STATE PLANNING TO ADDRESS OCEAN ACIDIFICATION

Angie Thomson
EnvirolIssues
Why does ocean acidification matter?
Vulnerability to Acidification

• Combination of regional factors exacerbate acidification caused by global CO$_2$ emissions
  – Coastal upwelling of CO$_2$-rich waters
  – Runoff of nutrient and organic carbon from land
  – Decay of organic matter in subsurface waters
  – Emissions of acidifying gasses (NO$_x$ and SO$_x$)
What’s at stake?

- Impacts to shellfish industry
- Impacts to marine food webs
- Impacts to continued identity and cultural survival of coastal tribes
- Need a state-level effort of address OA
Washington State Blue Ribbon Panel

- Convened in 2012 under WA Shellfish Initiative
- Comprehensive state-level effort to address OA
- Reviewed best available science and produced recommendations to guide Washington’s response
- Scientists, industry, state, local, federal, and tribal policymakers, conservation community
Recommendations

• Address CO$_2$ emissions
• Reduce local land-based pollutants
• Foster adaptation and mitigation
• Increase research and monitoring
• Inform, educate, and engage the public
• Maintain a coordinated focus on ocean acidification
What next?

• Executive order for agencies to implement recommendations
• Created Washington Marine Resources Advisory Council (MRAC) to coordinate and advise on OA
• Created Washington Ocean Acidification Center at UW to coordinate research and monitoring
Marine Resources Advisory Council

- Created by legislature in 2013
- Non-regulatory
- Sunsets in 2017

Advancing implementation of the Blue Ribbon Panel on Ocean Acidification’s recommendations

Collaborating with and advocate for the Washington Ocean Acidification Center

Ensure effective and efficient multi-agency coordination and collaboration

Communicating and educating broadly about ocean acidification
MRAC Members

Martha Kongsgaard, Chair
Puget Sound Partnership

Maia Bellon, WA Department of Ecology
James Peters, WA State Conservation Commission
Christine Woodward, Northwest Straits Commission
Kelly T. Wood, Representing large businesses
Tom Davis, WA State Farm Bureau
Lisa J. Graumlich, UW College of the Environment
Dennis J. McLerran, EPA Region 10
Norm Dicks, Former congressman
Libby Jewett, NOAA Ocean Acidification Program
Steve Hollenhorst, Western Washington University
Phil Rockefeller, Northwest Power and Conservation Council
Garrett Dalan, WA Coastal Marine Advisory Council

Steve Litzow, State Senator
Kevin Ranker, State Senator
Larry Seaquist, State Representative
Dave Hayes, State Representative
TJ Greene, Makah Tribe
Terry Williams, Tulalip Tribes
Bill Dewey, Puget Sound Shellfish Growers
Dick Sheldon, Coastal Shellfish Growers
Brian Allison, Commercial Fishing
Tony Floor, Marine Businesses
Mike Cassinelli, Recreational Fishing
Paul Dye, The Nature Conservancy
Peter Goldmark, Commissioner of Public Lands
Philip Anderson, WA Department of Fish and Wildlife
Focusing on:

Science and Monitoring

Local Land-Based Contributions

Adaptation and Mitigation

Education & Public Outreach
Over the past year, the MRAC has...

1. Reviewed Blue Ribbon Panel recommended actions
2. Evaluated progress to date for each action
3. Identified work that still needs to be completed or data gaps that need to be filled
4. Prioritized actions
5. Identified steps for moving prioritized actions forward
2015 budget requests

- Sustain and expand the ocean acidification monitoring network.
- Continue laboratory studies to determine biological response to ocean acidification alone and in combination with other stressors such as low dissolved oxygen and increased temperature.
- Sustain and improve the Ocean Acidification Forecast Model established by Washington Ocean Acidification Center.
- Funding for the Washington Ocean Acidification Center.
- Funding for continuation of the Marine Resources Advisory Council.
- Build on current work to assess the effectiveness of seaweed cultivation and harvest as an ocean acidification mitigation strategy.
- Investigate the capacity of native oyster beds to increase ocean acidification resilience.
Next steps for MRAC

- EVALUATE implementation of the Blue Ribbon Panel actions
- COORDINATE ocean acidification activities within the state
- ADVOCATE for funding and policy changes to advance the panel recommendations
- COMMUNICATE knowledge sharing about ocean acidification
For more information

www.ecy.wa.gov  Search “ocean acidification”

Angie Thomson, EnvirolIssues
(206) 269-5041
athomson@enviroissues.com