

COMPLETE STATEMENT OF

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DEPARTMENT OF THE ARMY

BEFORE THE

**Subcommittee on Water Resources and Environment
Committee on Transportation and Infrastructure
UNITED STATES HOUSE OF REPRESENTATIVES**

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Introduction

I am Major General Don T. Riley, Director of Civil Works, U.S. Army Corps of Engineers. I am pleased to be here today and to have the opportunity to speak to you about the National Levee Inventory and Technical Assessment Program. My testimony today will provide a brief background and update the Committee on progress made to date by the Corps of Engineers in the development of a National Levee Inventory.

Background

Since the early days of the country and probably well before then, people have attempted to confine floodwaters to watercourses by constructing levees, which are earthen embankments designed to allow water to rise to a certain point above stream bank without overflowing. Federal involvement in flood damage reduction began with the construction of levees, channel work, and dams, all of which are structural solutions. More recently, we have begun to recognize that the best way to reduce our vulnerability to damages in many cases is through effective floodplain management, which involves striking a balance between human and natural uses of floodplains. This recognition has led to an increased emphasis on the development and implementation of non-structural approaches to flood damage reduction. Despite this trend, a large number of structures exist throughout the country. Nearly 9,000 miles of levees have been constructed by the Corps of Engineers alone. This accounts for only a portion of the total number of

structures protecting communities. Currently there is no database or single source of information concerning these structures.

Through the Inspection of Completed Works (ICW) and the Rehabilitation and Inspection Program (RIP), the Corps of Engineers performs inspections of flood damage reduction projects, including (a) projects federally built and maintained, (b) projects federally built and locally maintained, and (c) those projects locally built and maintained to determine eligibility for inclusion in the RIP or to determine eligibility to remain in the RIP. In most cases, maintenance of levees is a local responsibility with oversight provided by the Corps Inspection Program. Levee owners have an incentive to maintain levees in a sound condition to remain in the program and receive rehabilitation assistance after flood events. Additionally, the failure to maintain a levee in sound condition may result in withdrawal of Corps certification that it meets the Federal Emergency Management Agency (FEMA) Base-flood requirement. We should note these inspections are visual verifications of the local entity's compliance with the Operation and Maintenance Manuals and do not include the engineering assessments needed to verify project performance or stability. Results of the inspections are forwarded to the local entity with recommendations for correcting any deficiencies identified.

Recent surveys and events have indicated that some levees protecting populated areas may not provide the expected level of protection during flood events due to poor maintenance, deterioration from natural aging, changed hydrologic conditions or other causes. The Corps is committed to undertaking a comprehensive review of the effectiveness of its levee inspection programs and communicating the results to Congress and the public.

Emergency supplemental funds appropriated under Public Law 109-148 (enacted on December 30, 2005) included \$30 million for the Corps of Engineers to initiate a National Inventory of Flood and Storm Damage Reduction projects, including an assessment of the condition of levee projects. In addition, the President's budget for Fiscal Year 2007 includes \$20 million to continue this effort. The Corps is working in conjunction with FEMA to coordinate its efforts with the FEMA Map Modernization program. It is envisioned that data from the inventory will be able to provide technical information to perform or be used as a basis for periodic re-certification of levees as required by FEMA for floodplain mapping purposes.

Current Status

The inventory will be a geospatial database that will allow data to be incorporated into the flood maps prepared by FEMA or, if more detailed mapping is available, could be used with that mapping. The database will allow users to have real time information

readily available. The database development will be a phased process. Each phase will be beta tested by the Corps prior to actual implementation on all Corps Districts other Federal and state agencies. The initial survey will generate administrative data and some technical data of projects in the Corps inventory. This phase is scheduled to begin this month and be completed by the end of June 2006. This is only the first step in populating a geospatial database. Completion of this initial survey will allow the Corps to evaluate the magnitude of the effort to generate the database as well as to have a better comprehensive understanding of the effort involved in performing the technical assessments.

This initial survey will also allow the Corps to begin to identify high risk levee reaches that will be used to start testing the assessment methodologies and procedures. A more detailed data input for technical fields will be beta tested on five to ten Corps Districts near the end of fiscal year 2006. Any lessons learned will be incorporated as the inventory is developed. As the Corps completes a phase, other federal agencies and states will be asked to input data into the inventory. The Corps is and will continue to coordinate with FEMA, the Association of State Flood Plain Managers, and the National Association of Flood and Stormwater Management Agencies on the inventory.

The criteria for the assessments are currently under development. A team is being assembled to develop the procedures and methods for conducting the technical assessments in a uniform and consistent method. The assessments will be able to rank projects using risk to human life and benefits of protecting population centers. For future risk assessments, we also will consult with DHS through the partnership established in the National Infrastructure Protection Plan (NIPP) to integrate consequence and vulnerability information for critical infrastructure into future assessments. The National Inventory will be able to provide an overall condition of levees within the National inventory. It is anticipated that the inventory and assessments will be able to indicate areas of higher risk.

We are committed to putting a program in place that will enable us to better evaluate the risk to public safety in areas located behind the levees, help decision makers set priorities for future levee investments, and ensure that all Americans can make more informed decisions on building homes, locating businesses, and purchasing flood insurance based on the actual risk of flood and storm damages where they live.

This concludes my statement. Again, I appreciate the opportunity to testify today. I would be pleased to answer any questions you may have.