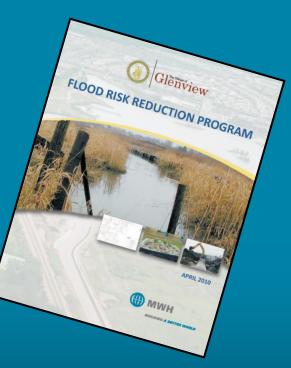
May 15, 2012

Flood Risk Reduction Program Implementation Update





TONIGHT'S OBJECTIVES

- Provide an update on the local implementation of the Flood Risk Reduction Program (stormwater master plan)
- 2. Provide context for benefits achieved along with recommended work still outstanding
- 3. Outline MWRD's progress on regional project development underway

FLOOD RISK REDUCTION PROGRAM

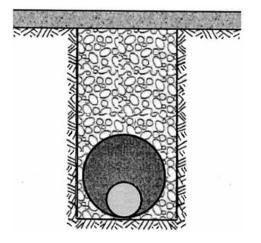


CAPITAL IMPROVEMENT PROGRAM "QUICK-WIN" BENEFITS

- Increased inlet and storm sewer capacity
- Reduced street flooding
- Allow emergency vehicle access during rain events
- Total cost for "quick-win" stormwater improvements = \$1,092,600
- 14 Village-wide locations improved
- Update of all projects included on Village website
 - Linked from "Village Maps" page
 - http://maps.google.com/maps?q=http://www.glenview.il.us/about/Reports/Storm_project.kml

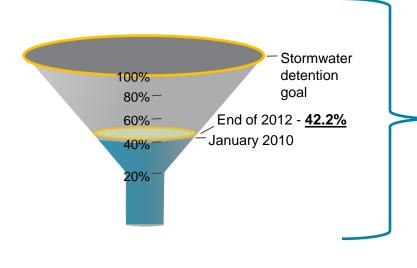
CAPITAL IMPROVEMENT PROGRAM COMPLETED PROJECTS – 2010-2012

- Pfingsten Road 2010
- Indian Road and Beverly Lane 2011
- Indian Road (south of Glenview Road) 2011
- Hunter Road (north of Glenview Road) 2011
- Forest Drive (south of Glenview Road) 2012
- ➢ Bel Air and Clavey 2012



Cost for Inline Detention Improvements = \$650,000

CAPITAL IMPROVEMENT PROGRAM DETENTION PERFORMANCE METRIC



Program goal: Village-wide detention

2010 baseline: 40% (area) with detention

Annual goal: add 1 – 3% per year

2012 status: 42.2%

Means to achieve:

- Inline detention with roadway reconstruction projects
- Area detention projects (opportunity)
- Regional detention projects

CAPITAL IMPROVEMENT PROGRAM COMPLETED PROJECTS - 2011

Storm Sewer Conveyance Improvements – 2,180 feet

- Mary Kay Lane and Pebbleford Lane
- Fontana Drive and Bel Air Drive
- Shermer Road and Robincrest Road
- West Lake Ave and Lehigh Ave
- Pine Street



Cost for Storm Sewer Improvements = \$413,000

CAPITAL IMPROVEMENT PROGRAM COMPLETED PROJECTS - 2011

Storm Inlet Capacity Improvements – 11 inlets

- Norwich Court
- Barry Lane and La Fontaine Drive
- Knight Street

Cost for Inlet Improvements = \$29,600

East of Harms – Sanitary Sewer System Improvement Project Completed 2011 omplete flow monitoring Eliminate backflow from regional system Maximize flow from local to regional system Phase I during heavy storm events 2010-2011 In Progress ary Sewer Evaluation Survey (SSES) Inspect all public and private components of local system to identify sources of "clean" storm water inflow & infiltration (I/I) Phase I Complete cost-effective "quick-win" rehabilitation projects to local system 2011-2012 TBD Complete flow monitoring update Construct additional storage (as necessary in Phase III locations to be determined) 2011-2012

Improve performance of public system affecting > 1,100 homes



Resident's Private Options:

- Convert old gravity services to "over-head" with Village's cost-sharing program (2010-2011)
- Actively (annually) maintain existing floodcontrol systems
- Actively maintain existing sewer services to limit leaking into public system

