



# DUPAGECOUNTY

## STORMWATER MANAGEMENT

### Post-Disaster Grant Funding in DuPage County

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# Background

Stormwater Management in DuPage County

# Who Are We?



## Stormwater Management in DuPage

- Countywide program established in 1989
- Guided by the Stormwater Management Planning Committee & Plan
- Enforce the Countywide Stormwater Management & Floodplain Ordinance
- FY17 Operating Budget \$7.1 Million
- Flood Control Facilities have a floodwater capacity of nearly 6 billion gallons

### Programs

- Watershed Management
- Water Quality
- Floodplain Mapping
- Regulatory Services
- Flood Control Operations & Maintenance



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# Watershed Planning



## Watershed Planning Efforts

- Floodplain Mapping
- Flood Control Planning
- Water Quality Planning

## Why is Planning Important?

- Identifies Regional Flood Control Facilities
- Identifies Regional Flood Control & Water Quality Projects
- Identifies Voluntary Flood-Prone Property Buyouts
- Connects Stakeholders
- Helps County & Stakeholders Secure Grant Funding

# Flood Control Projects



## Regional Project Design & Construction

- Projects Approved by County Board in Watershed Plans
- Projects Designed to Reduce Flooding in Multiple Jurisdictions
- Flood Control Facilities
- Flood Control Projects (i.e. Levees, Wetlands, Reservoirs)
- County Staff Oversees Design & Construction

## Voluntary Flood-Prone Property Buyouts

- When a Project isn't Feasible, Buyouts are Considered
- Buyouts are Contingent on Grant Funding
- Criteria Considered is Depth of Flooding, Proximity to Floodplain, Repetitive Flooding, Federal Grant Requirements
- Prior to 2013, DuPage Purchased ~101 Structures

# Flood Control Operations



## Flood Control Facilities

- Owns & Operates 16 Flood Control Facilities
- Include Reservoirs, Pump Stations & Dams
- 6 Facilities are Mechanically-Operated by Staff, Remaining are Gravity-Operated
- Floodwater Capacity of Nearly 6 Billion Gallons

## Flood Operations

- Flood Forecasting
- Remote Operation Using Rain/Stream Gages & Real Time Video
- <http://ec.dupageco.org/dec/stormwater/watershed/index.html>





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# Funding Overview

Overview of Budget, Grants & Bonds

# Funding



## Budget

- In a “Maintenance Budget”
- Stormwater Management Generate \$9.4 million in Tax Levy
- Supplemented by \$3 Million from General Fund
- Budget Includes ~\$7.36 Million in Annual Bond Repayments

## Outside Funding Sources

- Federal & State Grants
- County-Issued Bonds

# Federal & State Grants



## Overview

- Budget Supplemented by Federal & State Grants (i.e. FEMA, EPA, USACOE, HUD & State Equivalents)
- Often Include Cost Share from Budget
- Watershed Plans Help with Eligibility
- “Shovel-Ready” Projects are Preferred
- Stormwater Management Secured ~\$48.6 Million in Grants from 1996-2012

## Where Are Grants Used?

- Regional Flood Control Facilities
- Regional Flood Control & Water Quality Projects
- Voluntary Flood-Prone Buyouts
- Floodplain Mapping
- Water Quality Watershed Planning

# County-Issued Bonds



## Overview

- Bonds are Debt Securities to Finance Capital Projects
- Require Repayment Over Specified Time Period
- Stormwater Management Received Bond Financing in 1992, 1999 & 2010
- Stormwater Currently Paying Off Bonds from '90s

## Bond Projects

- Elmhurst Quarry Flood Control Facility (1992)
- Wood Dale-Itasca Reservoir (1999)
- Brewster Creek Headwaters Project (2010)
- Churchill Woods Dam Modification & Wetland Restoration (2010)
- West Branch DuPage River Flood Control Project (2010)
- Armstrong Park Reservoirs (2010)



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# Post-Disaster Grant Funding

Funding from April 2013

# April 2013 Flood



## Overview

- On April 17 & 18, 2013, Area Received Widespread Rainfall of 5.55 Inches in 24-Hour Period
- Central & Eastern DuPage Received More than 7 Inches of Rain in 24-Hour Period
- Heaviest Rain Fell in 15-Hour Window
- DuPage Received National Major Disaster Declaration

## Damage

- Estimated \$97 Million in Private/Federal Insurance Payouts, Grants, Loans for Property Repairs, Projects & Other Mitigation Activities
- Recovery & Mitigation Efforts Still Ongoing

# April 2013 Flood



Lisle, IL

# Post-Disaster Funding



## Funding Agencies

- U.S. Department of Housing & Urban Development (HUD)
- Federal Emergency Management Agency (FEMA)
- Illinois Emergency Management Agency (IEMA)
- U.S. Army Corps of Engineers (USACOE)

