

A photograph showing a flooded industrial or utility site. In the center, a white, rectangular building with a flat roof and some equipment on top is partially submerged in murky, grey water. A chain-link fence runs across the foreground and middle ground, with several red fire hydrants visible. The background consists of bare trees and a grey, overcast sky. The overall scene suggests a coastal area affected by flooding or storm surge.

A Tale of Two Coastal Communities

Protecting Customers from Sewer Back Ups
and

Earning Points under FEMA's Community Rating System

Bristol, Rhode Island

- Areas of older homes with basement utilities
- March 2010 Flooding resulted in many sewer overflows into homes
- Grant opportunity presented itself
- First one in State to develop a backflow prevention device (check valve) installation program with no real guidance

Warwick, Rhode Island

- 39 miles of coastline
- 300+ miles of sewer mains
- 48 sewage pumping stations
 - 29 in FEMA flood zones
 - 12 with no permanent back-up power
- Increasing Occurrence Sanitary Sewer Overflows
 - March 2010 Floods
 - June 2010 Lighting Strike at Gaspee Pump Station
 - February 2011 Cedar Swamp Interceptor Line Collapse

FEMA Hazard Mitigation Grant Project

- GOAL: Protect properties/prevent SSOs by installing check valves or backflow preventers in high risk areas
- TARGET: Vulnerable residences (connected to sewers pre-plumbing code requirement for check valves)
- BENEFITS: Reduced liability/insurance claims and added CRS points for possible reduced flood insurance rates for property owners

Scope of Work -- Bristol

- Town had listing of affected properties from response during storm
- Sent letter out to all inviting them to participate
- Also did press release to see if any other properties should be included in project
- Conducted inspections to document existing conditions and determine what type of check valve needed (interior/exterior)



Legend

- Sewer Pump Station
- Property Backup*
- Sewer Pipe
- Designated Project Area
- CRMC Coastal Area



June 2013

Scale: 1"=1500'

BETA Group, Inc.

*Refer to Table 1 for corresponding map location id's as well as detailed information

Scope of Work (continued)

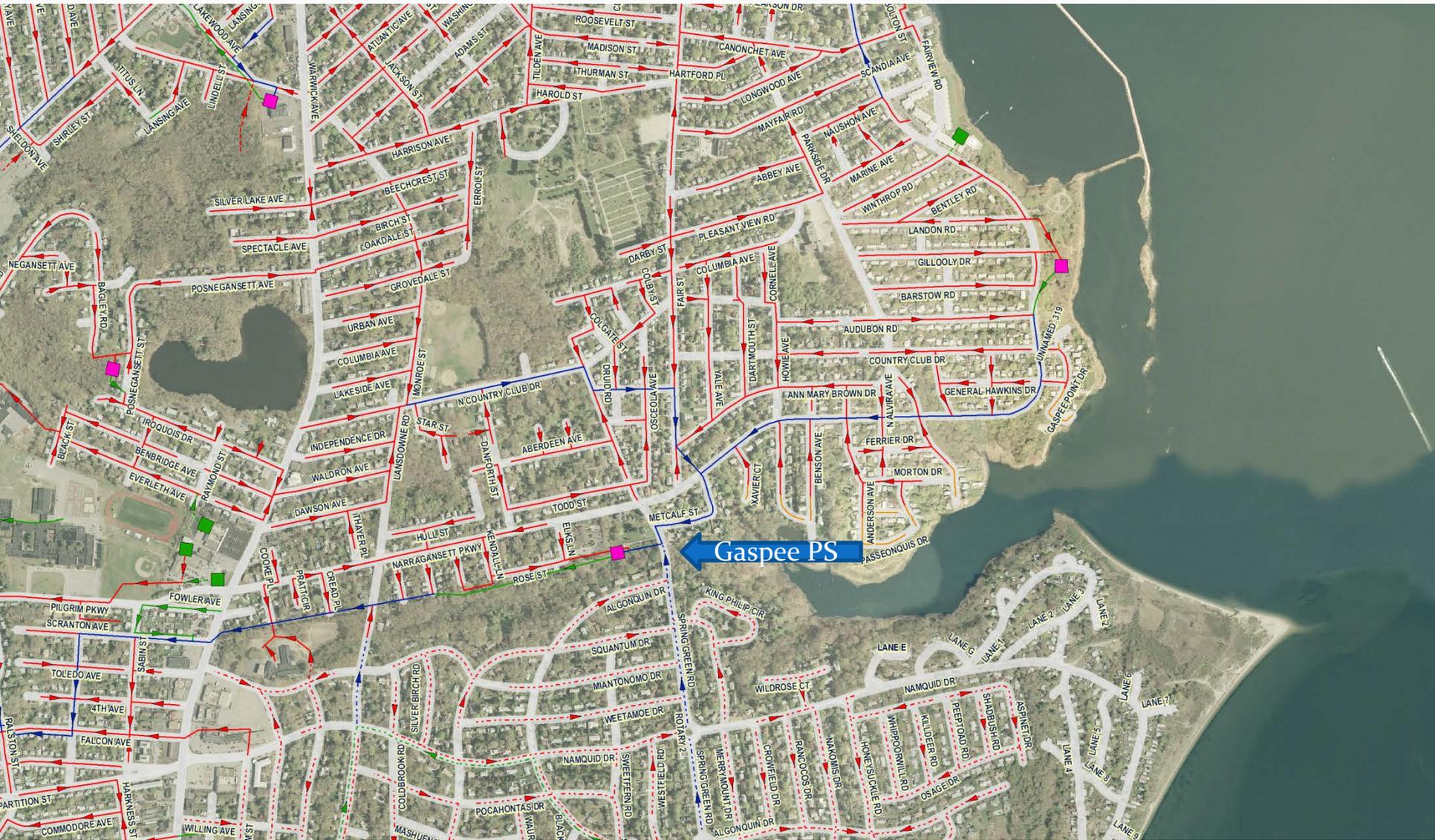
- Drafted Property Agreement
- Out to Bid for Contractor – had a lot of conversations about best approach
- Decided to go with GC for complete project
- Contractor contacted homeowners and scheduled work
- Once job started, more properties joined -- word of mouth very successful outreach
- \$145,913 grant/completed 37 properties

