



VILLAGE OF WILMETTE
STORMWATER
ACTION PLAN

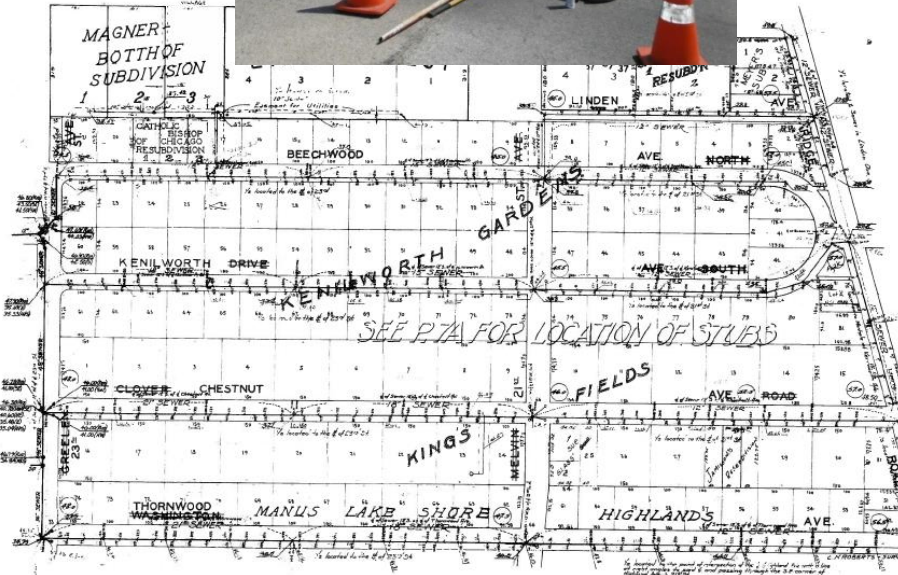
West Side Storm Sewer Study Status Update