## Funding Activities

- Capital Flood Control Projects
- Green Infrastructure Projects
- Voluntary Flood-Prone Buyouts
- Resilience Planning
- Local Match Program

# HUD Funding



## Overview

- Received Community Development Block Grant-Disaster Recovery (CDBG-DR) Funding of **\$31.5 Million**
- 51% of Funding Required to be Spent in Low-to-Moderate Income Areas
- Spent on Capital Projects, Buyouts, Planning, Green Infrastructure Projects & Local Match Program
- County Eligible for Additional Resilience Funding from HUD, Didn't Receive

## Capital Flood Control Projects Funded

- Armstrong Park Reservoirs
- West Branch DuPage River Flood Control Project
- Liberty Park Drainage Project
- Springbrook Culvert Replacement Project
- Glenrise Avenue Drainage Project
- Redmond Reservoir

# FEMA/IEMA Funding



## Overview

- Received **\$8.3 Million**
- Received \$7.7 Million from FEMA's Hazard Mitigation Grant Program (HMGP)
- Received \$600,000 from IEMA Flood Mitigation Assistance (FMA)
- Buyouts Needed to be Severe Repetitive Loss and/or Repetitive Flood Claims

## Funding Activities

- Voluntary Flood-Prone Property Buyouts
- Graue Mill Flood Control Project

# USACOE Funding

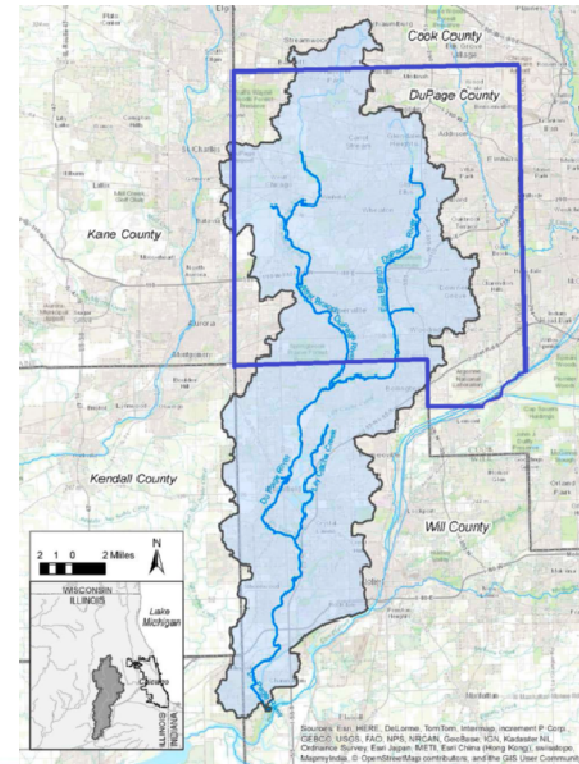


## DuPage River Feasibility Study

- USACOE Funding **\$3 Million** for Flood Control Study of DuPage River
- 50/50 Cost Share between Federal and Local Sponsors
- Once Complete, Projects Submitted to Congress for Funding Consideration

## Project Parameters

- Flow Rate 800-Cubic Feet/Second at 10-Year Event
- Flood Related Projects Only
- Considers Future Conditions & Bulletin 70 Update



# Capital & Green Projects



## Overview

- Regional Projects Identified in Watershed Plans
- “Shovel-Ready” or Even Underway
- Flood Control Projects, Including Reservoirs, Berms and Pump Stations
- Green Infrastructure, Including Bioretention

