

# Science Communication in the Chesapeake Bay Program

Carl Hershner

Center for Coastal Resources  
Management

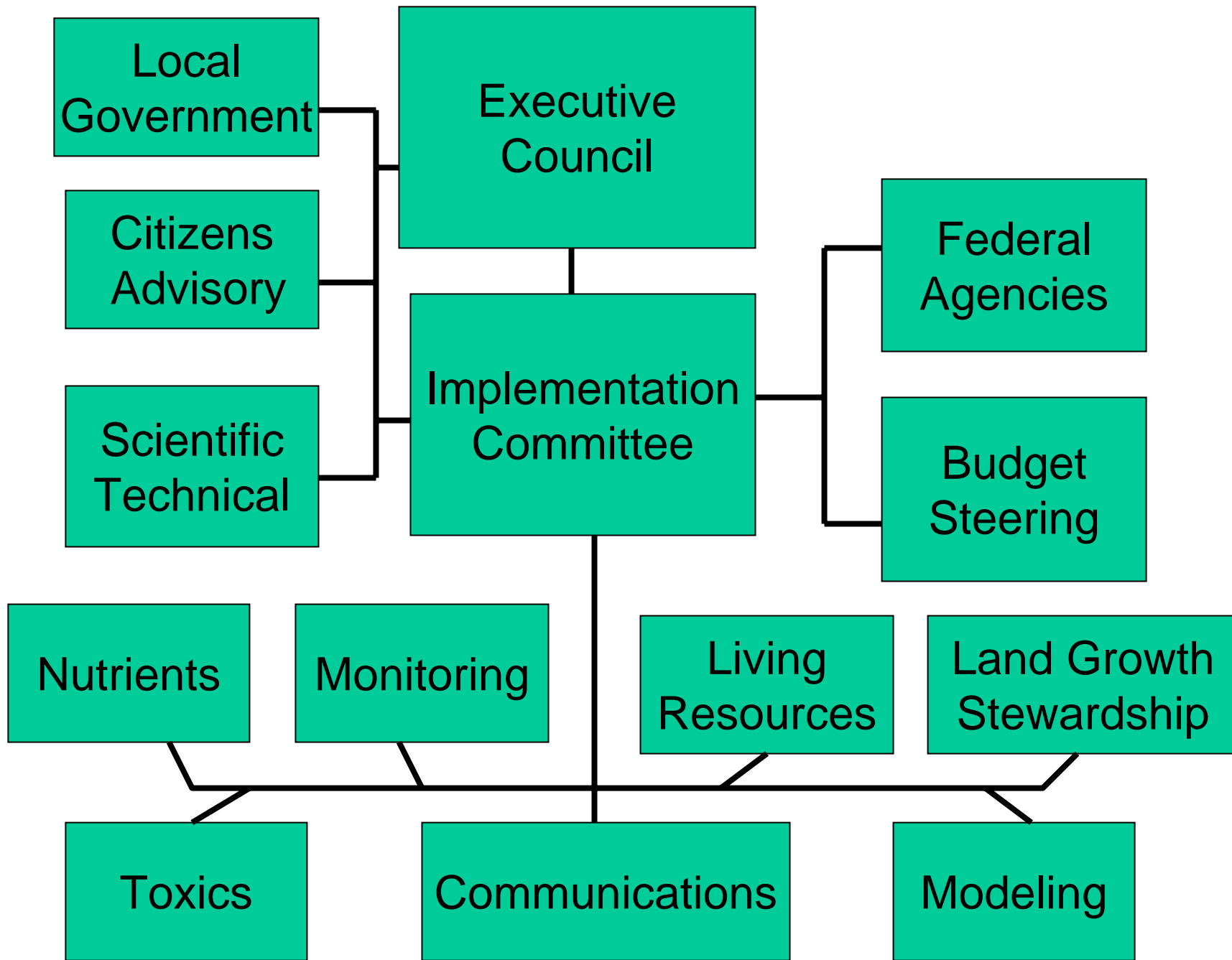
Virginia Institute of Marine Science  
College of William and Mary