August 25, 2014



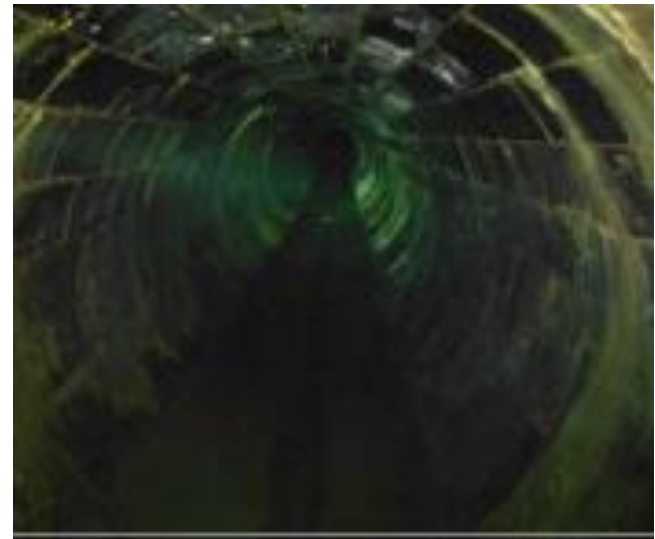
Work Completed To Date

- Survey of Storm Sewer System
 - >1,500 Structures



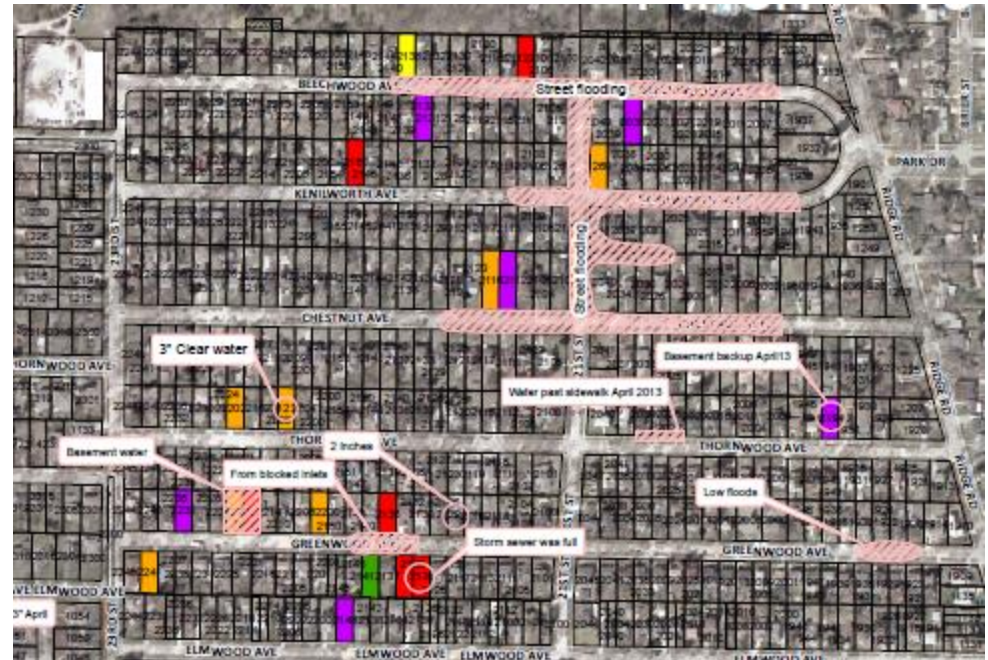
Work Completed To Date

- Flow monitoring capturing storm events
 - Multiple locations, data is used for calibration of storm sewer model



Work Completed To Date

- **Compilation of Resident Information**
 - Questionnaires/Surveys
 - Resident information
 - Open house
 - Photographs
 - Videos
 - Field visits



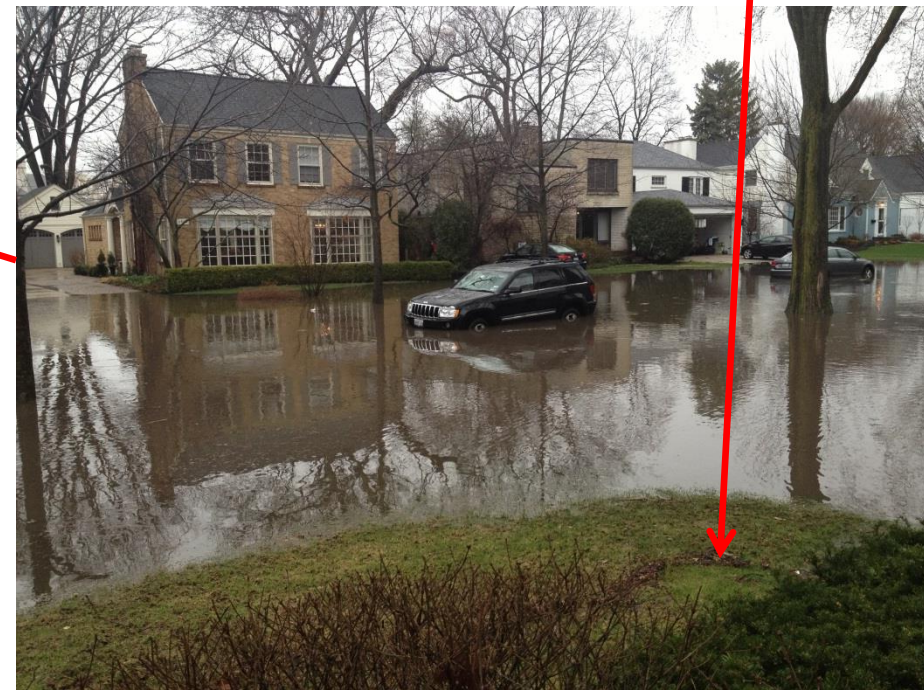
- Model development
 - Incremental approach to develop a plan
 - Comprehensive analysis
 - Identify underutilized segments and/or restrictions
 - Identify potential improvements
- Calibration from monitoring & flood events
 - April 2013, May 2014 and June 2014



