NATIONAL GOVERNORS ASSOCIATION

40th Annual Oklahoma Governor's Water Conference and Research Symposium: Water Means Business

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About NGA

Founded in 1908, the National Governors Association (NGA) is the collective voice of the nation's governors. Our members are the governors of the 55 states, territories and commonwealths. NGA provides governors and their staff with services that range from representing states on Capitol Hill and before the Administration to developing and implementing innovative solutions to public policy challenges through NGA Solutions -- Center for Best Practices.

NGA Services

NGA CENTER

The NGA CENTER FOR BEST PRACTICES is the only research and development firm that directly serves the nation's governors. Areas of expertise inside the division grow aptitude in five key public policy areas being shaped in the states.

NGA ADVOCACY

The mission of NGA GOVERNMENT RELATIONS is to ensure governors' views are represented in the shaping of federal policy. The collective policy positions, reflecting governors' principles on priority issues, guide the association's efforts.

NGA CONSULTING

NGA provides leadership assistance targeting the complete life-cycle of an administration—from election day through the final year in office. NGA Consulting offers services, resources and training, as well as a one-of-a-kind spouses' program.

ENERGY, INFRASTRUCTURE & ENVIRONMENT PRIORITY AREAS

Cross Cutting

CONNECTIVITY

RESILIENCE & SECURITY

DEFENSE WASTE

Learning Networks

ENERGY

WATER

TRANSPORTATION

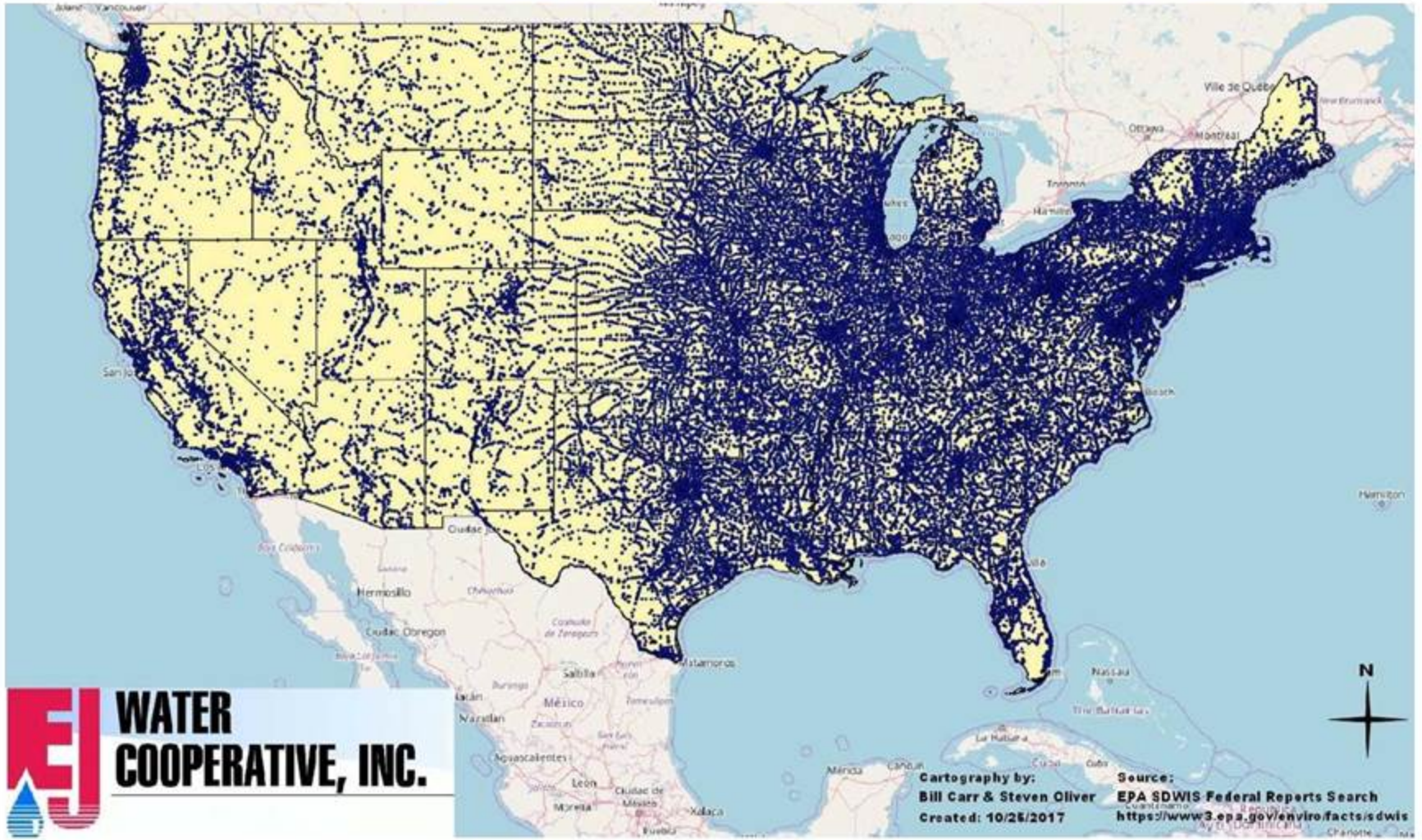
OUTDOOR RECREATION

National Perspectives on Water Resiliency

Practices for Selected States on:

- Water Utility Regionalization/Consolidation
- Reducing Water Loss
- Water–Energy Nexus
- Contaminants:
  - Harmful Algal Blooms
  - Lead
  - PFAS

Utility Regionalization/Consolidation



Over 150,000 public water systems

52,000 community water systems; 42,000 provide water to pop. of 3,000 or less

State Examples: Utility Regionalization/Consolidation

Kentucky- 781 public water systems in 1999 to 398 in 2017

- State Revolving Fund - prioritizes regionalization projects & discount interest rate for regional borrowers (from 2.75% to 1.75%)
- PSC authority to order systems to merge
- 1999- Gov. Exec Order to create Water Resources Development Strategic Plan- "promote regionalization"
- 2000- SB 409- Kentucky Infrastructure Authority (KIA)
  - structured planning process- 15 development areas council's identify water and wastewater infra needs; map & prioritize. SRF prioritizes statewide.
  - < $800 million to support water service expansion and facilitate mergers of water systems.

Illinois- EJ Water Cooperative- local board controls water system; consolidate water suppliers; deliver economies of scale & long-range planning.

California, Illinois, Indiana, Iowa, Maryland, Missouri, New Jersey, Pennsylvania, and North Carolina

Fair Market Value Legislation:

- utilities can value acquired assets for rate-making purposes at lesser of fair market value or negotiated purchase price, instead of the depreciated original cost previously required to be used.
- enables utilities to recover investments for capital upgrades thru rate base adjustments

WATER LOSS;

Annually- 1.7 trillion gallons lost; cost $2.6 BILLION; 240,000 water main breaks

State Examples: Reducing Water Loss

THE WALL STREET JOURNAL.

Water-Wasting Leaks Plague Many Cities

Brittle, aging systems lose trillions of gallons a year and result in damaging breaks

By Cameron McWhirter

June 21, 2016 1:44 pm ET

Texas - Texas Water Code requires most public water systems to:

- perform annual water loss audit
- send results to Texas Water Resources Development Board
- notify customers of the water loss reported in the audit.
  - Systems receiving funding from the Board must use part of funds to mitigate water loss if the loss exceeds thresholds set by the Board
  - Small systems (3,300 connections or less) that don't receive financial assistance from Board submit every five years.

Georgia - Georgia Water Stewardship Act of 2010 (*adopted after water stress events in 2008 and 2009*)

- Annual water loss audit by all public water systems serving more than 3,300 individuals (more than 250 utilities)

California - Senate Bill 555 of 2015 (adopted in the midst of a seven-year drought)

- annual submission of validated water loss reporting (IWA/AWWA standards) to the California Department of Water Resources starting Oct. 1, 2017.
- California Water Loss Technical Assistance Program created to introduce water balance methodology to 410 utilities (with greater than 3,300 connections) and help them prepare for the first submittal.
- empowers State Water Resources Control Board to apply performance standards for urban water suppliers regarding water loss, starting in 2019.

State Examples: Water-Energy Nexus

- **Arizona**-Gov. Ducey creates Water Augmentation Council in 2015- energy and water agencies, AG, muni utilities. Focus on new water resources, conservation, energy in water treatment.
- **California**-Water Energy Climate Action Team (WETCAT)- 11 state agencies focus on large energy and water efficiencies & GHG reductions.
- **Wisconsin;** Clean Water Loan Fund requires WWTP energy audit; DOE SWIFt program; Wastewater Bridge Program- $ incentives for over 50 WWTP's to reduce energy by 5% & 25 tips for low/no cost practices.
- **DC**- DC Water installs $470 million waste-to-energy project in 2015 to create 10 MW power (1/3 of need) for energy cost savings and energy reliability.

Drinking Water Contaminants

- Harmful Algal Blooms (HAB's)
- LEAD
- PFAS

Harmful Algal Blooms- Lake Erie 2011

2014- City of Toledo PW System – 500,000 people

Do Not Drink Advisory Issued

Ohio's Approach to Algal Toxins

Public Water System Harmful Algal Bloom Response Strategy

(developed in 2011; updated annually; no federal standards)

- requires routine microcystins monitoring and cyanobacteria screening by all Public Water Systems (PWS) using surface water.
- established numerical cyanotoxin thresholds to determine when a public health advisory will be issued for detection of cyanotoxins in finished drinking water.
- provides guidelines on Harmful Algal Bloom (HAB) monitoring and sampling protocols, identifies acceptable analytical methods, identifies cyanotoxin levels that will be used to make advisory decisions and recommends contingency planning for public water systems.