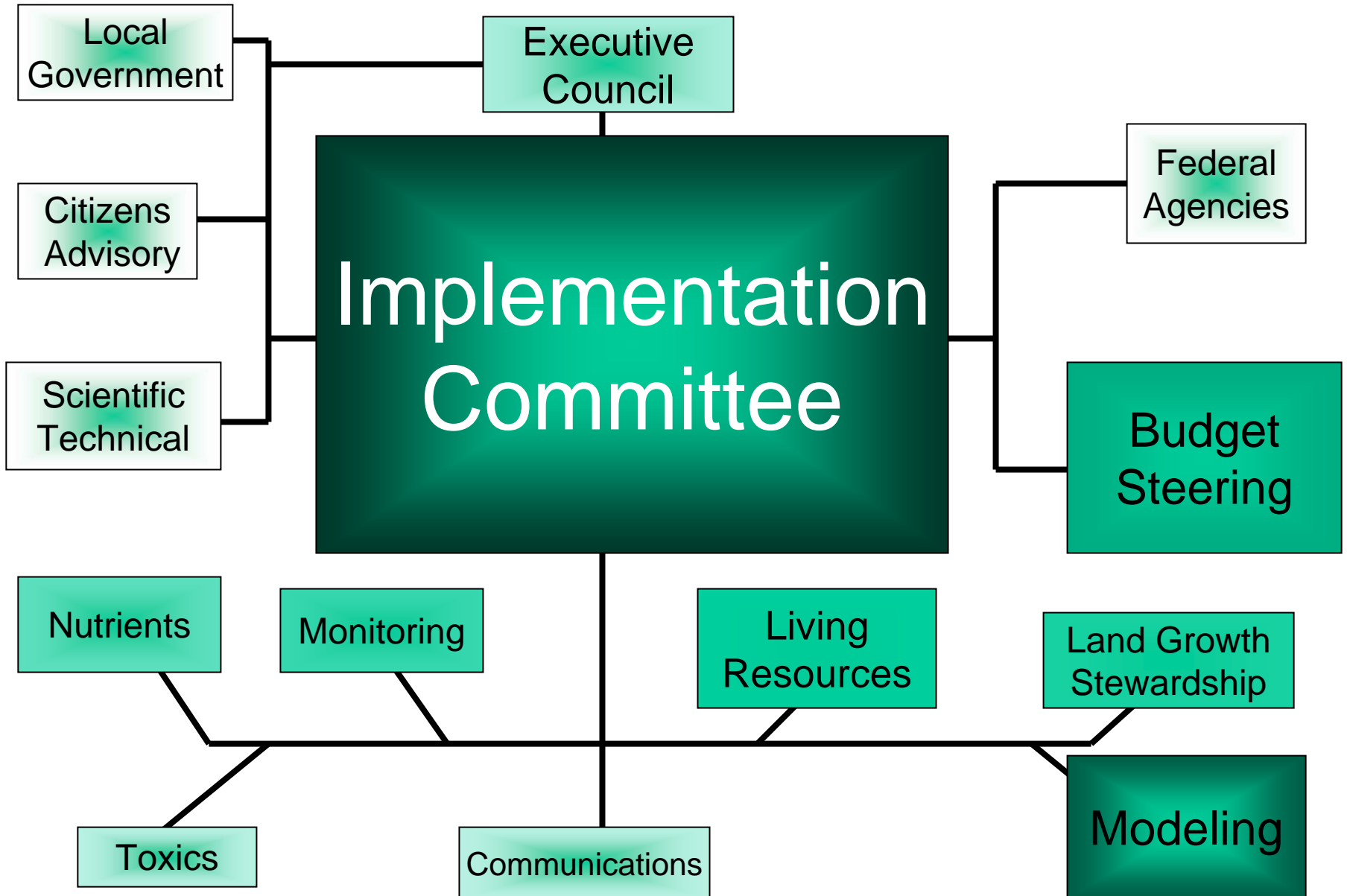
# Chesapeake Bay Program Stakeholders

- Virginia
- Maryland
- Pennsylvania
- District of Columbia
- EPA
- New York
- West Virginia
- Delaware