Model Calibration Results

- Kenilworth Gardens (April 2013)

Debris at High Water Mark



Storm sewer system has 2-yr capacity

Model Calibration Results

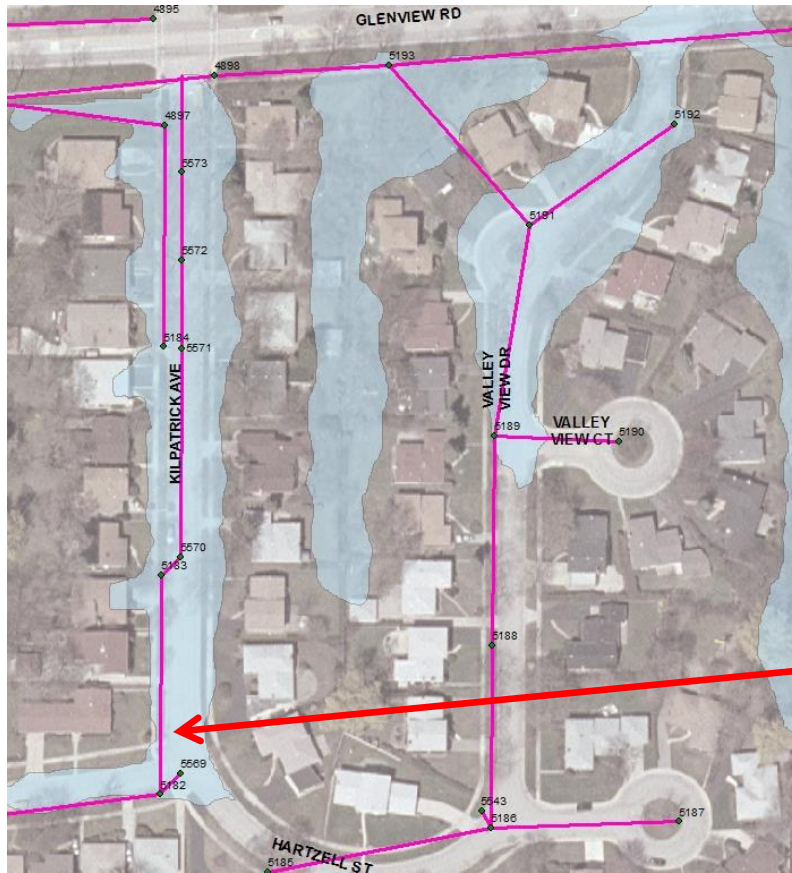
- Wilshire (April 2013)



Storm sewer system has 2-yr capacity

Model Calibration Results

- Valley View/Kilpatrick (April 2013)