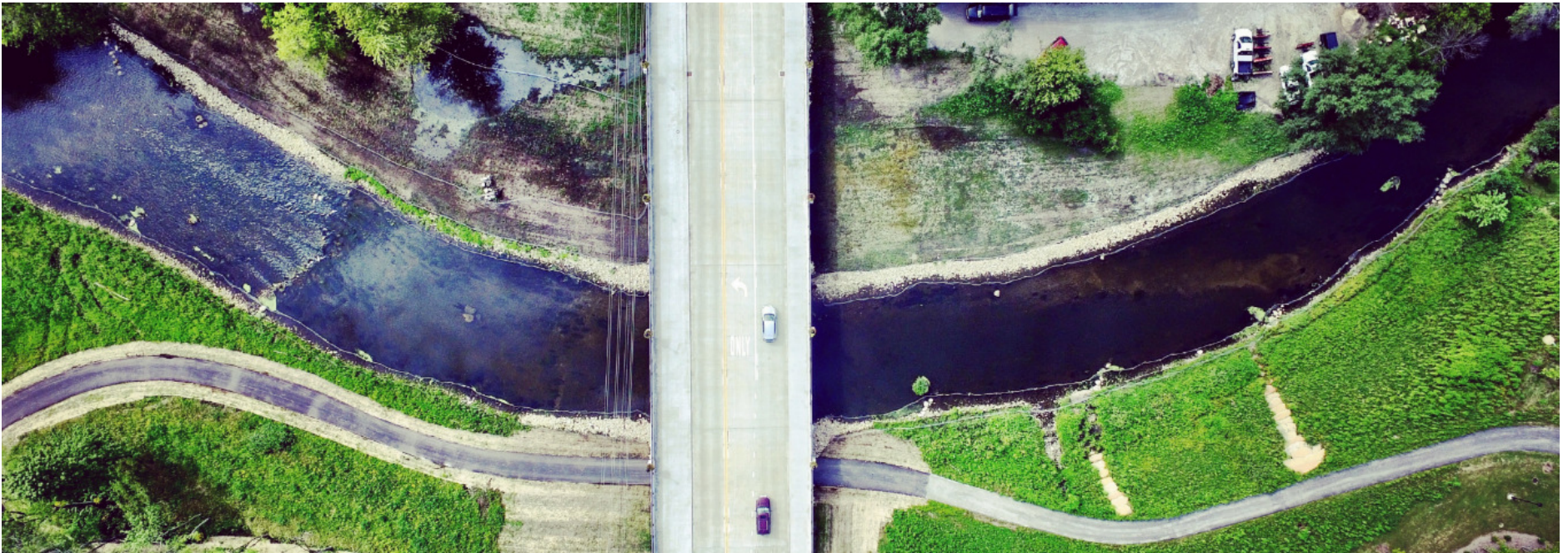
## Things to Consider

- Projects Need to Benefit People Served by Grant (i.e. HUD)
- Funding Needs to be Spent in Expedited Time Frame
- Funding Agencies Want to See Work Underway and Completed

# Armstrong Park Reservoirs



# West Branch Flood Control



# Flood-Prone Property Buyouts



## Process

- Properties Identified in Watershed Plans, Floodplain Maps, By Request or from Funding Agency
- Must Deal Directly with Homeowner
- Pre-Flood Value Usually Offered
- Once Purchased, Put Bid Out for Demo
- Funding Agency Determines Future Use of Property

## Potential Future Uses

- Open Space
- Wetland
- Flood Control
- Park
- Police/Fire Training Prior to Demolition

# Flood-Prone Property Buyouts



# Resilience Planning



## HUD's National Disaster Resilience Competition

- DuPage County Eligible for Additional Funding from April 2013 Flood
- Competitive Grant Asked to Demonstrate Unmet Need & Design Resilient Project
- Projects Needed to Emphasize Resilience, Not Recovery, & Highlight Co-Benefits
- DuPage Worked with State of Illinois, Cook County & City of Chicago, but no Entities Received Funding

## Outcomes

- Created East Branch DuPage River Resiliency Plan
- Developed Projects for Flood-Prone Area of Lisle
- Formed Northeastern Illinois Resilience Partnership
- Developed Planning Model Still in Use Today (i.e. Multi-Jurisdictional, Inter-Governmental Partnerships)

# Local Match Program



## Overview

- Using Grant Funds, County Assisting Municipalities with Projects
- Municipalities Apply to Receive Funds
- Administered by Community Development
- Alleviates County Burden in Recovering from April 2013

## Projects

- Flood Control Projects
- Green Infrastructure Projects
- Flood-Prone Buyouts



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# Lessons Learned

Keep Funding Rolling In

# Applying for Grant Funds



## Project Requirements

- Proposed activity must match agency requirements exactly
- Similar grants may have different focus points (Low-Mod/SRL, etc.)

## Project Alternatives

- Have alternatives approved by funding agency with original application (alternative buyouts, project options, etc.)

# Spending Grant Funds



## Project Deadlines

- Requirements for start dates and project finish dates
- Municipalities may have own deadlines
- Ask for extensions early if needed

## Eligibility

- Auxiliary expenses
- Staff time

# Managing Grant Funds



## Documentation

- Keep all paperwork
- Develop filing system (electronic & paper copies)
- Every RFP, Bid, Etc. needs to be aligned with funding agency

## Contractor Coordination

- Often large paperwork burden on contractors
- Grant administrators at pre-construction meetings to Help Explain Requirements
- Do Not Pay Contractors Until all Required Paperwork is Received

# Takeaways



## Organization & Flexibility are Key

- Track and save all documents
- Upfront paperwork (Planning & Construction)
- Be prepared for time extensions
- Grant Considerations: Staff time/Administration costs/Increased personnel/Consultant contract

## People are Important

- Property Acquisition is emotional: Both owner & neighbors
- Title Work/Appraisals/Surveys: all time consuming
- Utilization for Police & Fire training

# Questions



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