Scope of Work – Warwick

(basically copied Bristol's program)

- Identified eligible properties in target area(s)
- Developed program guidelines
- Conducted outreach and solicited participants
- Developed and published bid specifications for check valve installation contractor (to be paid by City)
- Obtained signed legal agreements from participants
- Contractor performed installation and property restoration (no cost to property owner thanks to grant)
-- \$13,300 for 14 check valves

Warwick – Initial Project Area



How To Sell It

- Minimize cost and effort for the customer
- Answer as many questions as possible up-front
- Obtain testimonials from other customers and/or insurance companies
- Earns points for flood protection under FEMA's Community Rating System (to reduce flood insurance premiums)

Things to Keep in Mind

- May have change orders because old records and hard to find pipes – suggest a pipe locator tool
- CRMC permitting/Historic District approval may be needed for exterior work
 - Cannot use grant for properties in designated Coastal Barrier Reef areas
- Specified standardized equipment and couldn't deviate without sign off
- Property owner responsible for future maintenance - need to inform

“During the catastrophic flood of March 2010, we had sewage back-up into our home, ruining our finished basement. We did not have a check valve. In May, 2010 we installed a check valve. In June, lightning struck the Gaspee pump station and it shut down and sewage once again backed up into the homes in our neighborhood.

Our neighbors without check valves suffered more damage. We did not. The check valve saved us.”

