



Disaster Recovery Funding for Water Infrastructure

Financing Resilient and Sustainable Water Infrastructure
September 10, 2015

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Topics

- 1. EPA Brochures of Federal Disaster Funding
- 2. Federal Funding for Utilities – Water/Wastewater-
in National Disasters (Fed FUNDS)



What if this Happened to You?



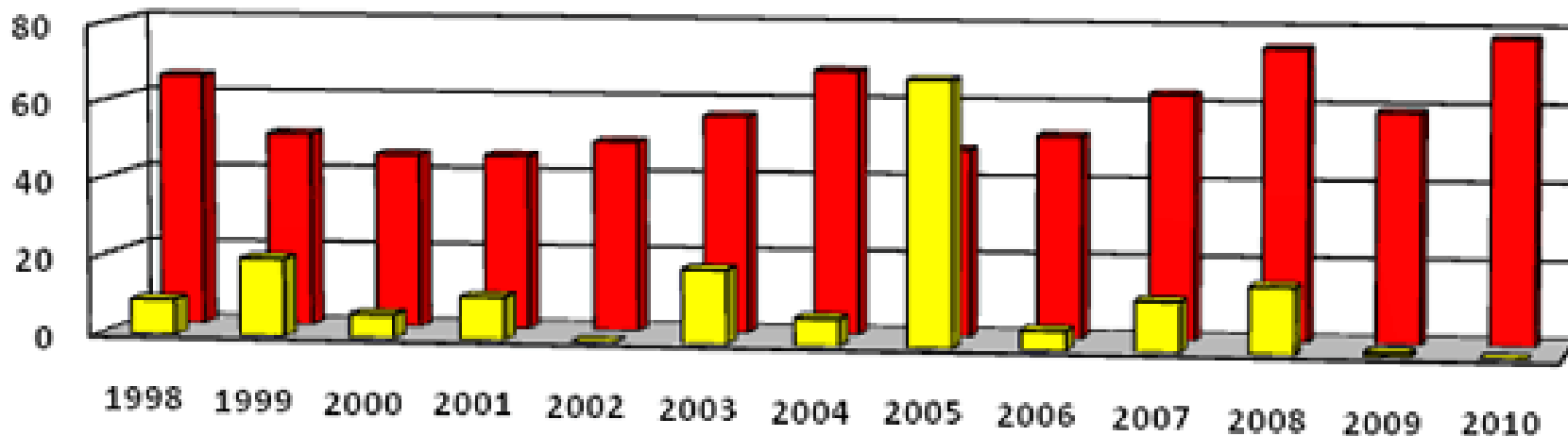
Where would you find the funding for recovery?
How would you fund future mitigation?



