

CLIMATE CHANGE

PROGRAMS IN THE NATIONAL PARK SERVICE

DONALD NEUBACHER, SUPERINTENDENT, POINT REYES
NATIONAL SEASHORE, NATIONAL PARK SERVICE



berkeley
boalt hall
school of law
CCELP
CALIFORNIA CENTER FOR
ENVIRONMENTAL LAW AND POLICY
UNIVERSITY OF CALIFORNIA, BERKELEY



EXECUTIVE ORDER NO. 3226
SIGNATURE DATE: January 19, 2001

Subject: Evaluating Climate Change Impacts in Management Planning
Sec. 1 Purpose. There is a consensus in the international community that global climate change is occurring and that it should be addressed in governmental decision making. The National Assessment of the Potential Consequences of Climate Variability and Change, an interagency effort initiated by Congress under the Global Change Research Act of 1990, Public Law 101-606, has confirmed that climate change is impacting natural resources that the Department of the Interior (Department) has the responsibility to manage and protect. This Order ensures that climate change impacts are taken into account in connection with Departmental planning and decision making.

DOI TASK FORCE

ESTABLISHED THREE NATION-WIDE
COMMITTEES—50 members, all agencies

- Law and Policy
- Land and Water Management
- Science

- Final Report due this
winter



LEGAL AND POLICY

- Reviewed current practices for considering climate change effects in land-use planning and other formal procedures and decisions.
- Reviewed relevant court decisions, administration policies, and practices of other agencies.
- Goal is to help guide the Department toward coherent, consistent decision making and documentation.

LAND AND WATER

- Catalogue the types of impacts relevant to Interior managed lands and waters.
- Evaluate current and prospective options for addressing the effects of climate change.
- Examine our role in carbon sequestration.



Science

- Focus on climate change science issues specifically relevant to Interior's responsibilities.
- Explore whether modeling might be developed at regional scales to better project more location specific changes to the landscapes we manage.
- Strengthen our understanding of on-the-ground trends in water availability and timing of flows, vegetative patterns, movement of species and so on.

NR Management and Climate Change—systematic approach

- Identify resources and processes at risk
 - Resource Stewardship Strategic Pilot
- Develop monitoring and assessment program for resources at risk
 - NPS I/M Vital signs program—32 networks
- Define baseline or reference conditions
 - Parks have 2200 climate stations