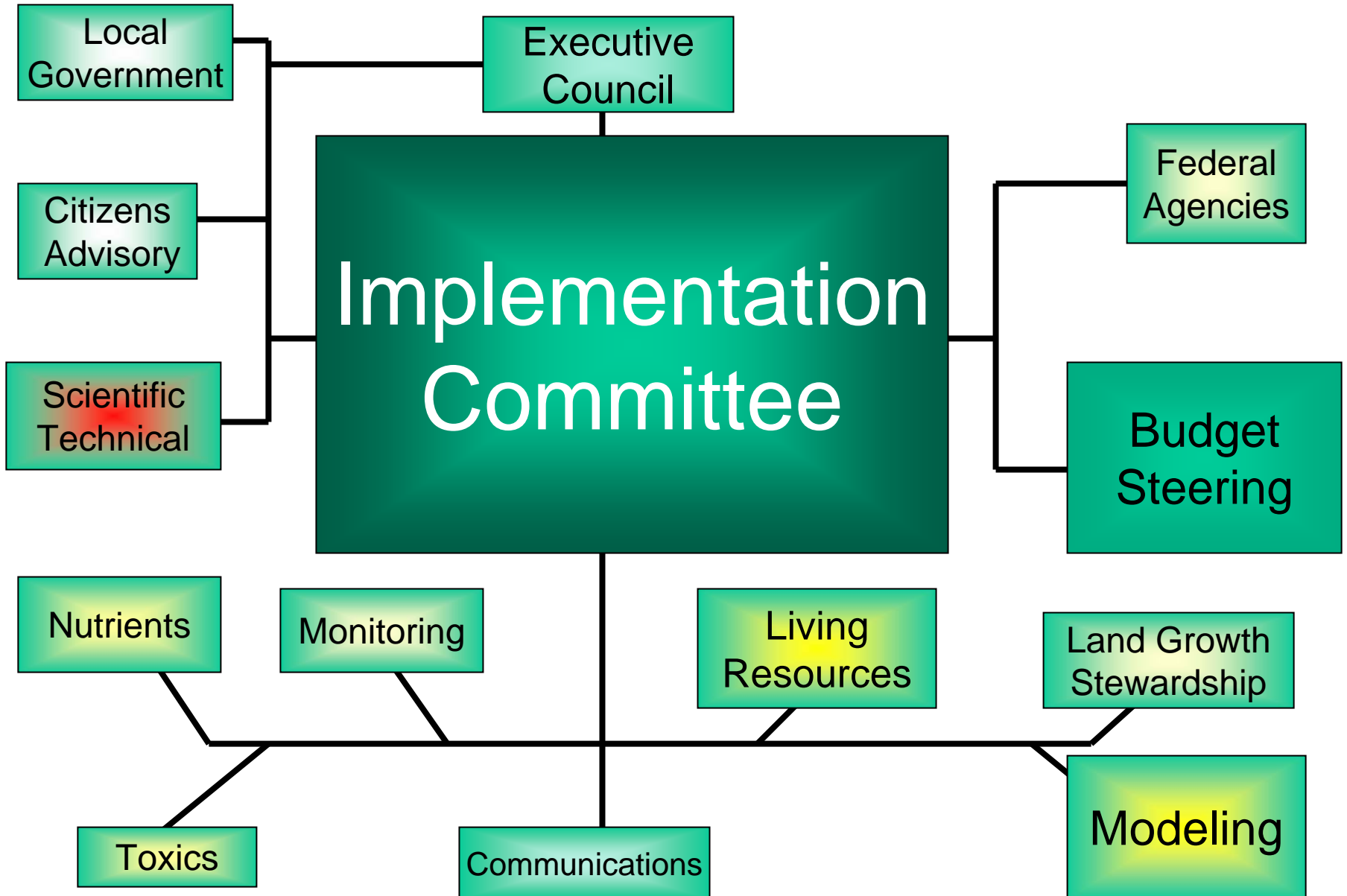




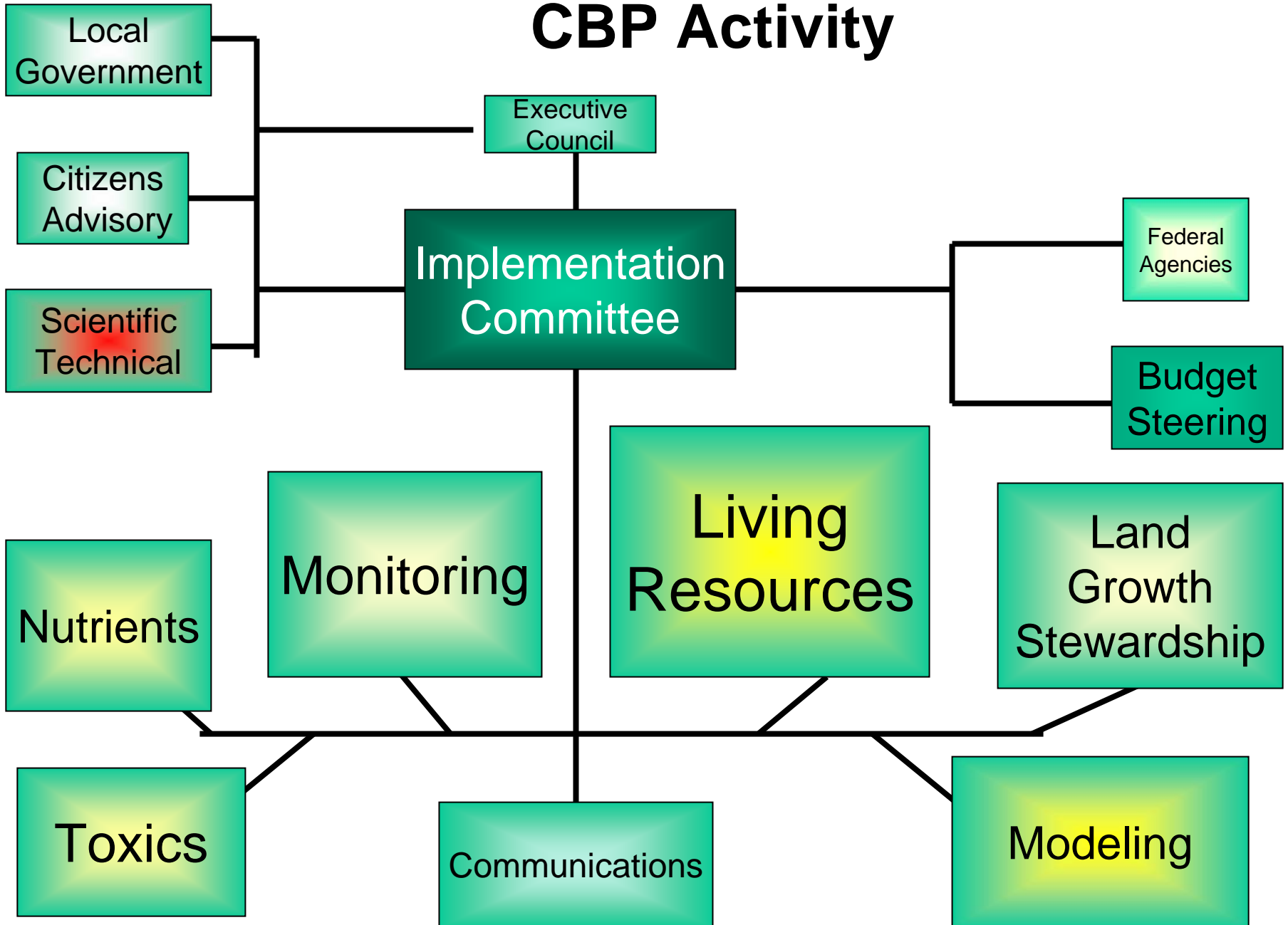
# CBP Authority



# CBP Science Expertise



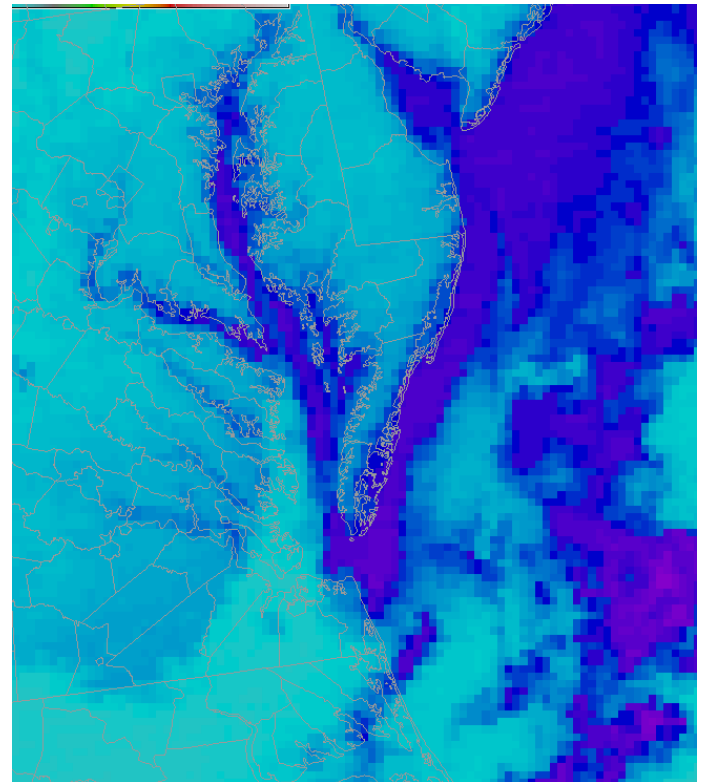
# CBP Activity





# Mechanisms