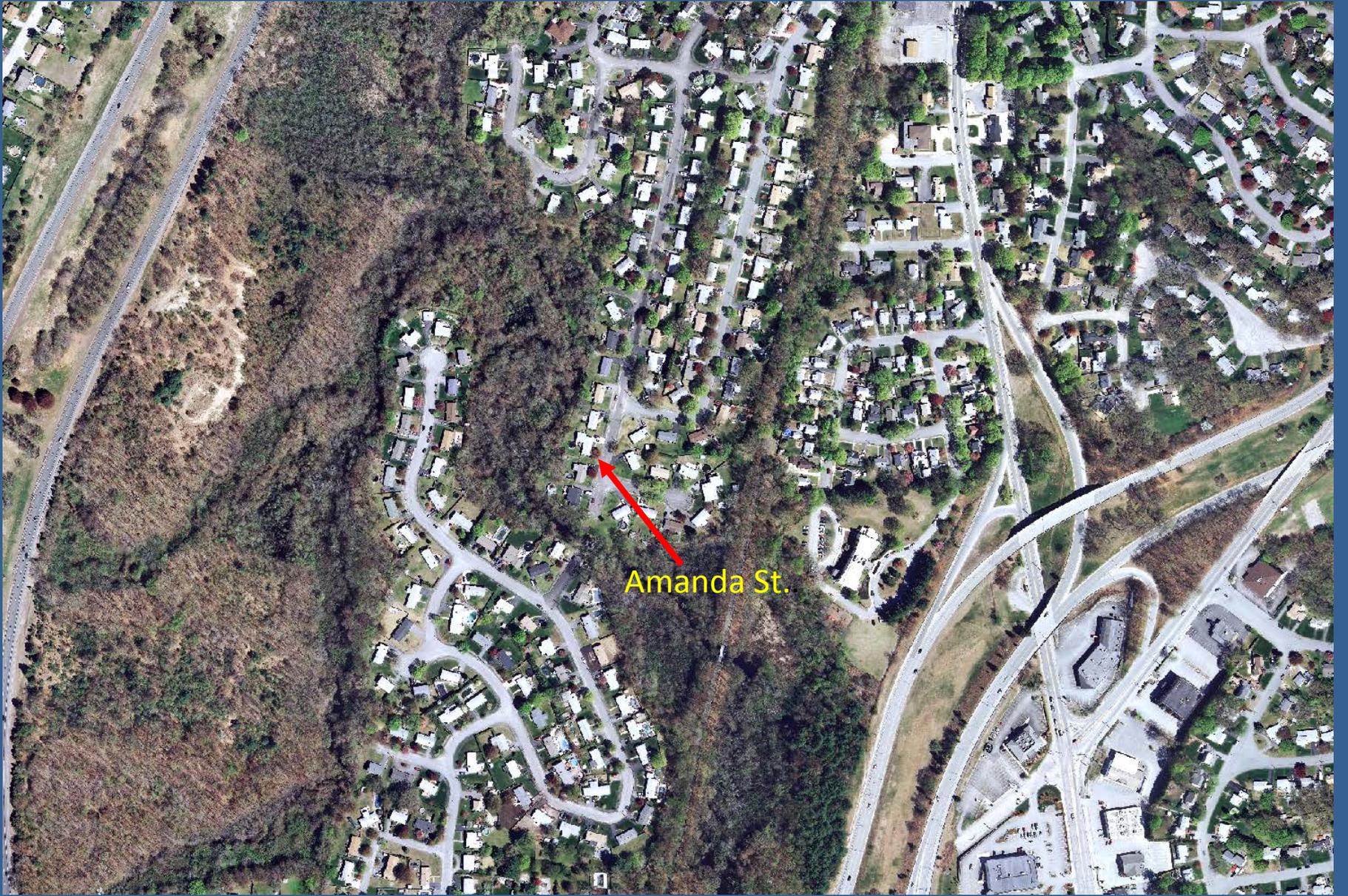
*Robin and George St. Vincent
24 Xavier Court, Warwick*

Flood Plain Acquisition

Peter Lapolla
Cranston Planning Department
August 2015



Pawtuxet River Sign



Amanda St.



Amanda St.

AE

AE

AE

AE





Moore Ave.

Perkins Ave.



Pawtuxet River



Moore Ave.

Perkins Ave.



PAWTUCKET RIVER



Perkins Ave.

Acquired properties





Elmwood Ave.





Perkins Ave. at Moore Ave.

A photograph showing a residential street completely flooded with murky water. In the foreground on the right, a red inflatable boat is partially submerged. The water reflects the sky and the surrounding houses. A white picket fence runs along the side of a house in the middle ground. In the background, several houses and utility poles are visible under an overcast sky. The text "Moore Ave." is overlaid in yellow on the water.

Moore Ave.

Perkins Ave.



before



after

Perkins Ave.



Dead End of Perkins Ave.



Dead End of Perkins Ave. today



06.08.2015 07:20



Corner Perkins and Moore Ave. today



Perkins Ave. today



06.08.2015 07:21







03.06.2014 06:32







06.08.2015 07:40



06.08.2015 07:41

PROPERTY ACQUISITION HANDBOOK FOR LOCAL COMMUNITIES

A SUMMARY FOR STATES

HOW THIS HANDBOOK CAME TO BE

Across the nation, more and more flood-inundated communities are choosing property acquisition as a hazard mitigation option. Besides being a permanent solution to a hazard-related problem, property acquisition achieves many other objectives, such as protecting critical habitat, providing opportunities for recreation, providing flood storage, or enhancing other natural or cultural resources.

Since the devastating floods of 1993, Hazard Mitigation Officers from flood-inundated States and FEMA Regions have developed guidelines to assist communities through the property acquisition process. Hundreds of acquisition projects have tested the effectiveness of those guidelines.

