

## Q&A

### Corps of Engineers Periodic Inspection Report Dallas Floodway Project Report Number 9

#### Inspection Process and Results

#### **What are the last ratings that the levee system has received?**

	Type of Report	Rating	Comments
2002	Annual Inspection	Excellent	Routine Inspection
2002	Periodic Inspection	Good	Extensive Inspection
2003	Annual Inspection	Excellent	Routine Inspection
2004	Annual Inspection	Excellent	Routine Inspection
2005	No Inspection		No inspection documented
2006	Annual Inspection	Excellent	Routine Inspection
2007	Periodic Inspection*	Unacceptable	Conducted Under new Levee Safety Program Guidance
2008	Annual Inspection	Very Good	Conducted under pre-2007 guidance, as a Routine inspection

There is a new Levee Safety Program developed in the wake of Hurricane Katrina. This is the first rating\* for the Dallas Floodway on a Periodic Inspection under the new Levee Safety Program. Over 240 other levee systems have also been rated as unacceptable under the new Levee Safety Program during the last two years.

We are not alone but we are in a better position than most other cities because of our focus on floodway improvements and the height of the existing levees, which were designed to provide an 800-year level of protection.

#### **What are the ratings?**

Previously, for the Corps' process to rate levees during inspections, the ratings on the Periodic Inspections (5 year) and the Annual Inspections were ranked as poor, fair, good, very good and excellent. These ratings were largely subjective and were based on the visible surface elements.

Under the revised rating system, the ratings are:

- Acceptable (A) – all items are acceptable and the system will perform as intended at the expected level of flood production. In this case, that is an 800-year flood event.
- Minimally acceptable (M) – one or more items are rated M OR one or more are rated Unacceptable (U) but in an engineering determination these items would not prevent the system from performing as intended.
- Unacceptable (U) – one or more items are rated as U and would prevent the system from performing as intended or a serious deficiency reported in a previous rating has not been addressed

**How many unacceptable (U) deficiencies does it take to be rated unacceptable overall by the Corps?**

Only one unacceptable deficiency that would prevent the system from performing as intended will determine an overall unacceptable rating.

**How was the inspection done?**

A team of Corps and City of Dallas professional engineers and operations personnel conducted a three day inspection of the various features of the levee system using an inspection checklist. Photos were taken and are being compared to the rating template.

**Have other levee systems been rated unacceptable?**

This new rating system has been used to evaluate levees across the nation. Since 2006, over 240 other levee systems across the nation have also received an unacceptable rating. A few examples include Sacramento, St. Louis, King County, Prince George, Hartford and others.

**How many ratings overall does the current Periodic Inspection identify for Dallas?**

Approximately 214 items were rated during the Periodic Inspection:

- 91 Acceptable
- 80 Marginally Acceptable
- 43 Unacceptable

**Can I get a copy of the report?**

Yes. Copies can be requested through the U.S. Army Corps of Engineers through the Freedom of Information Act. Submit requests via e-mail to Delene.R.Smith@usace.army.mil or via mail at: CESWF-OC, Attn: Delene Smith, FOIA Officer, 819 Taylor Street, room 2A08, Fort Worth, Texas 76102

In addition, the report is on CD and can be obtained from the City of Dallas by contacting Frank Libro at 214-670-3322 or contact him at City of Dallas, Public Information Office, 1500 Marilla 4E South, Dallas, TX 75201.

**What kinds of problems exist and are listed on the report?**

It includes any problem that could jeopardize the levee system such as damaged gate closures, unstable structures, severe desiccation cracking of the levees, erosion, vegetation, siltation, trees within 50 feet of levees, utilities crossing through the levees, and pier structures located on the levees.

**Were you aware there were problems?**

Yes, we have been aware that the level of protection needed to be improved. That is why we initiated and have been leading forward with the Trinity River Corridor Project. The primary focus of the Trinity River Corridor Project, from day one, has been improving flood protection. All parties want the best floodway system improvement possible for Dallas. It is one of the reasons that City leaders have placed the Trinity River Corridor Project in the forefront.

**What is routine maintenance? How has the level of acceptability changed?**

One way to quickly describe routine maintenance is the difference between caring for a lawn at your home and preparing for Dallas Blooms at the Arboretum. Every aspect of the levee system must be in top form to achieve an acceptable rating. All trash must be picked up. No cracks can be present in any walls. Grass must be a full stand of the proper type and cut to the correct height.

In the past, the levees have been deemed excellent or very good. The current required inspection checklist has been modified to incorporate lessons learned from Hurricane Katrina. Under the revised rating inspection, each element of the floodway system is inspected against this rating system.

## Path Forward

### **Can we get back to acceptable?**

Yes, after the system improvements are completed.

### **What is the path forward and the timeline for taking these next steps?**

- The City of Dallas and the Corps have already taken measures to reduce flood levels through our work on the Lower Chain of Wetlands, which was complete in 2008. Work will begin on the Upper Chain of Wetlands in 2009, which will further reduce flood levels.
- As part of the Dallas Floodway project, the City of Dallas and the Corps have plans in place to raise the existing levees. This will resolve some of the issues.
- The City has already taken actions to correct a number of identified maintenance improvements as the Corps continues its further evaluation of the system.
- Next steps:
  - Develop scope of work, including costs for investigations needed to confirm impacts to levee safety.
  - Evaluate alternatives to fix the problems.
  - Develop a strategy to address the potential problems in conjunction with other components of the Trinity River Corridor Project.

