Resiliency Financing for Water Utilities in U.S. EPA Region 6

Salvador Gandara
Water Division
EPA Region 6
Climate Change:

THE JURY'S STILL OUT ON CLIMATE CHANGE.
20 Year Infrastructure Needs
CWNS and DWINS

• The Clean Watersheds Needs Survey and the Drinking Water Infrastructure Needs Survey are a 20-year forecast of capital spending on water system infrastructure construction, rehabilitation, and replacement necessary to meet the public health goals of the Safe Drinking Water Act and clean water act.

• Region 6 states (AR, LA, NM, OK and TX) numbers do not include costs associated with climate change.
20 Year Infrastructure Needs
CWNS and DWINS

- **2011 DWINS (to 2031)**
  - National $384.2 Billion
  - Arkansas $6.1 Billion
  - Louisiana $5.3 Billion
  - New Mexico $1.2 Billion
  - Oklahoma $6.5 Billion
  - Texas $33.9 Billion

- **2008 CWNS (to 2028)**
  - National $298.1 Billion
  - Arkansas $0.9 Billion
  - Louisiana $4.9 Billion
  - New Mexico $0.1 Billion
  - Oklahoma $1.3 Billion
  - Texas $11.7 Billion
Climate Change Adaptation Costs Through 2050

- These numbers are from “Confronting Climate Change: An Early Analysis of Water and Wastewater Adaptation Costs”, NACWA 2009.

- **Wastewater Costs** (National $123-$252 Billion)
  - Central Plains $7 - $25 Billion
  - Southwest $42 - $72 Billion
  - Southeast $21 - $47 Billion

- **Drinking Water Costs** (National $325-$692 Billion)
  - Central Plains $14 - $112 Billion
  - Southwest $137 - $274 Billion
  - Southeast $78 - $149 Billion

*Central Plains: MT, ND, SD, WY, NE, KS, OK, TX
Southwest: NV, UT, CO, AZ, NM, CA
Southeast: TN, KY, VA, AR, NC, SC, GA, MS, AL, LA, FL
How do we finance all this stuff?

Total Federal Spending 2015: $3.9 trillion

Energy & Environment
$44.5 billion / 1.1%

Source: OMB
National Priorities Project
nationalpriorities.org
EPA’s Drinking Water and Clean Water State Revolving Fund Programs
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- Program Goal
  - The goal of the State Revolving Fund (SRF) programs is to provide low interest rate loans for clean water (CWSRF) and drinking water (DWSRF) projects.
  - CWSRF was created in 1987 reauthorization of the Clean Water Act.
  - DWSRF was created in 1996 amendment of the Safe Drinking Water Act.
EPA’s Drinking Water State Revolving Fund Program

• **Eligible Applicants**
  - Publicly-owned community water systems (e.g. counties, cities, towns, municipalities)
  - Privately-owned community water systems (e.g. for-profit water utilities, non-profit mutual water companies)
  - Non-profit non-community water systems (e.g. public school districts)

• **Eligible Projects**
  - Planning and design
  - Treatment facility construction
  - Security measures
  - Transmission and distribution
  - Elevated tanks
  - Storage reservoirs
  - Booster stations
  - Source water protection
  - Riparian buffers
  - Public education/outreach
  - System consolidation
EPA’s Clean Water State Revolving Fund Program

**Eligible Applicants**
- Any city, town, district, or other public body created under state law, a Native American tribal government or an authorized Native American tribal organization with jurisdiction over disposal of sewage, industrial wastes or other wastes, and any designated and approved management agency under Section 208 of the CWA.

**Eligible Projects**
- Wastewater Treatment Plants
- Sewer Interceptors
- Sewer Collection Systems
- Pumps and Equipment
- CSO Correction
- Stormwater pipes, storage and treatment
- Green Infrastructure
- Wastewater energy-efficient upgrades
- Water conservation education
- Others…
State Agencies

- The Texas DWSRF is administered by the Texas Water Development Board (TWDB).
- Financing operations are jointly carried out with the Texas Commission on Environmental Quality (TCEQ).

Priority Ranking System Highlights

- Systems that have urgent need due to unforeseen situations that require immediate attention to protect public health and safety (may be eligible for 100% principal forgiveness).
- Green Infrastructure (10% of capitalization grant): renewable energy generation such as solar panels, hydroelectric, geothermal or wind turbines or infrastructure built at the water system facilities such as green roofs, porous pavement, bioretention or grey water reuse. (Eligible for subsidy)
- Source water protection (10% of funds available) with a portion being allocated as principal forgiveness to eligible disadvantaged projects and subsidized green funds.
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Financing operations are jointly carried out with the Texas Commission on Environmental Quality (TCEQ).

