Statistics 498B  
Environmental Statistics

Instructor:  
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Time:  
WF 10:30-11:50

Place:  
C-301 Padelford Hall (may change)

Prerequisites:  
Students need the background of an introductory statistics course (such as STAT 220 or STAT 311). Some background in environmental sciences would be useful, but is not required. The course counts as a major elective for Statistics.

Course style:  
The course is based on in-depth studies of four or five cases, dealing with topics chosen from air pollution, groundwater contamination, nuclear waste, ecological monitoring, and environmental standards. We will discuss and think about design of observational studies as well as of experiments, data analysis, regression, and other statistical tools as needed for the cases. Students will work in groups, and present their findings in different formats, such as oral presentation, papers, web pages etc.

Grading:  
There will be no formal homework, and no formal examination. The grade will be based on class participation, group participation, and group presentations.

Learning goals:  
Students will be able to design impact studies, understand limitations and strengths of some standard techniques in environmental statistics, and deal with reasonably complex and messy data.