Presidential Disaster Declarations

Number of Declarations per Calendar Year

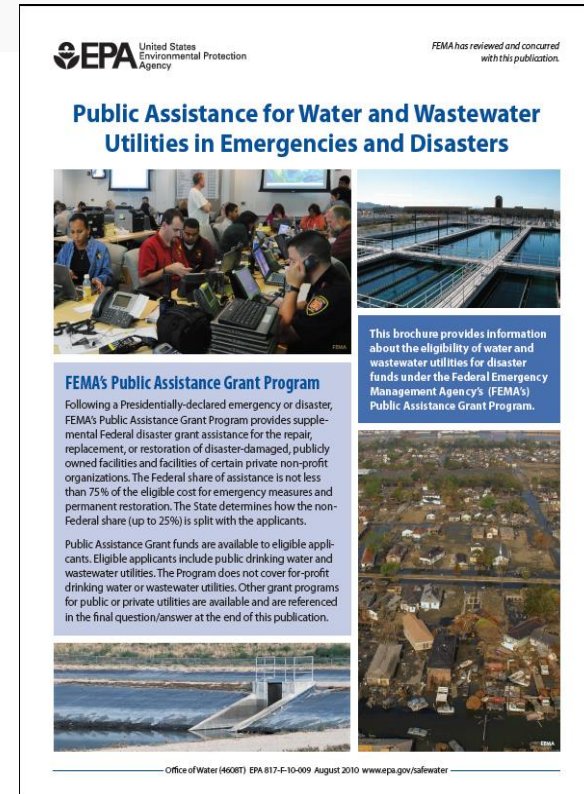
■ Emergency
■ Major Disaster





1. Public Assistance for Water and Wastewater Utilities

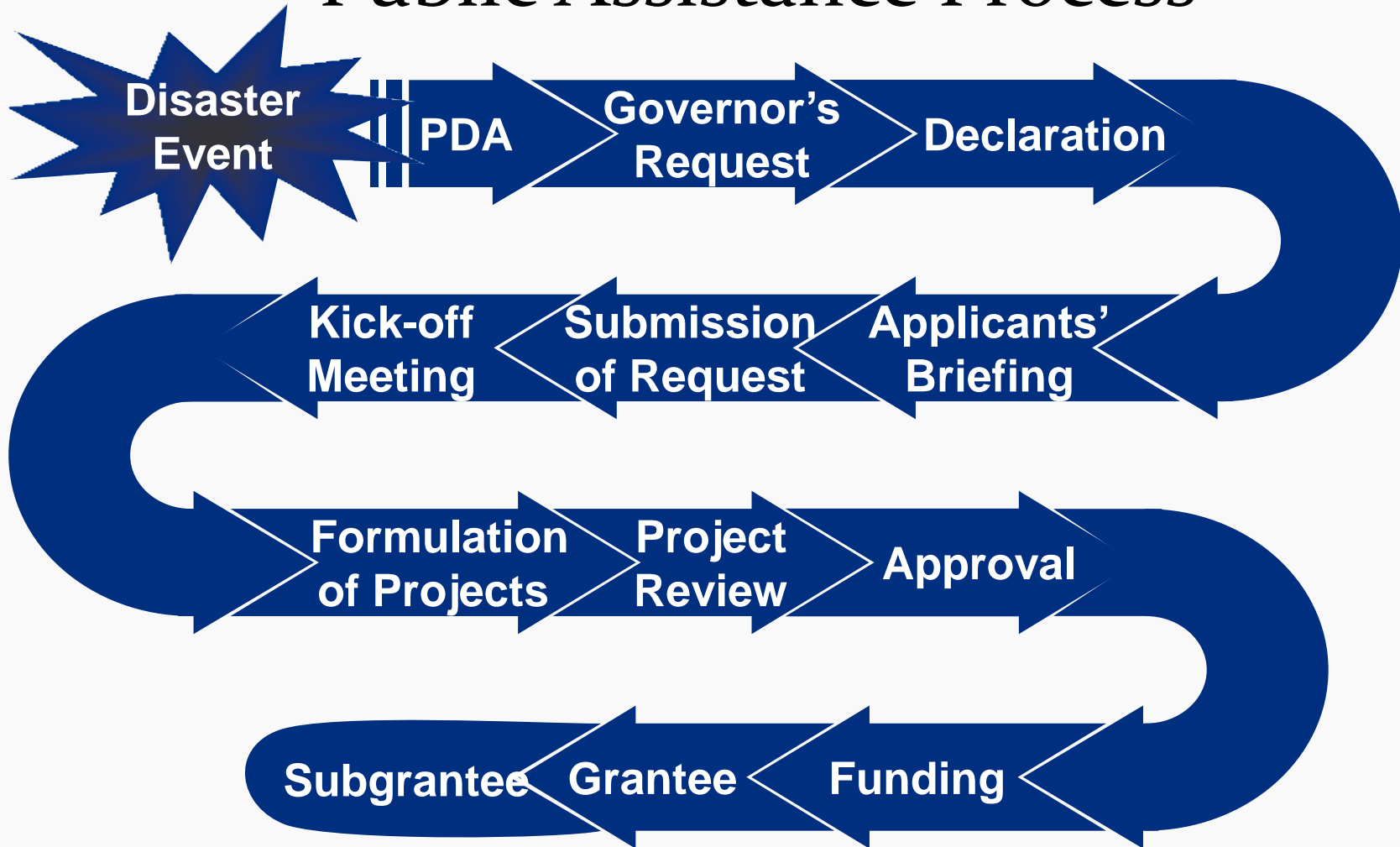
- Developed brochure targeted to water sector on FEMA's Public Assistance Program
- Covers eligible work, eligible reimbursements, and FAQs
- Available via web



<http://water.epa.gov/infrastructure/watersecurity>



Public Assistance Process





Reimbursement Tips for Water Sector

– *Reimbursement Tips for the Water Sector* fact sheet
(EPA 817-F-09-004)

– Tips for drinking water and wastewater utilities to maximize their ability to receive reimbursement

- Available at:

http://water.epa.gov/infrastructure/watersecurity/emergencyplan/upload/fs_watersecurity_reimbursementtips_watersector.pdf