**Priority Ranking System Highlights**
- Green Infrastructure: Eligible for principal forgiveness if the project has elements considered green and exceed 30% or greater than the total project cost.
EPA’s U.S./Mexico Border Water Infrastructure Program
EPA’s U.S./Mexico Border Water Infrastructure Program

- Created as a result of NAFTA
- Established BECC and NADB
- **Purpose**
  - Assist economically distressed communities
  - Provide safe drinking water and basic sanitation facilities
  - Assist communities within 62.1 miles (100 Km) from either side of US/Mexico Border
  - Projects can incorporate sustainable and green infrastructure elements.
EPA’s U.S./Mexico Border Water Infrastructure Program

Eligible Funding Elements:

• Project Development Assistance Program (PDAP) administered by the Border Environment Cooperation Commission (BECC):
  • Engineering Studies and plans
  • Public participation process
  • Environmental Review
  • Final Design

• Border Environment Infrastructure Fund (BEIF) administered by the North American Development Bank (NADB):
  • Assistance with financial analysis, user rate studies
  • Procurement of construction management and construction contracts
  • Drinking water and wastewater infrastructure construction
FEMA’s Public Assistance Grant Program

• **Purpose**
  - Following a Presidentially-declared emergency or disaster, FEMA’s Public Assistance Grant Program provides supplemental Federal disaster grant assistance for the repair, replacement or restoration of disaster-damaged publically owned facilities and facilities of certain private organizations.
  - The Federal share of assistance is not less the 75% of the eligible cost for emergency measures and permanent restoration.
  - The State determines how the non-federal share (up to 25%) is split between applicants.

• **Eligible Recipients**
  - Public Drinking water and Wastewater Utilities
  - For-profit utilities are NOT covered.
FEMA’s Public Assistance Grant Program

• **Eligible Work**
  - Required as the direct result of a Presidentially-declared disaster
  - Performed at a facility that had been in active use at the time of the disaster
  - Occur within the designated disaster area
  - Work must be the legal responsibility of the applicant at the time of the disaster
  - Emergency Work: Immediately protective measures to reduce or eliminate threats to public health and safety including restoration of drinking water, sanitation and fire protection services.
  - Permanent Work: Restoring a damaged facility to its pre-disaster design. Work may range from minor repairs to total replacement.

• **Eligible Reimbursements**
  - FEMA has specific rules governing the reimbursement process.
FEMA’s Public Assistance Grant Program Process
FEMA’s Public Assistance Grant Program

- **Resources**
  - [http://water.epa.gov/infrastructure/watersecurity/funding/fedfunds/upload/llfemapagp.pdf](http://water.epa.gov/infrastructure/watersecurity/funding/fedfunds/upload/llfemapagp.pdf)
Purpose

- Provides funding for clean and reliable drinking water systems, sanitary sewage disposal, sanitary solid waste disposal, and storm water drainage to households and businesses in eligible rural areas.
- Authorized under section 306 of the Consolidated Farm and Rural Development Act

Eligible Recipients

- State and local government entities, nonprofits, Federally recognized tribes with the legal authority to construct, operate and maintain the proposed services or facilities
- All facilities receiving federal financing must be used for a public purpose
- Must be located in a rural area and town with 10,000 or fewer persons
- The area to be served must also have a median household income less-than the state's median household income for non-metropolitan areas
USDA Rural Development Water & Waste Disposal Loan & Grant Program

- **What types of financing are available?**
  - Long-term (up to 40 years, based on useful life), low-interest fixed-rate loans
  - If funds are available, grants may be combined with a loan if necessary to keep user costs reasonable
- **How may the funds be used?**
  - Drinking water sourcing, treatment, storage and distribution
  - Sewer collection, transmission, treatment and disposal
  - Solid waste collection, disposal and closure
  - Storm water collection, transmission and disposal
  - Legal and engineering fees
  - Land acquisition, water and land rights, permits and equipment
  - Start-up operations and maintenance
  - Interest incurred during construction
  - Purchase of existing facilities to improve service or prevent loss of service
  - Other costs determined to be necessary for completion of the project
  - For a complete list, see 7 CFR Part 1780.7 and 1780.9
USDA Rural Development Emergency Community Water Assistance Grants

### Purpose
- Helps eligible communities prepare for, or recover from, an emergency that threatens the availability of safe, reliable drinking water for households and businesses
- Authorized under section 306A of the Consolidated Farm and Rural Development Act

### Eligible Recipients
- State and local government entities, nonprofits, Federally recognized tribes.
- Must be located in a rural area and town with 10,000 or fewer persons
- The area to be served must also have a median household income less-than the state's median household income for non-metropolitan areas
Eligible Projects

- Water transmission line grants up to $150,000 are for construction of waterline extensions, repairs to breaks or leaks in existing water distribution lines, and related maintenance necessary to replenish water supply.
- Water Source grants up to $500,000 are for construction of a new water source, intake and/or treatment facility.