Develop and Implement Management Strategies for Adaptation

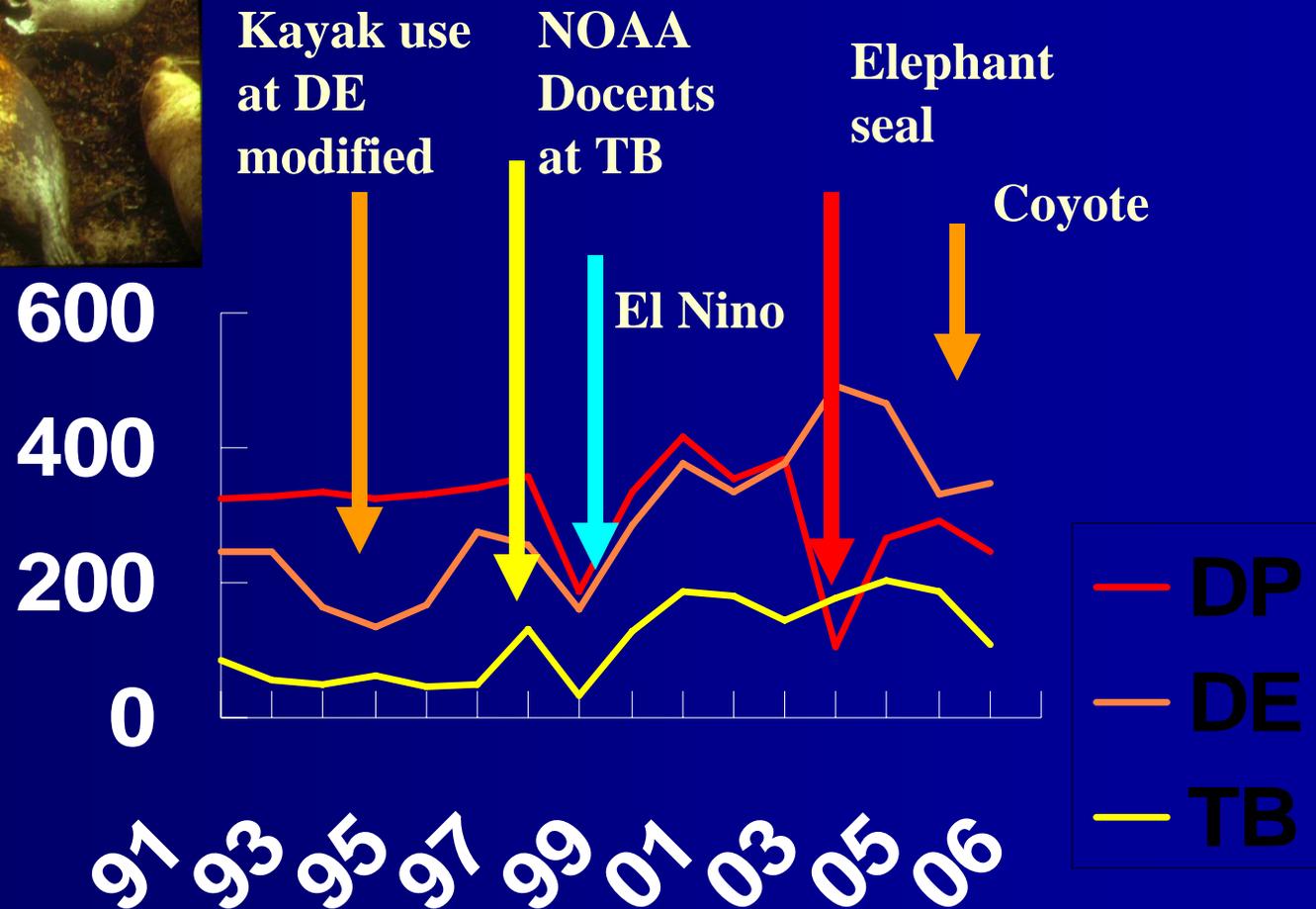
- Diversity management approaches
 - Maintenance of ecological process and natural hydrological function
 - Master Plans must have adaptive management components
 - Ecological Restoration
- Plan and manage for inevitable changes
 - Vulnerability index
- Accelerate the capacity for learning
 - Climate friendly parks