The thumbnail shows the EPA logo and the title "REIMBURSEMENT TIPS for Water Sector Emergency Response and Recovery". A blue box contains the text: "Emergency response and recovery costs incurred by drinking water and wastewater utilities may be eligible for reimbursement through local, state, or federal level mechanisms. While the rules for allowable activities vary between reimbursement mechanisms, lessons learned from past incidents reveal that reimbursement is commonly not maximized. This is often due to lack of knowledge of or failure to follow proper procedures and processes specific to a particular mechanism. This document presents tips drinking water and wastewater utilities can use to maximize their ability to receive reimbursement." Below this, the heading "Reimbursement Tips before an Incident" is followed by three columns of text: "Consider joining a mutual aid and assistance program.", "Review the actual coverage and limits of your insurance policy(s).", and "Develop accounting, documentation, and emergency procurement procedures and personnel policies you will use during a disaster." There is also a bullet point about "Temporary re-location and permanent work".



2. Federal Funding for Utilities-Water/Wastewater- in National Disasters (Fed FUNDS)

 <p>Which Funding Is Right for You?</p>	<p>Currently In a Disaster?</p>  <p>Here are forms to document the damage, costs, and repairs.</p>	 <p>Federal Disaster Funding Programs</p>
 <p>Be Prepared to Tap into Funding</p>		 <p>Utility Examples, Training, & Assistance</p>

epa.gov/fedfunds



**Which Funding Is
Right for You?
ENTER >>**



1. How would you characterize your water/wastewater utility?

- Public
- Private Non-Profit
- Private For-Profit

2. Are you interested in learning about funding opportunities to repair damage to your utility from a significant incident such as a Presidentially-Declared Disaster?

- Yes
- No

3. Are you interested in funding for mitigation activities that reduce disaster losses and protect life and property from future disaster damages?

- Yes
- No

4. Are you a rural utility serving a town with a population of less than 10,000?

- Yes
- No

[Submit for Summary Report](#)

[Start Over](#)



Which Funding Is
Right for You?
ENTER >>



Which Funding Is Right for You?

Fed FUNDS Home

Help

Federal Disaster Funding Summary Report

1. You indicated that you are a public water or wastewater utility.
2. You indicated that you are interested in learning about funding opportunities related to a Presidentially–Declared Disaster that may have caused damage to your facility.
 - Consider the **FEMA Public Assistance Grant (PA) Program**, which may provide funding for a damaged facility in a Presidentially–Declared Disaster to repair/replace the facility to pre–disaster conditions.
 - For program information tailored for water/wastewater utilities, see the [FEMA PA Program topics in Fed FUNDS](#) or go directly to the [FEMA PA website](#) and [FEMA PA Forms](#).
 - You must attend an applicant briefing with FEMA (contact your state to determine the location/timing). Complete a [Request for Public Assistance Form](#) within 30 days of a Federal disaster declaration to be eligible for FEMA funds.
 - Check out the [Lessons Learned from Water/Wastewater Utilities that Participated in FEMA's PA Grant Program](#) (X pp, XXXK).



Checklist to Prepare for Funding

- Checklist to Prepare for Funding
- Know the Basics
- Establish Funding Contacts
- Set Up System to Document Damage/Costs
- Develop Emergency Procurement Policy/Procedures
- Conduct Training and Exercises
- Maintain Business Operations

Checklist to Prepare for Funding

Activities to Prepare for Funding	Typical Utility Officials Involved
<input type="checkbox"/> Know the basics of disaster funding	Emergency Manager, Operator, Finance/Accounting Department, Senior Management
<input type="checkbox"/> Contact local/state officials with connections to funding	Emergency Manager, Senior Management
<input type="checkbox"/> Set up a system to document damage and costs	Emergency Manager, Operator, Senior Management Finance/Accounting Department
<input type="checkbox"/> Develop emergency procurement policy and procedures	Emergency Manager, Operator, Finance/Accounting Department, Senior Management
<input type="checkbox"/> Develop Emergency Overtime Policy	Emergency Manager, Operator, Finance/Accounting Department, Senior Management
<input type="checkbox"/> Training and exercise on systems and procedures	Emergency Manager, Operator, Field Crews, Mutual Aid Coordinators, Finance/Accounting Department, Senior Management
<input type="checkbox"/> Maintain financial business operations	Senior Management, Emergency Manager, Operator

Currently In a Disaster?