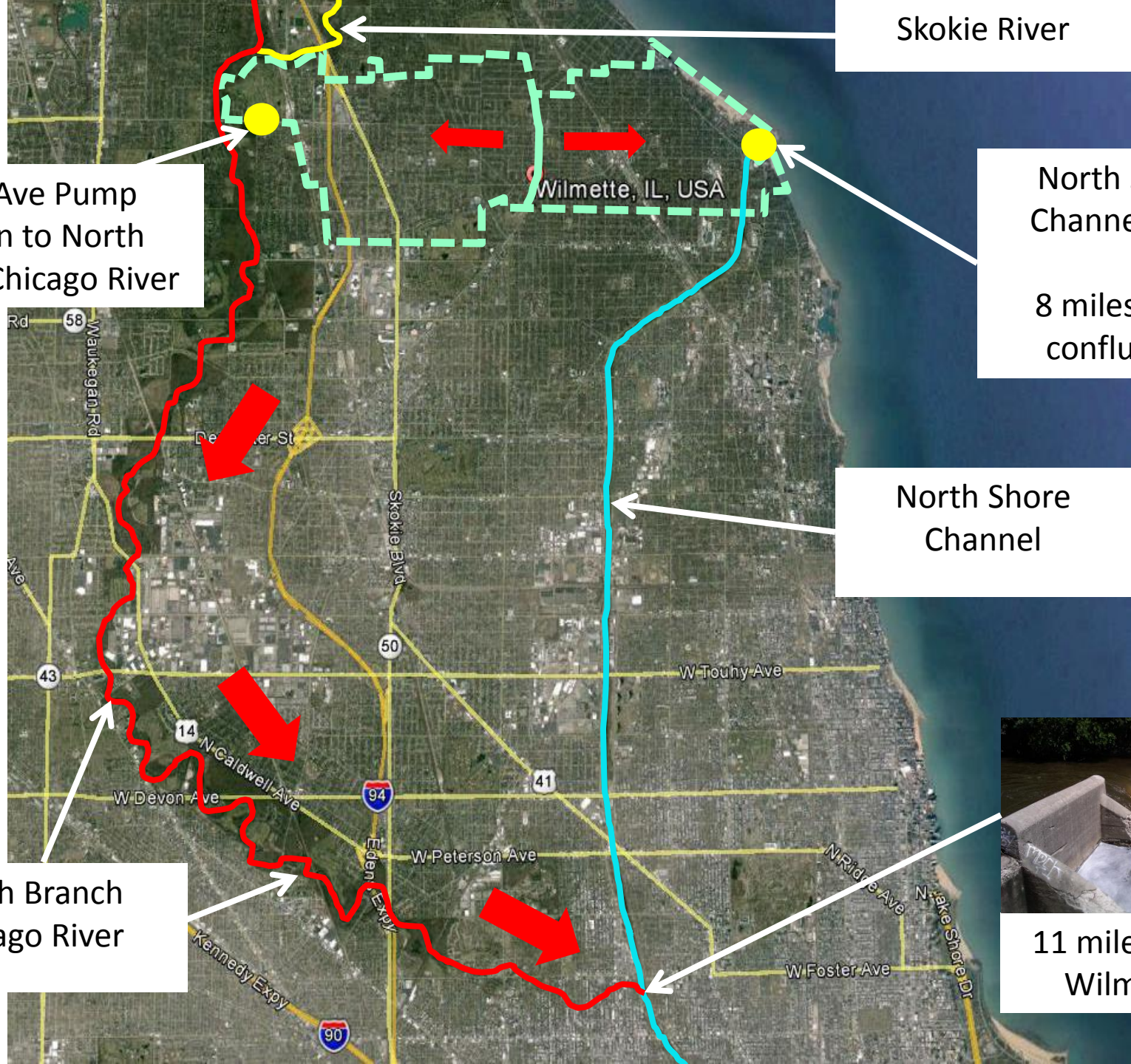


Storm sewer system has 2-yr capacity

Next Steps

- Finalize existing model
- Evaluate proposed drainage improvements
 - Green infrastructure
 - Rain gardens
 - Green islands
 - Bio-swales
 - Stormwater conveyance
 - Storm sewers
 - Pump station
 - Stormwater storage
 - Open space limitations
 - Coordination with other municipalities