The Property Acquisition Handbook for Local Communities brings together into one document the best practices from States that have successfully fostered property acquisition projects. FEMA and its cadre of Region, State, and local subject-matter experts and potential users designed the handbook to:

- ❑ Bring as much nationwide uniformity as possible to the property acquisition process, while respecting each State's and FEMA Region's diversity.
- ❑ Make the process more user-friendly for the communities, regardless of their size, expertise, and human and technical resources.

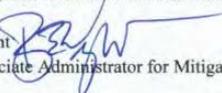


FEMA

AUG 15 2013

MEMORANDUM FOR: Regional Administrators
Regions I-X

ATTENTION: Regional Mitigation Division Directors
Hazard Mitigation Assistance Branch Chiefs

FROM: Roy E. Wright 
Deputy Associate Administrator for Mitigation

SUBJECT: Cost Effectiveness Determinations for Acquisitions and Elevations
in Special Flood Hazard Areas

Projects that are eligible for funding under the Hazard Mitigation Assistance (HMA) programs must be cost effective, i.e., have a Benefit Cost Ratio (BCR) equal to or greater than 1.0. The Risk Reduction Division has completed an analysis of 11,000 acquisition and elevation projects and determined that the average benefits for each type of project were \$276,000 and \$175,000 respectively. Therefore, FEMA has determined that the acquisition or elevation of a structure located in the 100-year floodplain (as delineated on the Flood Insurance Rate Map or based on best available data) that costs less than or equal to the amount of benefits listed above is considered cost effective. For projects that contain multiple structures, the average cost of all structures in the project must meet the stated criterion. There is no need for applicants to conduct a separate benefit cost analysis for a structure that meets this criterion.

Additionally, the specific geographic location of structures can greatly increase acquisition and elevation costs. The amount of benefits identified above may be adjusted by the applicant or subapplicant using locality multipliers that are included in industry accepted cost and pricing guides for construction. If a multiplier is used, a copy of the source document must be included as part of the grant application for review and the methodology demonstrated for the increase of benefits. Also, the applicant or subapplicant should use the most up-to-date locality multiplier at the time of application.

To qualify for these pre-calculated benefits, applicants must provide maps with the structure footprint clearly identified and the 100-year Special Flood Hazard Area (SFHA) delineated (Flood Insurance Rate Map or best available data) as part of the grant application. If the structure or any part of the structure lies in the 100-year SFHA, the structure can utilize the pre-

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calculated benefits. Alternatively, first floor elevations (FFE) can be included for each structure as well as the base flood elevation (BFE) for that location. If the FFE is less than BFE, structures can use the pre-calculated benefits. No other detailed analysis will be required. These pre-calculated benefits can be used for structures in 100-year floodplains in riverine and coastal areas that meet the stated criterion.

This methodology satisfies the cost-effective requirements for the Flood Mitigation Assistance program, any disasters with an open grant application period as of the date of this memorandum, and future disasters. We will discuss the methodology used in the analysis in a future call with the HMA Branch Chiefs.

This determination advances FEMA's commitment to streamline the HMA programs by eliminating the need to perform a complete benefit cost analysis for each structure; reducing time involved in data collection, application development and review; and assisting communities in recovering from disaster more quickly. This memorandum does not replace or supersede the substantial damage benefit cost analysis waiver memorandum.

If you have any questions, please contact me directly at (202) 646-3461, or Kayed Lakhia, Deputy Director, Risk Reduction Division at (202) 646-3458.

City of Cranston

Voluntary Property Acquisition

Informational Meeting

July 9, 2015

Council Chambers, Cranston City Hall

IMPORTANT

- 1) This is a VOLUNTARY PROGRAM
- 2) It may NOT BE FOR EVERYONE
- 3) The City or State WILL NOT EXERCISE THEIR RIGHT TO EMINENT DOMAIN
- 4) The rules and regulations that drive this grant are all FEMA standards – the City is only an expediter in making this opportunity available
- 5) TIME is an important factor (application due 8/7/2015)
- 6) There Are No Guarantees Of Success. This Is A Nation Wide Competitive Grant Opportunity

PRIORITIES FOR ACQUISITION

Repetitive Loss Properties

Location within Floodway

Location Within Floodplain

Proximity To Other Acquisitions

ACQUISITION PROCESS

- Reconfirm Homeowners Participation
- Environmental Review
- Appraisal
- Formal Offer Purchase And Sales
- Closing
- Demolition

RANDOM OBSERVATIONS

- Estimating A Purchase Price
- Houses That Are Under Water
- Uniform Relocation Act
- Timing of the Closings