Document the Disaster

Document the Disaster

Organize Documentation into a Damage/Cost Report

REMEMBER TO:

- Contact your local/operational area/state emergency management agencies.** These agencies can provide guidance on handling the disaster and the requirements that apply for disaster funding.
 - <http://www.fema.gov/about/contact/statedr.shtm>: follow this link to view a list of state emergency management agencies.

- Document all damage on the sample Damage Assessment/System Status Forms.** These forms can be used to quickly assess damage to various system components, where repairs are needed, and any impact to public health and safety. Choose from the forms below or use other forms that suit your needs.
 - [Water System Status Report \(PDF\)](#) (1 pg, 141K): documents critical issues for water systems. This form can also support a request for mutual aid/assistance from an organization such as Water/Wastewater Agency Response Network (WARN). See below for more information on WARN.
 - [Wastewater System Status Report \(PDF\)](#) (1 pg, 66K): documents critical issues with wastewater systems.
 - [Suggested Questions for Water/Wastewater Utilities \(PDF\)](#) (3 pp, 113K): helps explore issues in more depth that may emerge after a disaster or large-scale service interruption.
 - [Natural Disaster Incident Report Form \(PDF\)](#)(4 pp, 480K): documents the status of utility systems.

Currently In a Disaster?



Here are forms to document the damage, costs, and repairs.



Federal Disaster Funding Education Website for Water and Wastewater Utilities WARN Water System Status Report

<input checked="" type="checkbox"/> This is an exercise <input type="checkbox"/> This is NOT an exercise		Situation Status Report #3		
WARN Water System Status Report				
1. Date: May 18, 2011	2. Time: 09:30	3. Incident Name: New Madrid Earthquake		
4. Utility Name: Morgan City Water Treatment Plant		5. Contact: Mr. Smith		
6. Phone: XXX-XXX-XXXX		7. E-mail: XXXX@mcwtp.gov		
8. Fax:		9. Alt. Phone:	10. Other:	
11. Overall Status:	<input type="checkbox"/> Green (normal)	<input type="checkbox"/> Yellow (no mutual aid required)	<input checked="" type="checkbox"/> Red (some mutual aid required)	<input type="checkbox"/> Black (significant mutual aid required)
12. Prognosis:	<input checked="" type="checkbox"/> No Change		<input type="checkbox"/> Improving	<input type="checkbox"/> Worsening
13. Utility EOC Activated: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				
14. Proclamation of Local Emergency by Local Government: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unsure				
15. Critical Issues: (and actions taken):	<input checked="" type="checkbox"/> Pipes <u>severe damage to miles of distribution system</u>			
	<input checked="" type="checkbox"/> Pump Stations <u>5 stations out in valley</u>			
	<input checked="" type="checkbox"/> Tanks/Reservoirs <u>3 tanks suffer deformations</u>			
	<input type="checkbox"/> Wells _____			
	<input type="checkbox"/> Connection(s) Status/Flow change request(s) _____			
	<input checked="" type="checkbox"/> Power/Communications <u>operating on generator</u>			
<input checked="" type="checkbox"/> Chemical Supply/Leak <u>small chlorine tank leak complicating response</u>				
16. Water Quality	Contamination : <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Undetermined _____			
	Water Quality Order : <input checked="" type="checkbox"/> Boil Order <input type="checkbox"/> Do Not Drink <input type="checkbox"/> Do Not Use			
	Order Issued by : <u>Mr. Smith</u> Est. Date/Time of Lift: <u>May 20, 2011</u>			

Currently In a Disaster?



Here are forms to document the damage, costs, and repairs.



Photolog

Instructions: This form should be used to document photographically the status of the utility's systems and facilities immediately after a disaster event when it is safe to do so. Please include photos from various angles so that as much damage as possible is shown. For each photo, a caption should be included that tells what the picture is of.

Initials

Date: May 18, 2011

Time: 09:30

Facility Name: Morgan City Water Treatment Plant

Address or Location: 2343 Corner St

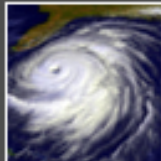
Person Making Report: Mr. Smith,



Damage to Roof of Water Tank #3



Bent piping in unit 1



Overview of Federal Disaster Funding Programs

[Overview of Programs](#)

[FEMA Public Assistance](#)

[FEMA Mitigation Programs](#)

[USDA Emergency Water Grants](#)

[EPA State Revolving Funds](#)

[HUD Community Grants](#)

[SBA Loans](#)

[Fed FUNDS Home](#)



Below are short descriptions of federal disaster funding programs from FEMA, USDA, EPA, HUD, and SBA. The descriptions are followed by a table of eligible uses for each funding program, including planning, construction, operations and maintenance.