for Engaging Scientists

- Official technical advisors
- Committee members
- Research contractors
- Ad hoc advisors



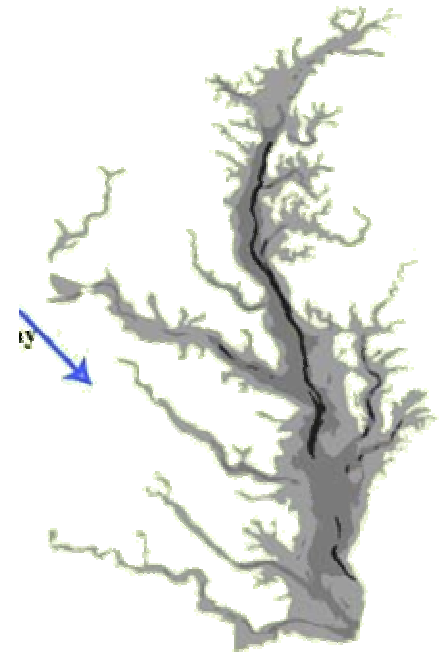
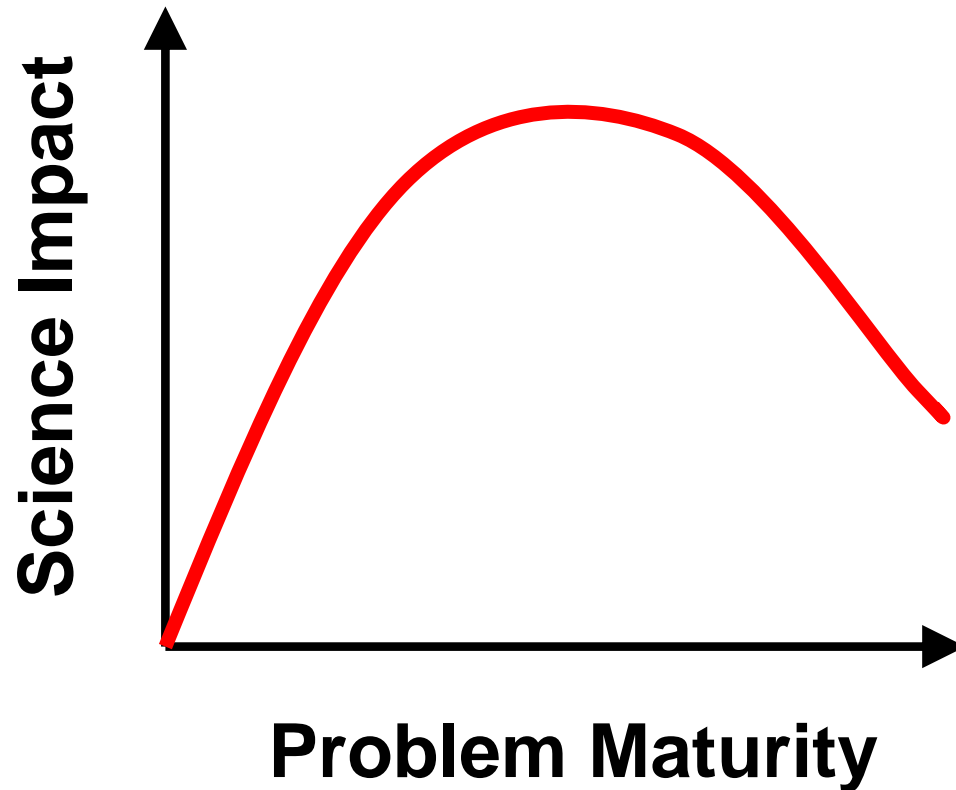