East of Harms Sanitary Sewer System Improvement Project

Phase 2 – Status Update

- Smoke Testing Completed
 - Repairs to be completed in 2012
 - Includes 3,000 feet of lining
 - 52 private downspouts to be reviewed
- Manhole Inspections Completed
 - Manhole epoxy lining to be scheduled (MPI)
- House Inspections 95% Complete
 - 67 storm sump to sanitary sewer to be reviewed





2012 Construction Projects

- Navy Bypass Storm Sewer
 - Phase 1 completed April 2012
 - Phase 2 under design
- Bel Air & Clavey Inline Detention
 - Additional upstream work with Dist. 34
- Forest Drive Inline Detention



- Waukegan Road (River Drive) Rain Garden
 - \$7,114 IGIG grant for \$11,430 project

2012 Design Projects

- Glenayre Park SWAMP
- Park District Coordination
 - Flick Park drainage
 - Glenview Park Golf Club drainage
- Harrison/Ronald/Glendale (Niles Coordination)
- Bellwood "Quick-Win"
- Central/Glenwood (Northfield Township Coordination)
- Juniper SWAMP
- Maple SWAMP
- Long Valley SWAMP
- Northfield Woods

OPERATIONS & MAINTENANCE

Public Works 2011 Summary:

- 420,600 feet of sanitary sewer cleaned 92% of system
- 1,860 sanitary manholes cleaned 52%
- Over 40,000 feet of storm sewer cleaned >4%
- Over 2,000 storm sewer grate and structures cleaned >13%
- Debris removal:
 - 320 tons from streets (by sweeping)
 - > 116 cubic yards from storm sewers

Capital Maintenance 2011 Summary:

- \$1,200,000 of storm and sanitary capital maintenance
- Over 18,000 feet (3.5 miles) of sanitary sewer lining
- Over 2,500 feet (0.5 miles) of storm sewer lining

REGULATORY MODIFICATIONS

Community Rating System (CRS) Certification

- Village received Class 6 rating from FEMA in October 2011
- Property owners in 100-year floodplain will receive 20% discount on their flood insurance
 - Average savings for each policy = \$419/year
- Property owners in 500-year floodplain will receive 10% discount on their homeowners insurance
 - Average savings for each policy = \$108/year
- Total savings = \$34,000/year

REGULATORY MODIFICATIONS

Infill Ordinance Amendment

- Original Ordinance adopted April 2008
 - New single-family homes and substantial additions to connect to Village storm sewer
 - Neighbor notification of proposed impervious improvements
 - Grading as-builts required for new single-family homes
- Amendment adopted June 2011
 - Expanded grading "as-built" and neighbor notification requirements
 - Additional tools available to assist staff to proactively handle drainage problems

COST-SHARING PROGRAMS

Cost Sharing Program	Number of Approved Permits	Resident Reimbursement	Cost Sharing
Rain Garden (2007-2011)	34	\$27,147	50/50 up to \$1,000
Overhead Sewer Conversion (2010-2012)	14	\$74,423	50/50 up to \$7,500
Local Drainage Inspections (2010-2012)	40	\$16,000	50/50 \$400
TOTAL	88	\$117,570	

Rain Barrels Provided to Residents (2010-2012) = 152

FUNDING MECHANISMS

- Village Board committed \$7.05 million for "Quick-Win" Projects
- Illinois Green Infrastructure Grant (IGIG)
 - Waukegan Road Rain Garden (\$7,114)
- DCEO Grants Approved
 - Bel Air and Clavey inline detention (\$100,000)
 - Flick Park drainage (\$50,000)
 - East of Harms sanitary system (\$200,000)
- FEMA-PDM Grant pending application for Downtown drainage
- Entered into contract with AMEC to perform Stormwater Utility Feasibility Study on October 25, 2011 – Q3 2012 Workshop