[FEMA Public Assistance \(PA\) Grant Program](#)

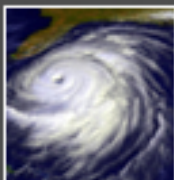
Following a Presidentially-Declared Disaster, FEMA's Public Assistance Grant Program provides supplemental federal disaster grant assistance for emergency and permanent repair, replacement, or restoration of disaster-damaged facilities. Emergency work includes debris removal and disposal and removal and demolition of unsafe structures. Permanent work includes repair, replacement, or restoration of disaster-damaged facilities to pre-disaster design. The program applies to publicly owned water and wastewater utilities or private nonprofit utilities (e.g., cooperatives), but does not cover private, for-profit drinking water or wastewater utilities.

As part of the Public Assistance Grant Program, FEMA would consider hazard mitigation proposals that would eliminate or reduce future damages similar to those that occurred during the current Presidentially-Declared Disaster. For example, for a Presidentially-Declared Disaster that flooded a culvert and washed out a road, FEMA would consider proposals for...

East Valley Water District

East Valley Water District in California obtained reimbursement of more than \$400,000 from FEMA Public Assistance Grants for disaster response to the Old Fire in the San Bernardino National Forest in October 2003.





FEMA Public Assistance Grant Program

Fed FUN

Overview of Programs

FEMA Public Assistance

FEMA Mitigation Programs

USDA Emergency Water Grants

EPA State Revolving Funds

HUD Community Grants

SBA Loans

FEMA Public Assistance Grant Program – What is it?

In the wake of disasters, Federal assistance is coordinated by the Federal Emergency Management Agency (FEMA). In the event of a Presidentially-Declared Disaster, FEMA can provide supplemental federal assistance (under the Public Assistance Grant Program) to states, tribal nations, local governments, and certain private nonprofit organizations (PNPs) as quickly as possible. FEMA may provide eligible applicants (e.g., water/wastewater utilities) with PA grants to reimburse eligible costs associated with repair, replacement, and/or restoration of disaster-damaged facilities.

Applicants may receive funding to restore the facility based on the original design, capacity, and function as it existed immediately prior to the disaster. However, FEMA is authorized to provide additional payments to repair facilities that they comply with current regulations, codes, and standards and to mitigate damage from future disasters. FEMA has four types of projects under the PA Program: small projects, large projects, improved projects, and alternative projects. Additional detail and level of reimbursement for each type is provided under the subtab Plan Project.

Many water and wastewater utilities have taken advantage of the FEMA PA Program. To build further awareness of the Program among the water sector, EPA has developed a brochure targeted to water and wastewater utilities. This brochure, entitled [Public Assistance for Water and Wastewater Utilities in Emergencies and Disasters \(PDF\)](#) provides information about the eligibility of water and wastewater utilities to receive disaster funds under the FEMA PA Program. You can also go to the [FEMA PA program profile \(PDF\)](#) (2 pp, 98K About PDF) or go directly to the [FEMA PA website](#) for further information about the current PA program.

Funding/Eligible Work

Application/Forms

Assess Damage

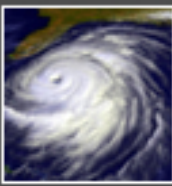
Plan Projects

Mitigation Funds

Keys to Success

Mitigation Projects Considered Cost-Effective by FEMA for Water/Wastewater Utilities

General Project Area	Project Type	Project Description
<p align="center">Sanitary and storm sewer systems</p>	<p align="center">Access covers</p>	<p>When feasible, access covers can be elevated to the hydraulic grade line. There are a number of devices that prevent infiltration into access holes.</p>
	<p align="center">Sewer lines</p>	<p>Repair, lining, or encasement of damaged sections to prevent infiltration or structural collapse.</p>
	<p align="center">Pump stations</p>	<p>Equipment or controls in a pump station that are subject to damage from a 100-year flood can be elevated. Pump station buildings can be dry flood-proofed.</p>
		<p>Installation of camlocks, transfer switches, and electrical panels to facilitate the connection of portable emergency generators.</p>
		<p>If pumps and their attached motors are damaged by storm water inundation, replace them with submersible or inline pumps as appropriate.</p>
		<p>If pump station equipment is damaged as a result of inundation resulting from power failure, install switches, circuit isolation and quick connect capability to facilitate rapid connection of backup power.</p>
<p align="center">Wastewater treatment plants</p>	<p align="center">WWTP facilities</p>	<p>If pump station equipment is damaged as a result of inundation resulting from power failure, install switches, circuit isolation and quick connect capability to facilitate rapid connection of backup power.</p>
		<p>Elevation of equipment and controls that can be elevated easily.</p>
		<p>Dry or wet flood-proofing of buildings.</p>