# Relative impact of scientific advice

	Solicited	Unsolicited
Committee membership	--	<b>High</b>
Formal advisor	<b>High</b>	<b>Moderate</b>
Research contractor	<b>Moderate</b>	--
Ad hoc advisor	<b>High</b>	<b>Moderate</b>



# Impact of science on problem resolution



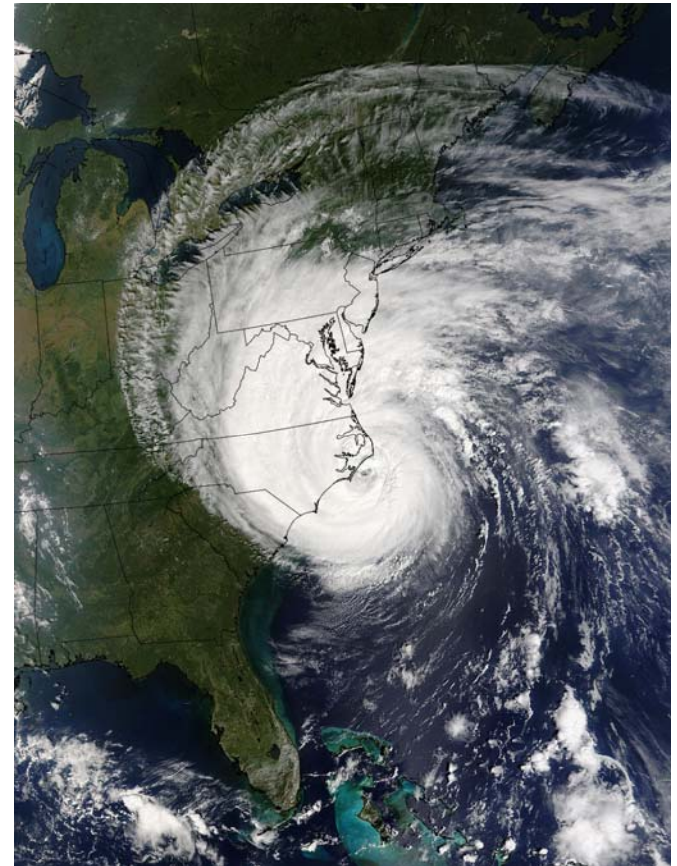
# Consequence of maturing science

- Improved identification of management options
- Refined risk assessment
- Increased probability of consensus



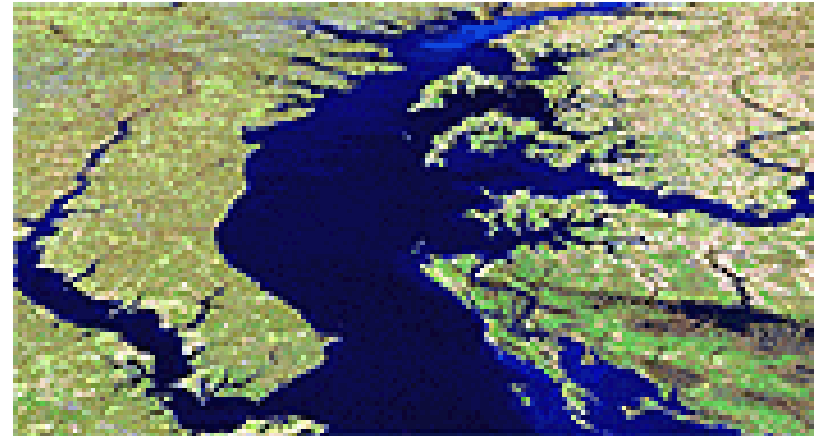
# Consequences of maturing problems

- Balkanization of stakeholders
- Increased social and economic costs of change
- Growing complexity of mitigation



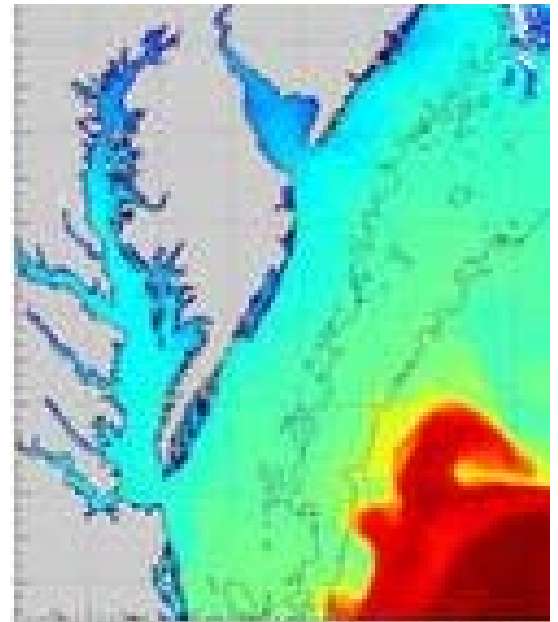
# Example Issues/Problems

- Wetlands – tidal and nontidal
- Oyster restoration – native and non-native
- Point source nutrient reduction
- Fisheries management
- Landuse management
- Windmill oxygenation