STORMWATER UTILITY FEE

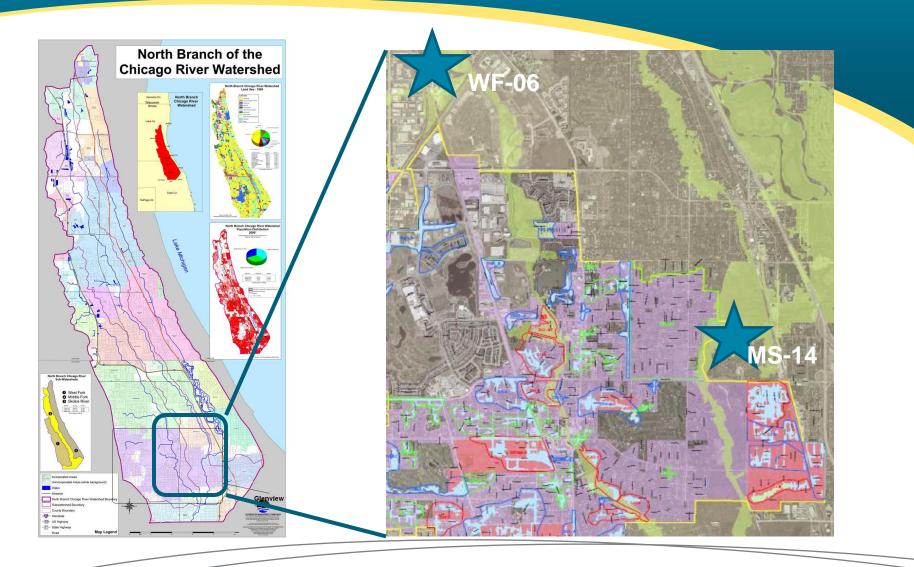
- Current capital maintenance needs per standards = \$1.57 million
 - Historical amount spent 2008-2012 = \$800,000
- Master Plan recommended capital projects (2010) = \$124.8 million
 - Projects to be value engineered
 - Primary coordination with roadway reconstruction schedule (60 years)
- Stormwater Utility Fee is one opportunity to provide a long-term sustainable stormwater funding source
- Over 1,500 implemented nationwide

REGIONAL PROJECTS

<u> MWRD – Regional Detention on West Fork</u>

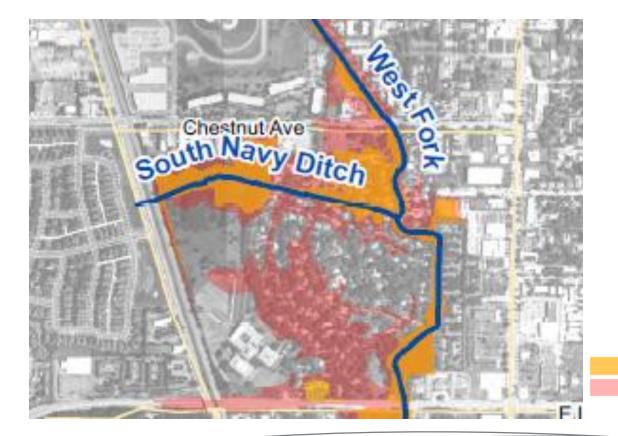
- ➢ WF- 06 will provide an additional 1,100 acre-feet of storage
- Will lower flood elevation of West Fork of North Branch of Chicago River by as much as 2 feet
- Watershed Plan approved March 2011
- Preliminary design for WF-06 approved April 2012
- Stakeholder meetings expected to start shortly
- Cost Estimate = \$108.8 million (\$146.5 million of benefits)

REGIONAL PROJECTS



REGIONAL PROJECTS

Conceptual Benefits of Project WF-06



100-year Inundation Area With Project 100-year Inundation Area Without Project

STORMWATER TASK FORCE ADVISORY SUBCOMMITTEE

Regional SWTF Subcommittee met on January 10, 2012

- Reviewed MWRD's recommended West Fork project (WF-06)
- Will support Village as stakeholders during MWRD's preliminary engineering process
- > 2012 meeting schedule TBD additional outreach forthcoming
 - First stakeholder meeting expected in mid-June

NEXT STEPS

- Staff will continue progress on 2012 construction and design projects underway
- A Q3 2012 Board Workshop will be scheduled to review future implementation of stormwater improvements and potential funding sources
- Contacts:
 - Joe Kenney, joek@glenview.il.us or (847) 904-4313
 - Andrew Mayes, <u>amayes@glenview.il.us</u> or (847) 904-4410
- Questions?