Lessons Learned from Water/Wastewater Utilities that Participated in FEMA's Public Assistance Grant Program

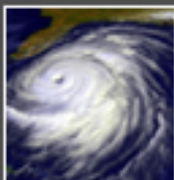
Many drinking water and wastewater utilities have received funding for repair and replacement work through the Federal Emergency Management Agency (FEMA) Public Assistance (PA) Grant Program. The PA Program provides grants to eligible applicants after Presidentially-declared disasters. In this brochure, water and wastewater utilities provide lessons learned from working with FEMA and participating in the PA Program.

For more detailed information about the FEMA PA program, see <http://www.fema.gov/government/grant/pa/index.shtm> and the EPA publication: *Public Assistance for Water and Wastewater Utilities in Emergencies and Disasters* – available at <http://water.epa.gov/infrastructure/watersecurity/emmerplan/upload/Public-Assistance-for-Water-and-Wastewater-Utilities-in-Emergencies-and-Disasters.pdf>.

DISCLAIMER: These lessons learned are provided to help water and wastewater utilities better understand use of the FEMA PA Program, but do not assure or guarantee any funding from FEMA.

Learn about the PA Program prior to a disaster so the process goes more smoothly – To help maximize your potential for reimbursement, learn about the PA process and key deadlines for applying for funds and reach out to state officials who administer the grant program with





FEMA Hazard Mitigation Assistance Programs

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[Overview of Programs](#)

[FEMA Public Assistance](#)

[FEMA Mitigation Programs](#)

[USDA Emergency Water Grants](#)

[EPA State Revolving Funds](#)

[HUD Community Grants](#)

[SBA Loans](#)

What is hazard mitigation and how is it beneficial?

After disasters, repair work typically involves restoring damaged facilities to pre-disaster conditions. However, subsequent disasters often result in similar damage. By implementing mitigation measures, utilities can reduce or eliminate the loss of life, property, essential services, critical facilities (e.g., utilities) and minimize the time and costs of recovery.

[Mitigation Funding](#)

[Mitigation Projects](#)

[Cost Effective Mitigation](#)

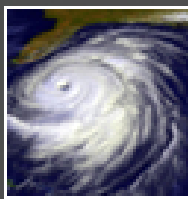
[Application/Forms](#)

[Plan Project](#)

[Keys to Success](#)

FEMA's Hazard Mitigation Funding Programs

1. Why should you first develop a hazard mitigation plan?
2. What programs are available to fund mitigation projects/activities?
3. Who can apply for these mitigation funding programs?
4. What is the difference between the mitigation provisions in the FEMA Public Assistance Program (406 Mitigation) and the HMGP Program (404 Mitigation)?



EPA SRF Disaster/Mitigation Funding

Repairing Hurricane Damage

In 2009, the City of Galveston, Texas received a grant through EPA's DWSRF, which was used to finance repairs to the White Sands elevated storage tank, damaged by Hurricane Ike.



Flood Mitigation

The City of Linwood, New Jersey will receive \$2,183,362 through EPA's CWSRF to fund major stormwater drainage improvements, which will alleviate significant flooding in two watershed locations and ensure that storm water run-off discharging into the Patcong Creek is cleaner.





- Dozens of successful utility applications for disaster and mitigation funding
 - Portland Water Bureau FEMA Pre-Disaster Mitigation for Conduit
 - Metro Water Services (Nashville): FEMA Public Assistance for Flood Damage in 2011
 - East Valley Water District: FEMA Public Assistance for Flood Damage in 2010

- Training from FEMA and EPA on federal disaster funding

- Funding mentors including utilities and federal officials



Outreach/Training Planned on Fed FUNDS

- Fed FUNDS Short Video Trainings
- Fed FUNDS Webinars





Questions?

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Find FedFUNDS at epa.gov/fedfunds