

Des Moines and Raccoon Rivers, Des Moines, Iowa 18 October 2006



Abstract: The recommended plan for flood damage reduction and recreation would provide increased flood protection and recreation opportunities along the Des Moines and Raccoon Rivers in the areas of Birdland Park, Central Place and downtown Des Moines. The flood damage reduction features consist of constructing 7,700 feet of levee and 440 feet of retaining wall with one closure structure generally along and extending the existing non-Federal levee at Birdland Park; constructing 5,900 feet of levee generally along and extending the existing non-Federal Central Place levee; and modifying three existing pump stations. The recommended plan also includes modification to nineteen closure structures in the existing Federal downtown levee system including permanently closing 7 levee closures, reducing the size of 11 levee closures, and installing gates at existing pedestrian walkway closures at the Simon Estes Amphitheater. The recreation features include 5,100

feet of recreational trail along the Birdland Park levee with access to Riverview Park and landscaping along the levee crossing Riverview Park.

The first cost of the recommended plan is estimated at \$10,500,000 including \$10,240,000 for flood damage reduction and 260,000 for recreation. The overall Federal share of the project cost would be \$6,800,000 and the non-Federal share would be \$3,700,000. The City of Des Moines, Iowa, is the non-Federal cost sharing sponsor for all features of the plan. The City of Des Moines would also be responsible for the operation, maintenance, repair, replacement, and rehabilitation of the project after construction, a cost currently estimated at \$30,000 per year. Equivalent annual costs are estimated at \$658,000; equivalent annual benefits of the project are \$1,794,000.

This results in equivalent annual net benefits of \$1,136,000. The benefit-to-cost ratio for the project is 2.7 to 1. The recommended plan is a locally preferred plan (LPP) and provides the maximum level of protection desired by the non-Federal sponsor.

There is a greater than 95 percent probability that the Birdland Park and Central Place levee segments would protect adjacent areas from a flood which has a 0.2 percent chance of occurring in any year (500-year flood). These levee segments would reduce expected annual flood damage in the Birdland Park and Central Place areas by more than 98 percent. The selected plan would substantially increase the reliability of closure structures in the downtown levee system for floods which have less than a 1 percent chance of occurrence in any year (greater than a 100-year flood). The project would also reduce the threat to loss of life and reduce health and safety services disruptions. The recreation features are consistent with proposed recreational improvements to enhance the riverfront in downtown Des Moines. Unavoidable environmental impacts would be fully mitigated by the creation of 13 to 16 acres of emergent wetland, open water, upland forest, and herbaceous upland buffer at the Chichaqua mitigation site, northeast of Des Moines. Further compensation includes approximately 5 acres of bottomland forest enhancement, and upland forest creation on the riverside of the levee at Central Place.

Report Documentation: Pertinent documentation on the project, the results of the CWRB, and subsequent Washington Level Review Actions are linked below.

- [CWRB Briefing Agenda](#)
- [Project Summary](#)
- [CWRB Briefing Slides](#)
- [CWRB Lessons Learned](#)
- CWRB Meeting Record
- [Comment Letters](#)
- [Documentation of Review Findings](#)
- [Signed Chief of Engineers Report](#)
- [ASA \(CW\) Memo to OMB](#)
- [OMB Clearance](#)
- [Congressional Notification](#)
- [Finding of No Significant Impact](#)
- Authorization
 - [Section 1001 \(21\) WRDA 2007](#)
 - [Full WRDA Text](#)

Additional Information:

[Mississippi Valley Division](#)

[Rock Island District](#)

[Des Moines and Raccoon River Damage Reduction Project Information](#)