upc/driving\\_directions](http://www.usc.edu/about/visit/upc/driving_directions)

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K-12 teachers may get documentation for Professional Development hours upon request. This event counts toward credit for the COSEE-West UCLA Extension course.

Teachers and other educators: Pre-register for the educators' session to receive content materials and/or course credit.

by e-mail to cosee.west@gmail.com
or call the UCLA COSEE-West office at 310-206-8247.

For information about the COSEE-West program, visit <http://www.usc.edu/org/cosee-west/>

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