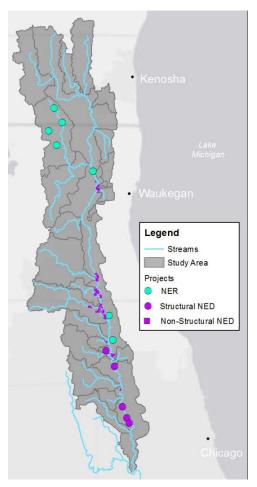
UPPER DES PLAINES RIVER AND TRIBUTARIES, IL & WI FLOOD RISK MANAGEMENT AND ECOSYSTEM RESTORATION PROJECT

20 MAY 2014



ABSTRACT: The Upper Des Plaines River and Tributaries Project will reduce the flood risk to residential and commercial structures and restore impaired aquatic ecosystems in the watershed. The non-Federal sponsors for implementation of the project are the Illinois Department of Natural Resources, Metropolitan Water Reclamation District of Greater Chicago, Forest Preserve District of Cook County, Lake County Forest Preserve District, Kenosha County, and the City of Des Plaines.

The Upper Des Plaines River watershed originates in Racine and Kenosha counties of southeastern Wisconsin then extends south into Illinois through Lake County and then Cook County, where it converges with the Salt Creek watershed near Riverside, Illinois. The watershed covers approximately 477 square miles, an area that spans approximately 60 miles from north to south and 8 miles from east to west, and includes 12 major tributaries.

Several major floods have resulted in significant damages to homes and businesses and severe impacts to the regional transportation network. Two severe events in 1986 and 1987 resulted in over

\$100 million in damages (over \$200 million at 2014 price levels). Most recently, new flood stage records were set in April 2013. This flood inundated hundreds of structures and closed major roadways for days. Regional development, both urban and agricultural, has resulted in severe impairment of watershed ecosystems. Only 9% of the watershed remains as natural open space. Most of these fragmented remnants are dominated by invasive and non-native species.

The plan recommended for congressional authorization is the National Economic Development / National Ecosystem Restoration (NED/NER) Plan. The Recommended Plan includes five structural flood risk management (FRM) projects consisting of levees, floodwalls and two floodwater storage reservoirs; non-structural FRM measures for 400 structures, to include flood-proofing, structure elevation, or buyout and removal from the floodplain; and seven ecosystem restoration (ER) projects that will restore wetland, riverine and riparian habitat by manipulating site conditions to return hydraulics and

geomorphology to a more natural state, eradicating invasive plant species, and reestablishing native plant communities. Five additional ER projects and one additional FRM project are recommended for implementation under the Corps Continuing Authorities Program. Two justified structural FRM projects and additional non-structural FRM measures that are not compliant with current USACE policy were also identified and are recommended for implementation by other agencies, as appropriate.

The estimated total first cost for the NED/NER Plan is \$299,192,000, including \$140,827,000 for flood risk management and \$158,365,000 for ecosystem restoration (October 2013 Price Levels). The non-Federal sponsors are responsible for operation, maintenance, repair, rehabilitation, and replacement at an estimated annual cost of \$511,000. The recommended projects will reduce flood risks and hazards in the watershed; minimize impacts to human safety, health, and welfare; and restore and preserve natural and beneficial floodplain values. The projects will provide structural flood protection to about 1,000 homes and businesses, provide non-structural flood protection at about 400 structures across the watershed, and restore over 10 square miles of nationally significant aquatic habitat. Cumulatively, these projects will provide \$4,158,000 in net annual economic benefits and 9,034 net average annual habitat units. The BCR for the NED Plan at the current discount rate is 1.8-to-1.

REPORT DOCUMENTATION: Pertinent documentation on the project, the results of the Civil Works Review Board, and subsequent Washington-level review actions, are linked below:

- CWRB Agenda
- Project Map/Placemat
- Project Summary
- CWRB Briefing Slides
- CWRB Lessons Learned
- CWRB Meeting Record
- State & Agency Review Comment Letters
- Documentation of Review Findings
- Signed Chief of Engineers Report
- Advance Copy to Congressional Committees
- ASA(CW) Memo to OMB
- OMB Response
- ASA(CW) Transmittal to Congress
- Signed Record of Decision
- Authorization

ADDITIONAL INFORMATION:

Great Lakes and Ohio River Division

Chicago District