

## Eastern U.S. Region: Water Resources Management Challenges and Opportunities

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### National Collaborative Water Resources Conference

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Budget  
Cutbacks

## Challenges

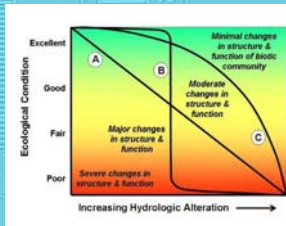
- All doing more with less -- difficult
- We need data -- especially integrated data -- to know the condition and quantity of our resources
- Our ecosystems are in need of restoration

Our systems are insufficient and not lasting

We need to know more & understand better

## Challenges (cont'd)

- **Fragmentation – Agencies, Funding, Separate Quality and Quantity, Lack of Vision of Total Resource**
- **Need to balance uses and minimum flow levels to share water and meet ecosystem needs**



Weather  
Extremes

## Challenges (cont'd)

- **Climate change is a real factor - don't know enough to forecast and plan**
- **Our infrastructure is stressed -- will not last**
- **We aim for sustainability**

Sustain  
resources for  
the future

## Specific Challenges Water Supply Allocation

- **GA: surface and groundwater supplies stressed to meet growing demands (more than Atlanta); drought of record brings added pressure**
- **MA: focus on water allocation 10-30 miles outside of Boston**



## Specific Challenges Water Supply Allocation

- **NJ: reservoir capacity is developed, moving toward groundwater**
- **FL: manages water supply for economic development and Everglades in south Florida**
- **DC: Last taking on Potomac**



### Specific Challenges: Energy Water Nexus

- SRBC, ICPRB, PA, WV: “hydrofracing” deep natural gas stresses water supply and presents water quality issues
- DRBC: energy sector demand is 2/3 of total withdrawal river and is biggest growth area
- SC: hydropower H2O expected to double in demand by 2045



### Specific Challenges: Water Quality

- MD & VA: upstream impacts on Chesapeake Bay sediment and nutrients
- Great Lakes: invasive species management; chemical contamination
- SRBC: 6,000 miles of impaired streams
- AL: 25% of lakes and reservoirs have environmental protection compliance issues



### Specific Challenges: Coastal Management

- VA: evacuation of people from vulnerable areas greatest emergency management concern
- DE: development on coast = added need for reliable wastewater infrastructure



### Specific Challenges: Coastal Management

- ✓ NC: sea level rise and increased storm surges bring added need for dredging, harbor maintenance, beach nourishment
- ✓ RI: 30 percent of population indicate beaches are deficient



### Eastern Regional Conference ~ Workshop Thoughts ~

- Collaboration is not a luxury -- we must plan and fund for it
- We have met the enemy and he is us. This group speaks its own language.
- We must move outside our safety zone to join forces for clear and consistent action toward shared sustainability goals using a language the public understands

### Eastern Regional Conference ~ Workshop Thoughts ~

- The Federal agencies could help empower an interstate network to help states develop and implement statewide water plans consistent with a national vision or direction for water management in light of climate change

### Successful Collaborations

- **Interstate River Basin Commissions:** (DRBC, ICPRB, SRBC) conduct watershed-based IWRM from assessments to evaluation; ready facilitation mechanism to bring states and stakeholders together
- **Great Lakes:** (Great Lakes Commission, Council of Great Lakes Governors, Great Lakes-St. Lawrence River Basin Water Resources Council) new compact brings new approach (shared commitment; consistent standards on water use; goals on conservation)

### Opportunities for Partnerships/ Collaboration

- **Data Gathering:** climate change, USGS-BuRec unified hydrologic data network, the USGS Water Census
- **Monitoring:** USGS gaging program, West Virginia Water Gaging Council
- **Adaptive Management:** Grand Canyon Adaptive Management Program integrates power, engineering, science, and environmental interests

### Opportunities for Partnerships/ Collaboration (cont'd)

- **Ecosystem restoration:** Everglades Restoration program, Massachusetts Wetlands Restoration Partnership with USACE and the private sector, Chesapeake Bay Restoration Agreement
- **Interstate and international coordination and conflict resolution:** Columbia River Treaty between the U.S. and Canada, the Great Lakes Regional Collaboration

### Opportunities for Partnerships/ Collaboration (cont'd)

- **Emergency management processes:** pre-disaster mitigation, preparedness, response, and post-disaster recovery operations
- **Port development:** e.g., Georgia and South Carolina deep water port development on the Savannah River
- **Research and development:** e.g., USACE, USGS, and The Nature Conservancy modeling and simulations

### Opportunities for Partnerships/ Collaboration (cont'd)

- **Be proactive:** Southeast Regional Water Resource Alliance, Southeast Natural Resource Leaders Group, USACE-led initiative to form a Southeast regional entity around common needs, AWRA Water Policy Dialogues, Conference of Southern County Associations regarding solid waste and wastewater
- **Shared Vision Planning**

### Opportunities for Partnerships/ Collaboration (cont'd)

- **Project Development:** Implementation of the Principles and Guidelines
- **Infrastructure operations and maintenance:** Reservoir operations and re-operations, Water & Wastewater, Asset management
- **Innovation:** Regional Greenhouse Gas Initiative carbon trading among states & Canada in Northeast

### Strategies That Could Help

- Use a sustainable water resources paradigm
- Do comprehensive integrated water resources planning
- Foster collaboration and communication
- Develop, use, share models and modeling via one-stop electronic portal
- Build a National Water Vision and supporting goals, policies and strategies-- a framework
- Apply adaptive management strategies
- Secure coherent and comprehensive funding mechanisms
- Touch base via active outreach

### Roles and Responsibilities

- **Federal Government:** *Support, Not Dictate*
- **States:** *Primary Water/ Land Use Manager*
- **Interstates:** *Treat Members Equitably and Assist*
- **Tribes:** *Engage*
- **Non-Governmental Entities and the Private Sector:** *Develop and Share*

Questions?