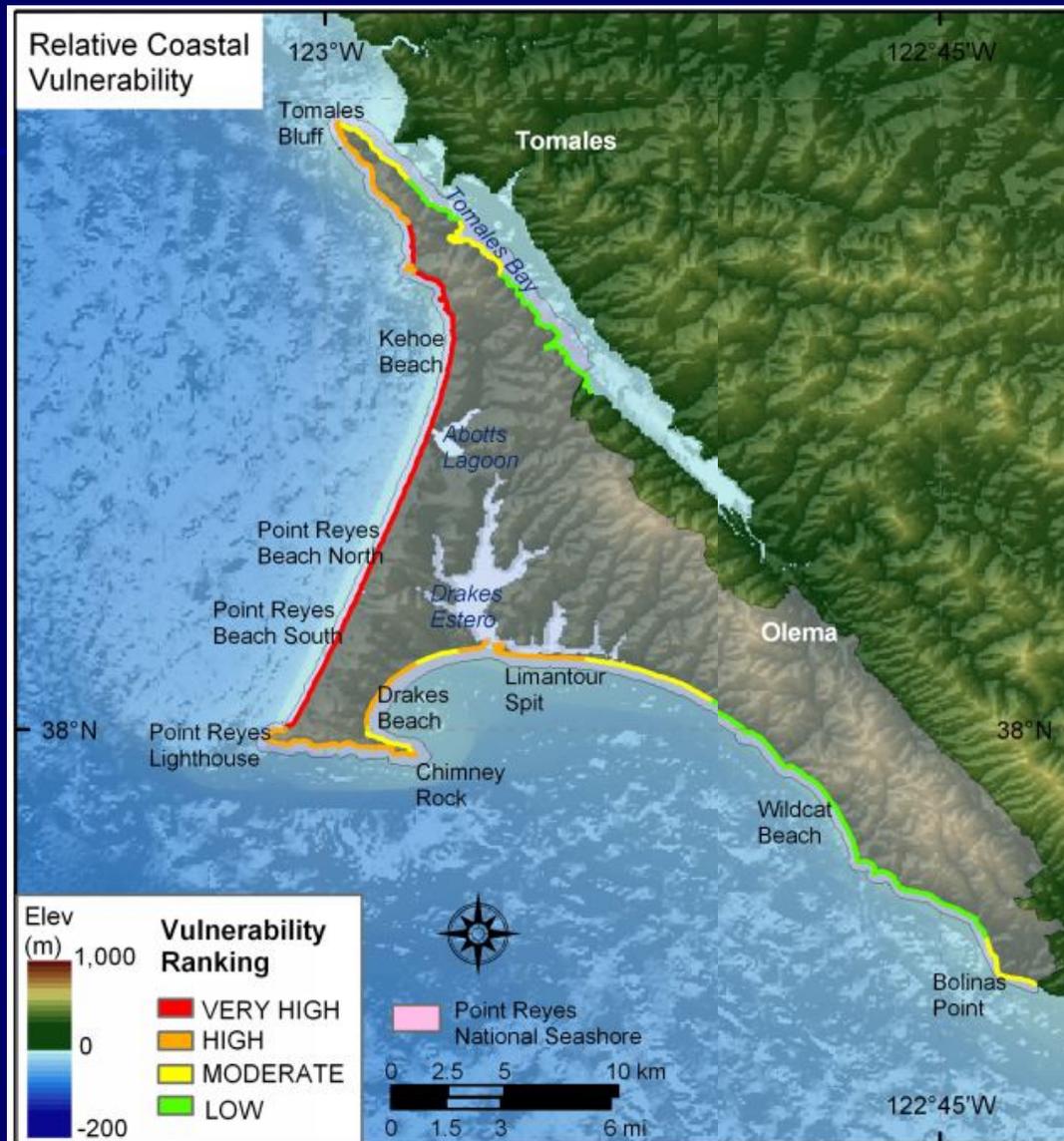
Management actions



Adaptive management



VULNERABILITY INDEX



Giacomini Wetlands Restoration

560 acres



CLIMATE FRIENDLY PARKS

- A Climate Friendly Parks Workshop designed to educate national park staff about climate change and train them to use the tools available.
- The Climate Leadership in Parks (CLIP) Tool, a Microsoft Excel based program that helps a park conduct an emission inventory, develop strategies for reducing emissions through the development of an action plan, and educate park visitors about climate change and what the park is doing to address the issue.
- The Do Your Part! program, a program for park visitors to join together and reduce their personal emissions.

NR Management

- Manage on multiple scales
 - Landscape level driven land acquisition—
larger scale, adjust boundaries
 - Regional level management
 - West Coast Governors Federal Group
- Reduce human and other stressors
 - Minimize pollution, spread of disease,
competition with exotics
 - Create marine reserves and
protected areas



Future NPS Needs—Managing for Uncertainty

- Enhanced ecological monitoring
- Forecasting at relevant scales
- Integrated assessment of impacts
- Communication and education
- Guidelines for implementing adaptive management principles
- Enhance partnerships



Summary: Managers Must

- Use active ecosystem and adaptive management
- Use climate change results
- Eliminate threats
 - Non-native deer at Point Reyes
- Lead by example
- Educate the public