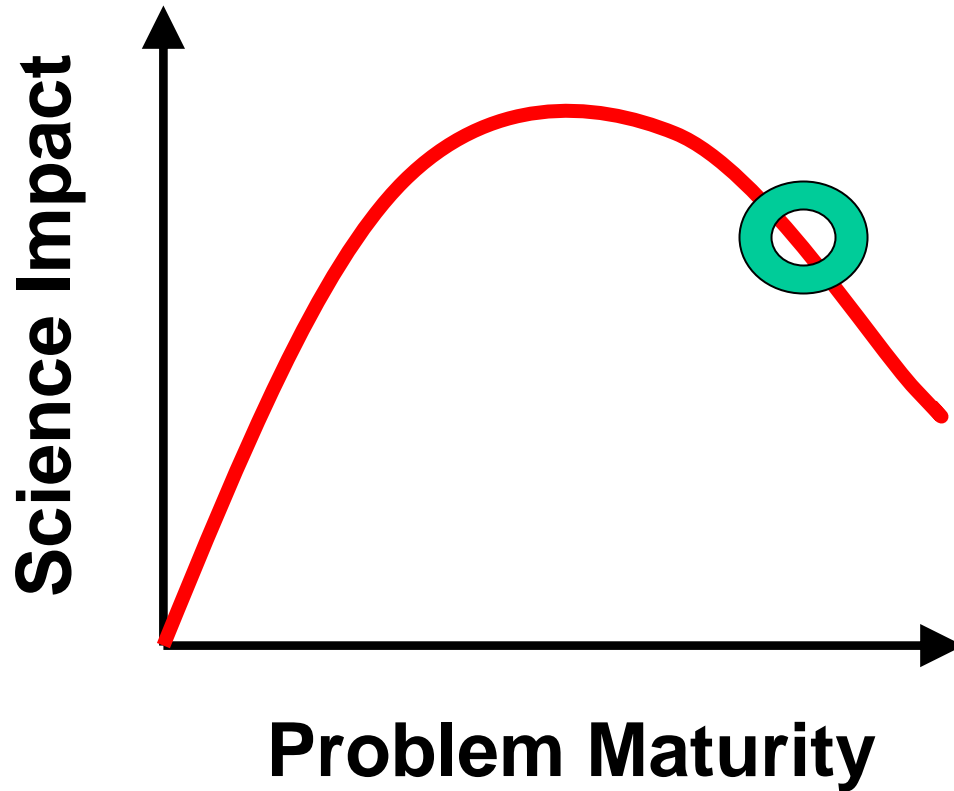


# Example Issues/Problems

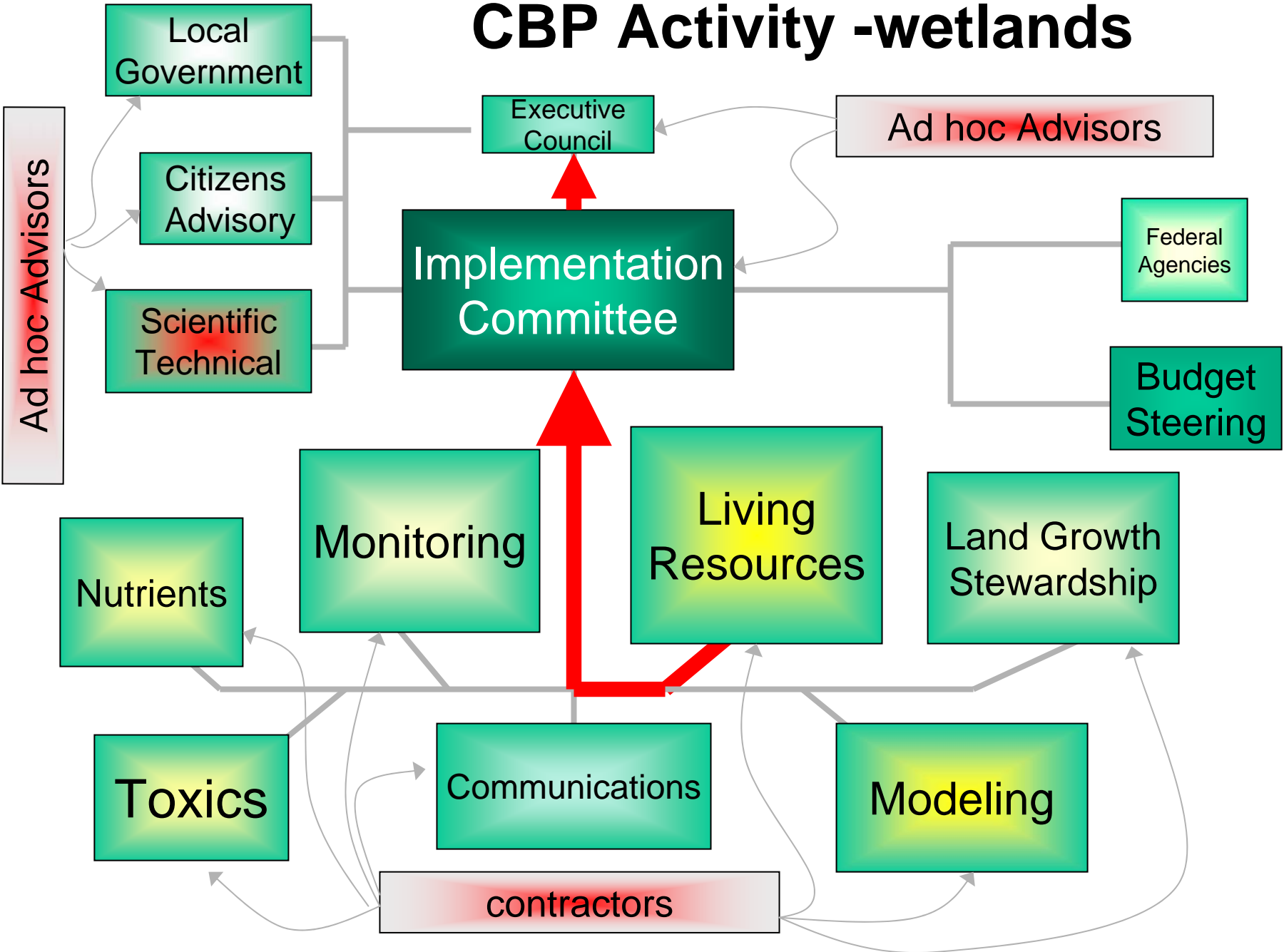
- **Wetlands – tidal and nontidal**
- Oyster restoration – native and non-native
- Point source nutrient reduction
- Fisheries management
- Landuse management
- Windmill oxygenation