What Qualifies as an emergency?

- Drought, Flood, Tornado, Hurricane, others.
Texas
Paco Valentin, State Director
Federal Building, Suite 102
101 South Main Temple, TX  76501
Voice: (254) 742-9700
Fax: (254) 742-9709

www.rd.usda.gov/tx
EPA’s Water Infrastructure and Resiliency Finance Center

• **Purpose**
  • Serves as a resource to communities and stakeholders looking to maximize delivery of investment capital for planning, design, and construction of state-of-the-art sustainable and resilient water infrastructure.

• **Center Goals**
  • Promoting effective use of federal funding programs and private capital
  • Promoting state-of-the-art financing paired with life cycle design solutions
  • Supporting collaborative technical assistance efforts that expand managerial, technical, and financial capacity
  • Serving as a data and learning clearinghouse that closes knowledge gaps and supports effective decision-making

• [http://www2.epa.gov/waterfinancecenter](http://www2.epa.gov/waterfinancecenter)
EPA’s WIRFC: Operational Framework

- USEPA Office of Water
  - Finance Center
    - Regional Environmental Finance Centers
    - USEPA Financial Advisory Board

*Finance Centers Selected in October*
EPA’s WIRFC: Current Activities & Engagements

• **Regional Finance Forums**
  These forums bring together communities with water infrastructure financing needs in an interactive peer-to-peer networking format. Attendees hear how local utilities have financed resilient water infrastructure projects and have the opportunity to meet key regional funding and technical assistance contacts.

• **Disadvantaged Community Support**
  The Center is kicking off work to build financial capacity in small and medium disadvantaged communities. Through increased communication with community decision makers and targeted technical assistance, the Center assists in identifying financing options to address community needs. Financing options include available funding sources and possible financing strategies.
EPA’s WIRFC: Current Activities & Engagements

- **Affordability Programs**
  The Center is exploring how household affordability considerations are addressed for specific segments of service areas that have difficulty paying water and sewer bills. The Center is developing a compendium on rate assistance and household affordability program best practices.

- **Innovative SRF Financing**
  The Center is launching a State Revolving Fund (SRF) Peer-to-Peer Learning Program with the Council of Infrastructure Financing Authorities (CIFA) and engaging in other SRF outreach on state-of-the-art practices.
EPA’s WIRFC: Current Activities & Engagements

- **Partnerships**
  The Center is initiating a Water Infrastructure Public-Private Partnership and Public-Public Partnership Study and Local Government Training with the University of North Carolina Environmental Finance Center and West Coast Exchange. The Center is working with its partners to promote new tools such as EPA Region 3’s "Community-Based Public-Private Partnerships Guide for Local Governments" to explore alternative market-based tools for integrated green stormwater infrastructure.

- **Stormwater Financing Clearinghouse**
  The Center is focusing on stormwater financing by developing a clearinghouse of information to support communities to develop dedicated sources of revenue for stormwater programs.
EPA’s WIRFC: Challenges

- The Center does not currently manage a funding program of its own
- Value of the Center rides on expertise, relationships, collaborative effort, credibility and trust
- Success is shaping a national conversation that identifies and effectively promotes - and scales - state-of-the-art technical and funding solutions
EPA’s WIRFC: Contact Information

Jim Gebhardt
Director
202-564-0323
Gebhardt.Jim@EPA.gov

Sonia Brubaker
Program Manager
202-864-0120
Brubaker.Sonia@EPA.gov
Federal Funding for Utilities in National Disasters (Fed FUNDS)

• **Purpose**
  - Provides tailored information to water and wastewater utilities about applicable federal disaster funding programs. The Fed FUNDS Web pages address national-level disasters, but could also apply to large-scale and even local disasters that result in service interruptions and significant damage to the critical water/wastewater infrastructure.
  - [http://water.epa.gov/infrastructure/watersecurity/funding/fedfunds/index.cfm](http://water.epa.gov/infrastructure/watersecurity/funding/fedfunds/index.cfm)
David Reazin
Efficiency Coordinator, GPRC, and CWSRF Project Officer
214-665-7501
Reazin.David@EPA.gov