USEPA’s Climate Change Efforts

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Overview

• EPA’s role in Climate Change
• Energy/Water/GHG Nexus
  – Office of Water Climate Change Strategy
  – Energy Star
  – WaterSense
  – Low Impact Development
  – Clean EnergyEnvironment Municipal Network
• Other Voluntary CO₂ Programs
• Legislative Proposals in 110th Congress
• Closing Thoughts
EPA’s Role in Climate Change:

• Contribute significantly to Bush’s goal of 18% reduction in GHG intensity by 2012
• Challenge businesses, state and local gov’ts to reduce their emissions through voluntary partnerships. Estimated Success:
  – Energy Saved: 768.8 trillion BTUs (2000)
• Provide near-term solutions while other agencies invest in long-term R&D
• Prepare annual GHG Inventory Report
Energy/Water/GHG Nexus

• Water transport, treatment and delivery = Approx. 19% CA Energy Use
• Climate Change will intensify the need to look at water holistically
  – Assimilative capacity for wastewater effluent
  – Rising sea levels-->saltwater intrusion
  – Greater need for water conservation and efficiency
  – Need to adapt to decreasing snowpack
  – Reduced surface water flow = reduced groundwater recharge
USEPA National Water Program
Climate Change Workgroup

- Reviewing climate change information
- Evaluating potential impacts on water programs
- Identifying potential response actions
- Developing Climate Change Strategy for the National Water Program
  - Mitigation
  - Adaptation
  - Research
ENERGY STAR

- Reduce greenhouse gas (GHG) emissions through large win-win-win opportunities with today’s energy efficient technologies and practices
  - 30% savings in many buildings, homes, and facilities
- Provide credible information to buyers to
  - reduce transaction (research) costs
  - reduce perceptions of risk
  - enhance investment in efficient technologies and practices
- Work with the marketplace to build on motivations of important individual actors

Source: Energy Star® Overview of 2005 Achievements
ENERGY STAR Water and Wastewater Industry Focus

Partners: Drinking water, POTW’s, Industry, Nat’l and State Associations Developing:

- Energy Performance Rating System
- Energy Efficiency Assessment and Opportunities--Best Practices
- Energy Management Guidelines
- Financing Energy Efficiency Projects
- Technical Training and Support for use of EPA ENERGY STAR rating system and tools
- EPA Recognition of Energy Performance Tools
WaterSense: “Efficiency Made Easy”

- Voluntary Partnership
- Promotes and Enhances Markets for Water-Efficient Products and Services
- Products Labeled through WaterSense
- Examples:
  - High Efficiency Toilets or Bath Faucet
  - Landscape Irrigation Services
  - Irrigation Control Technologies
- epa.gov/watersense/
Low Impact Development (LID)

- LID Literature Review & Fact Sheets
- LID Design Strategies
- LID Hydrologic Analysis
- Field Evaluation of Permeable Pavements for Stormwater Mgm’t
- Links to:
  - LID Design Center
  - LID Urban Design Tools
  - LID for Big Box Retailers
  - Others
- www.epa/owow/nps/lid
• Launched in November
• Clean Energy Strategies for Local Government
• Information Sharing Resource
• Designed to:
  – Reduce GHG & Air Pollutants
  – Lower Energy Costs
  – Improve Reliability and Security of Energy Systems
• www.epa.gov/cleanenergy/stateandlocal
Other Voluntary Partnerships Targeting Major CO₂ Sources

- State Clean Energy-Environment Partnership
- WasteWise
- Green Power Partnership
- Combined Heat & Power (CHP) Partnership
- Coal Combustion Products Partnership
- Best Workplaces for Commuters
- Green Vehicle Guide
- Voluntary Diesel Retrofit Program
- Clean School Bus USA
- Green Suppliers Network
- Climate Leaders
Climate Change in the 110th Congress

- Many climate-related bills introduced
  - 11 cap-and-trade bills
  - 18 transportation/CAFE bills
  - 9 other climate/energy bills
  - 4 foreign policy bills

- Hearings on climate issues
  - Senate: EPW, Commerce, Energy, Finance, Transportation
  - House: Government Reform, Energy and Commerce, Science, Transportation, Ways and Means, Select Committee on Climate Change

- Staff workshops
  - Senate and House Energy held workshops to educate staff
  - EESI other groups many staff/public sessions
Closing Thoughts

• EPA will continue and expand our successful voluntary programs including water and wastewater. *Significant* GHG reductions have already been achieved:
  – Estimated GHG Reductions of **86 MMTCE** (2005)
  – Energy Saved: 768.8 trillion BTUs (2000)

• Considerable opportunities for reducing GHG through local government partnerships for energy and water conservation

• Momentum building in Congress and States/Locals are out in front
Closing Thoughts

• California can adopt progressive policies and programs to encourage and incentivize water conservation and energy efficiency
  – Evaluate rate relief to private water companies when they invest in efficiency
  – Decouple profit from consumption in rates (Similar to CA Energy Utilities)
  – Understand energy intensity of water by geographic location/use
  – Compare price of water to production Costs
  – Promote more energy efficient utilities (pumps, aerators, etc.)
Further Information

• U.S. EPA Climate Change
  www.epa.gov/climatechange/

• ENERGYSTAR
  www.energystar.gov

U.S. EPA State and Local Clean Energy Programs
  www.epa.gov/cleanenergy/stateandlocal

• WaterSense
  www.epa.gov/watersense/

• Low Impact Development
  www.epa/owow/nps/lid