# Impact of science on problem resolution - wetlands



# CBP Activity -wetlands



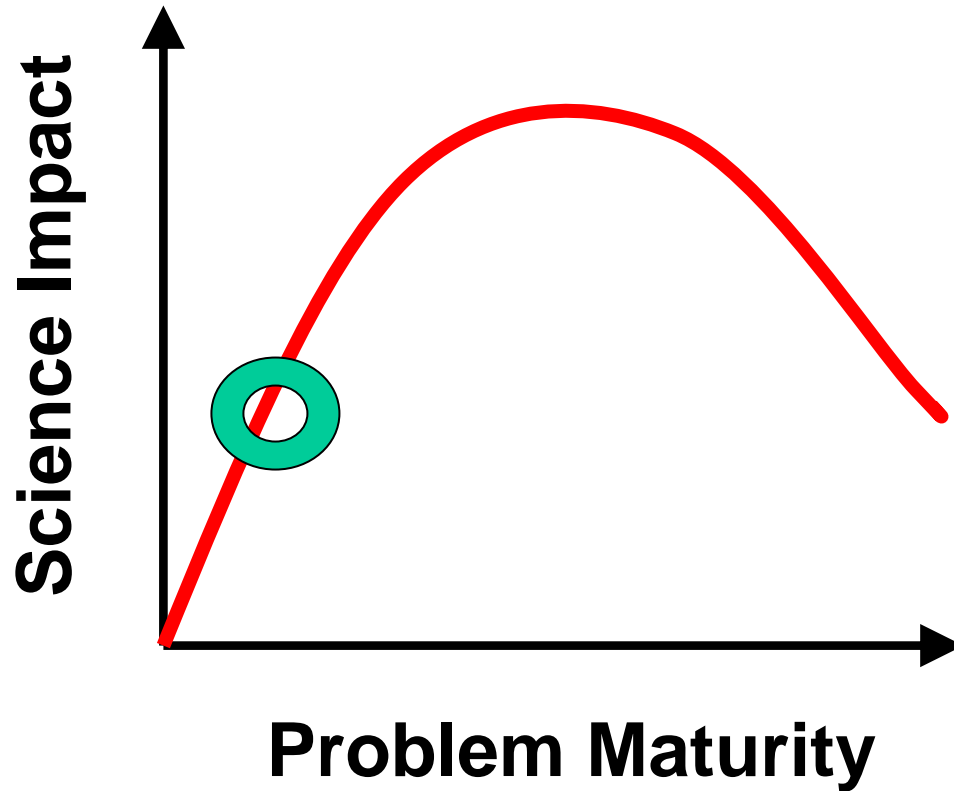


# Example Issues/Problems

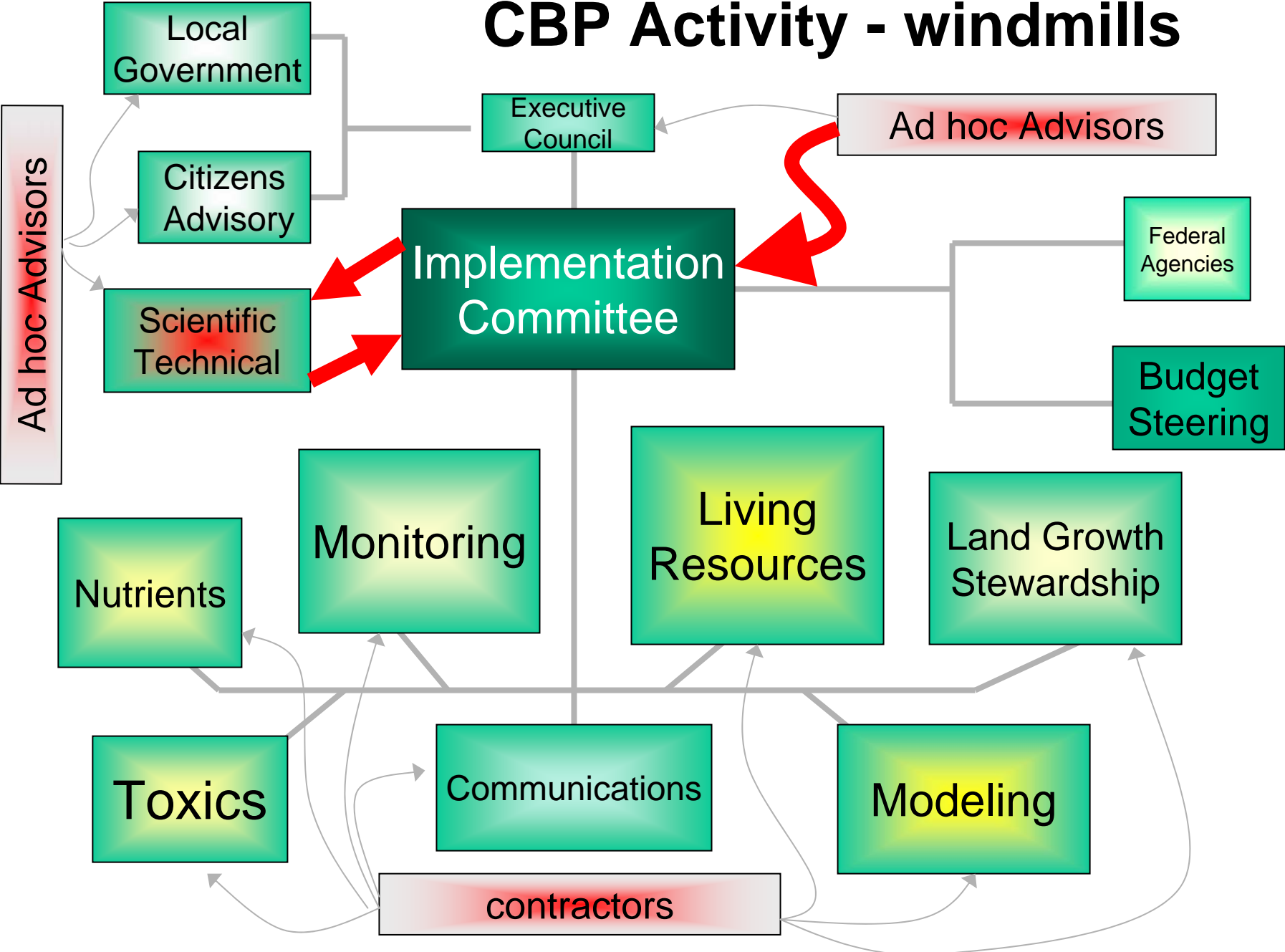
- Wetlands – tidal and nontidal
- Oyster restoration – native and non-native
- Point source nutrient reduction
- Fisheries management
- Landuse management
- **Windmill oxygenation**



# Impact of science on problem resolution - windmills

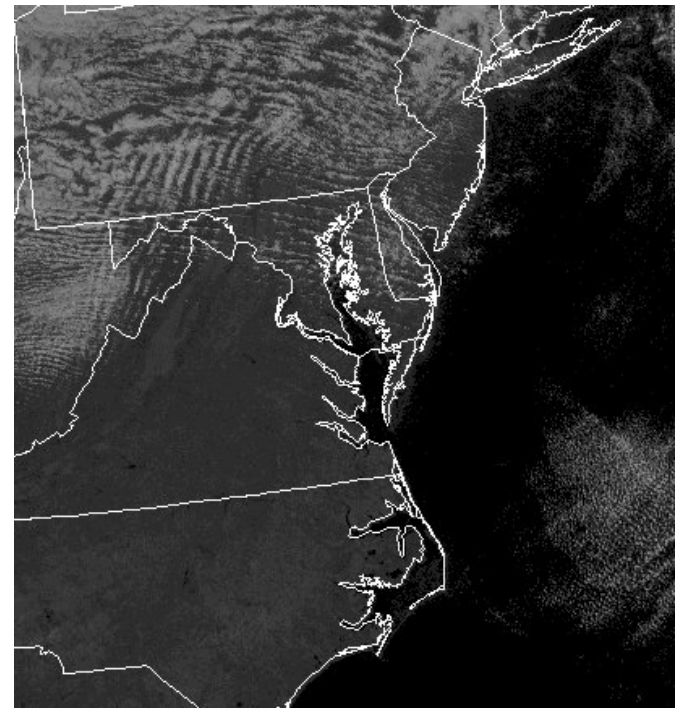


# CBP Activity - windmills



# Diversity imparts vigor

- Multiple sources increase variety of subjects considered
- Distinct standings enhance impact of individual sources
- Official technical advisory group provides validation





# National Academy of Science Model

- Small representative group of scientists
- Draw on larger community of experts
- Accept commissions
- Maintain independence
- Retain capacity to be proactive
- Publish findings



# Challenges for STAC

- Turnover
- Diversity
- Activity
- Stature
- Impact



# Keys for success

- Experts who aren't myopic
- Concise and timely findings
- Limited professional whining
- More than 3 active members
- Support staff
- Meaningful budget

