Anacostia Flood Risk Reduction
Levee Rehabilitation Case Study
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Discussion Topics

- Levee System Overview
- Evaluate Existing Conditions
- Plan Improvements
- Complete Rehabilitation
- Provide Sustainability
- Looking Forward
LEVEE SYSTEM OVERVIEW
Anacostia Levee System

Constructed in the 1950s, the levee includes:

- More than five miles of earthen levees
- Twin 8x4 pressure conduits 2500 feet long
- Four flood control pumping stations
- Gravity outfall
Ongoing Investment in Levee System

- Construction of new screw pumps
- Replacement of flapper valves
- Installation of automatic bar screen cleaners
- Emergency generator installations at each pumping station

- No levee failures, overtopping or breaches
- Engaged in H&H Analysis
Levee owner was advised that the levee system would not meet the standards for FEMA accreditation.

What does that mean?
EVALUATE EXISTING CONDITIONS
- Field Inspection
  - Penetrations
  - Structures
- Concrete Testing
- Utility Coordination
- Review of Historical Records
Subsurface Investigation
Concept Design Report

- Summarized alternatives
- Cost Benefit Analysis
- Property and community impacts
3 PLANNING
Stakeholders Outreach

- Public Outreach
- Elected Officials
- Property Owners
- Maintenance Division
Outreach Methods

- Briefings to elected officials
- Community meetings, press releases and website updates
COMPLETE REHABILITATION
4 Separate Contracts to Address Deficiencies

- Levee Rehabilitation
- Flood Control Pumping Stations Repair and Upgrades
- Pressure Conduit Access Vaults, Cleaning and Evaluation
- Steep Slope Improvements to allow for Maintenance
5 SUSTAINABILITY
Checklists were developed:

- Maintenance Personnel
- Electrical and Mechanical Contractor(s)
6 Looking Forward
Water Resources Reform and Development Act of 2014

- Nationwide Inventory
- Hazard Classification based on Risk
- Levee Safety
- Public Awareness
- Grant Funds
Levee Safety Initiative Implementation involves the Levee Sponsor and all of us....
Questions?

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