Ohio EPA encourages public water systems to be proactive and consider additional source water HAB monitoring, reservoir management practices, development of HAB treatment optimization protocols, and contingency planning.

State Examples: Lead Testing in Schools & Childcare

Mandatory testing of water in schools:
CA, IL, MD, MN, NH, NJ, NY, VA, DC

Voluntary testing programs for schools:
AL, CO, AZ, ID, IN, ME, MA, MI, NV, ND, OH, OR, RI, UT, VT, WA

Mandatory Testing in childcare facilities:
CA, CT, IL, MA, NH, NJ, OR, RI, VT, WA

Per- and polyfluoroalkyl substances (PFAS)

- Used in non-stick cookware, stain repellants, waterproof clothing, firefighting foam, industrial uses

- Linked to developmental effects; changes in liver, immune, and thyroid function; and increased risk of some cancers.

- Detected in drinking water across the country

State Examples: Governors' Task Forces

Coordinate Stakeholder, Interagency & Intergovernmental Efforts

New York- Governor Cuomo established Water Quality Rapid Response Team in 2016.

- Dept's Health, Environmental Conservation, Transportation & Agriculture.
- Drinking Water Quality Council established in 2017 as advisory group that reports to the Health Dept. on emerging contaminants.

Michigan- Governor Snyder created Michigan PFAS Action Response Team (MPART) in 2017.

- Dept's Health, Environment, Agriculture & Military and Veterans Affairs
- Governor Whitmer's 2019 Executive Order
  - est. MPART as permanent advisory body housed in Dept. of Env. Quality;
  - adds Dept's of Natural Resources, Transportation, and Licensing and Regulatory Affairs.

Pennsylvania- Gov Wolf formed that PFAS Action Team in 2018

- Dept's Environmental Protection, Health, Military and Veteran Affairs, Community and Economic Development, Agriculture, and the State Fire Commissioner.

State Examples: Special Studies for Contaminants

Minnesota, 2007- Pollution Control Agency launches studies to learn more about the presence, extent, movement, sources and fate of the chemical in the environment.

Studies:

- Air and Precipitation Monitoring (in urban and rural environments)
- Aqueous Film-Forming Foam (AFFF) Use (in fire-fighting training)
- Fish Tissue and Surface Water Monitoring
- Food Web Studies (for aquatic life and bird eggs)
- Ground Water Monitoring; Land Use Influence of PFOS Concentrations in Fish Tissue
- Source Investigation for Lake Calhoun
- Mississippi River Sampling
- Soil Microcosm Studies with EPA Labs (to measure chemical mobility in groundwater);
- Urban Watershed Study
- Wastewater Treatment Plant PFC Release Assessment

State Examples: Special Studies for Contaminants

Michigan – Department of Environmental Quality (MDEQ)

- testing drinking water, groundwater, lakes & streams, soils, sediments, wastewater, and PFAS foam in lakes and rivers.
- testing 1,380 water systems and 460 schools to develop a baseline dataset in 2018 on PFAS presence in statewide drinking water supplies.
- testing for 14 different PFAS compounds; cost 1.7 million; schools with their own wells are priority.
- test fish and wildlife along with Dept's of Health and Natural Resource

Share results with the public through the Michigan PFAS Action Response Team (MPART) website.

California- Water Board developed "PFAS Phased Investigation Plan"

- systematically obtain PFAS effluent and drinking water data from more than 1,500 airports, landfills, and drinking water wells across the state.
- plans to extend the investigation to refineries, non-airport and urban fire training areas, secondary manufacturers, and wastewater treatment plants.

State Examples: Action on PFAS

- Drinking Water Standards
  - NJ- adopted PFNA 13 ppt; proposed PFOA 14 ppt; PFOS 15 ppt
  - NH- proposed PFOA 38 ppt; PFOS 70 ppt
  - NY- proposed PFOA 10 ppt; PFOA 10 ppt
  - VT- proposed PFOA 20; PFOS 20 ppt
- Groundwater Standards
  - CA- PFOA 70 ppt; PFOA 70 ppt
  - MI- PFOA 70 ppt; PFOS 70 ppt
  - NH- PFOA 12 ppt; PFOS 15 ppt; PFNA 11 ppt
  - VT- PFOA 20 ppt; PFOA 20 ppt; PFNA 20 ppt
- List as Hazardous Substance – NY, NJ
- Ban in food packaging- WA

- For state info see: Interstate Technology Regulatory Council https://pfas-1.itrcweb.org/fact-sheets/