A Regional Approach to Adaptation

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"Some say it's irrevocable, others say it's irreversible. Given such an absence of consensus I suggest we do nothing drastic."
The Cost of Climate Change

$1.9 TRILLION PER YEAR

- $100 billion/yr. infrastructure
- $6 billion/yr. lost agriculture
- $375 million/yr. ski industry
- $250 million/yr. flooding, tornado damage
- $92 – 154 million/yr. dredging
- $9 – 41 billion/yr. lost agriculture
- $61 – 113 million/yr. fire
- $4.8 billion/yr. fire
- $13 billion moving villages
- $1 – 3.5 billion/yr. hurricanes
- $6 billion infrastructure
- $4.1 billion/yr. lake declines
CLIMATE SUMMIT

WHAT IF IT'S A BIG HOAX AND WE CREATE A BETTER WORLD FOR NOTHING?

- ENERGY INDEPENDENCE
- PRESERVE RAINFORESTS
- SUSTAINABILITY
- GREEN JOBS
- LIVABLE CITIES
- RENEWABLES
- CLEAN WATER, AIR
- HEALTHY CHILDREN
- ETC., ETC.
Local Government Leaders
Presentation Overview

The Region
The Process
The Outcomes
Demographics
Build Local Support First
Data Driven
Stakeholder Engagement
Involve the Public
Strategy Areas

- Species and Ecosystems
- Water
- Infrastructure
- Health & Emergency Preparedness
- Agriculture/Tourism
- Coastal and Marine Resources/Tourism
- Economy
# Key Process Findings

1. Phase implementation
2. Build on current opportunities
3. Frame it right
   - Focus on existing issues
   - Focus on local impacts
   - Humanize - it's not just about polar bears!
4. Have the right people at the table
5. Identify local champions
Addressing Political Challenges

- Politically Conservative County
- Climate Change Disbelievers
- Current State of the Economy
- More than the Environment
Utilizing the Media

Climate change is a hot issue in San Luis Obispo County
Yearlong effort will seek to understand effects of climate change and what can be done about them

What’s in store for SLO County?
Locally, it’s predicted climate change will bring water shortages and health issues

SLO County ponders climate changes
Leaders discuss ways to minimize the potential impact of shifting weather pattern
Outcomes

- SLO County Specific Data
- Increased Awareness
- Climate Change Adaptation Strategy
Current Opportunities

- Community and General Plan Updates
- Encourage Energy Conservation
- Renewable Energy Technologies
- Protect Local Water Supplies
- Improve Water Use Efficiency
- Adopt Sustainable Communities Land Use Policies
Implementation

- Climate Action Plan
- Local Hazard Mitigation Plan
- Engage Public Health Officials
- Ongoing Public Education and Outreach
Challenges

- Political Climate
- State and Local Budget Constraints
- Current Planning Processes & Tools
1. Non profit organizations (LGC, Geos, ICLEI)
2. Local Universities (Cal Poly)
3. Local Agencies (Public Health Dept, Air District, COG, Planning Dept, Emergency Services, Water Districts)
4. Engaged Stakeholders
5. Legislation Driving Local Policy (AB 32, SB 375, CalGreen)
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Top 10 Concerns for Species and Ecosystems under Climate Change

1. Water Withdrawals
2. Connectivity of Fish and Wildlife Habitat
3. Sedimentation
4. Loss of Riparian, Wetland & Marsh Ecosystems
5. Sea Level Rise
6. Loss of Oak Woodlands
7. Threatened and Endangered Species
8. Comprehensive Planning
9. Monitoring of Species & Ecosystems
10. Utilize New Opportunities
Potential Impacts: Water

- Water supply shortages
- Reduced groundwater recharge
- Saltwater intrusion
- Septic systems and sewage treatment plants could be compromised
Water Strategies

1. Monitor and reduce agricultural water use
2. Cooperative basin planning
3. Low impact development
Transportation routes are exposed to several climate change impacts:
- Sea-level rise
- Flooding
- Erosion
- Heat extremes
- Wildfire

The Diablo Canyon Nuclear Power Plant is exposed to the impacts of climate change.
1. Smart growth policies and avoid building in at risk areas
2. Encourage alternative transportation
3. Encourage energy conservation and alternative energy development
Potential Impacts: Health & Emergency Preparedness

- Increase of heat related mortality and hospitalizations
- Increased respiratory and cardiovascular disease
- Decline in food security
- Increased demand for emergency and social services
Health & Emergency Preparedness Strategies

1. Expand outreach and education
2. Identify and target vulnerable populations for outreach
3. Bolster wildfire management
4. Increase local food production
5. Reduce food miles traveled
6. Promote healthy lifestyle practices
Potential Impacts: Agriculture

- Higher temperatures
- Reduced water availability
- Potential for increased water costs
- More intense downpours
- Increased risk of soil erosion
- Increased water demand
- Increased risk of pest infestations and invasive plants
Agriculture Strategies

1. Water conservation
2. Reduce greenhouse gas emissions from agricultural activities
3. Increase carbon sequestration
4. Conserve agricultural land
5. Provide additional support for farm workers and employees
Potential Impacts: Coastal and Marine Resources

- Threats to fisheries, harbors and coastal tourism
- Coastal flooding of low-lying areas—damage to coastal developments and facilities
- Beach erosion
- Damage to tourism infrastructure
Coastal and Marine Resources Strategies

1. Identify high-risk areas and
2. Map failing infrastructure
3. Prioritize repairs/improvements
4. Reassess coastal land use policies
5. Protect habitats
6. Ecotourism