Skokie River

Lake Ave Pump
Station to North
Branch Chicago River

North Shore
Channel Lock

8 miles from
confluence

North Shore
Channel

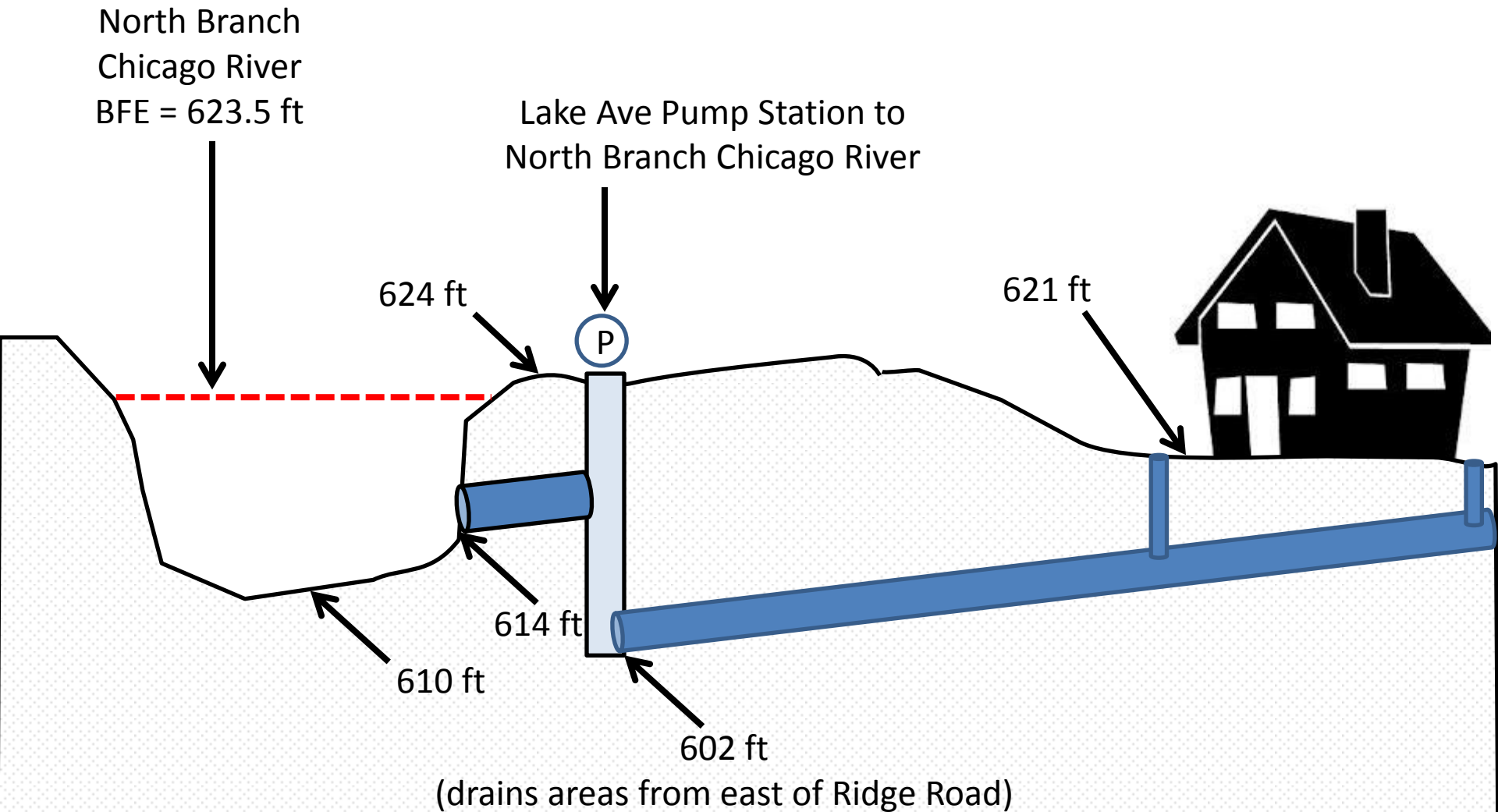
North Branch
Chicago River



11 miles from
Wilmette



Limitations of Existing System





Next Steps

- Desired level of protection – Need input
 - Protection of homes and structures is most important
 - Is street ponding acceptable?
 - A certain design event? (5-yr, 10-yr, 50-yr, 100-yr, etc.)
 - New developments
 - Storm sewers designed for a 10-yr event
 - Runoff excess of the 10-yr storm is conveyed overland to a storage area
- How would the proposed plan handle the April 2013 storm event?



End of Presentation

Questions