### **What is the City doing?**

The City has been working on this prior to 1998. We have been moving forward and gotten an authorized project to address many of the issues. We have already begun working on the operations and maintenance (O&M) items identified in the Corps' Periodic Inspection. The City is actively seeking stimulus funding for the Dallas Floodway Extension, which will also remedy aspects of the Periodic Inspection. The primary focus has been to protect the citizens, and public safety will continue to be paramount.

### **How much will it cost to make the levees acceptable and from where will the money for this come?**

We are still early in the process. A list of activities, responsibilities and costs associated is currently being developed. We are exploring opportunities for partnering and cost sharing related to implementation strategies. Some activities are already funded through other Trinity River Corridor Project components.

**How quickly can you get started on all of this?**

We have started. We have taken action on items we can address immediately. We will continue looking at all the components. We will take into account these findings and address all issues. Incorporating all of this into the components of the Trinity River Corridor Project is what we are going to work on together with the Corps and other interagency partners.

**What this Means for Property Owners****Are the levees safe?**

For the floods we have encountered to date, the levees have performed well. However, there is always risk associated with levees. We have a good performance history of the levees in place based on the flooding that has occurred. The Periodic Inspection and work on other associated projects identified areas needing further investigation to ensure the system will perform as intended at higher flood levels.

**What parts of the City are going to be affected?**

We are talking about all the areas protected by the levees. This includes areas adjacent to existing levees and within the flood plain. Risks remain the same for business and residences. The difference is we now know.

**Are the neighborhoods and businesses along the levees at risk?**

For the floods we have encountered to date, the levees have performed well. However, there is always risk associated with levees. We need further evaluations on how the levee system will perform during future larger flooding events and what improvements are needed.

Levees are earthen structures and over time they settle and have to be re-worked, because as with any infrastructure, it ages outside in the elements. The levees date to the 1920s and had a major facelift in the late 1950s/early 1960s. This is not unique to Dallas in terms of aging infrastructure. It is something the entire nation is looking at and it is part of the overall strategies the City is working on at this time.

**Do people have to move?**

No. Risk remains the same for businesses and residences. Flood insurance is normally required by federal lenders if a structure is located within a 100-year flood

plain. The recent unacceptable rating is based on an 800-year event. Further investigations will take place to find out how the levees will function during a 100-year event.

### **Has the risk of being flooded increased?**

No. The levees are the same today as they were yesterday. People will have concerns when they learn of this rating. It is always important for business and homeowners to have insurance and most agents sell flood insurance. For those with the greatest concern, we recommend they make a call to their insurance carrier and explore flood insurance options.

### **What does this Mean for the Trinity River Corridor Project?**

#### **How does this affect the overall Trinity River Corridor Project?**

The recreational components that are downstream of the levees, Elm Fork improvements, gateway parks, and the horse park are not impacted. Work on the project components within the Dallas Floodway will continue while we evaluate the scope of these findings and integrate them into the remainder of the components. It is too early to tell what the impacts may be on other features of the project.

#### **How does this rating impact the Margaret Hunt Hill Bridge? What about the current construction on the bridge?**

The Bridge moves forward. Additional features may have to be incorporated to ensure structural integrity of the levees but none of this will affect the look of the Bridge.

#### **Does this delay the Trinity Parkway?**

It is too early to tell if construction will be delayed. Current design efforts will continue. As with every piece of the project, when the evaluations are complete, we will make adjustments if needed. We will continue to work with our partners to move forward with all components of the Trinity River Corridor Project. The SDEIS Public Hearing is at the Dallas Convention Center on May 5, 2009 at 7:00 p.m. Parking is free to the public.

**Does the Trinity Parkway threaten the levee?**

No. The Parkway has always been developed from the perspective of ensuring the integrity of the levee system and having safety in mind. The levees would not be impaired.

**Can we use Trinity Parkway money to repair the levee?**

The 1998 Bond funds are allocated, through an Interlocal Agreement with the North Texas Tollway Authority for design and construction. However, the Trinity Parkway could address some of the items identified in the inspection.

**What is FEMA?**

The Department of Homeland Security's Federal Emergency Management Agency (FEMA) provides assistance for emergency preparedness and disaster relief. In addition, FEMA provides accreditation of levees and levee systems. This accreditation is shown as flood protection on the Flood Insurance Rate Maps (FIRM).

FEMA accredits levees that meet the criteria of 44CFR65.10 as providing protection from the 100-year or one percent annual flood chance based on the certification provided by levee owner.

- FEMA accredits certification documents provided by the levee owners
- FEMA review is for the sole purpose of establishing appropriate flood insurance risk zone determinations for FIRMs.

FEMA is not responsible for:

- Certifying or examining levees
- Designing, constructing, operating, or maintaining levee systems
- Determining how a structure or system will perform in a flood event

**What is FEMA's involvement in Dallas?**

The Federal Emergency Management Agency (FEMA) accredits levee systems. At this time, the Dallas Levee System is accredited at the 100-year flood event level. Certification is conducted by a licensed professional engineer as requested by the City of Dallas or through a federal agency responsible for the levee system design.

With the recent news of the “unacceptable” Corps rating, the City will plan additional investigations and work with FEMA regarding the accreditation of the Dallas Levee System. The City will complete an engineering analysis to determine if the levees can pass the “base Flood” event (100-Year flood) so that the levees can be certified.

**How will FEMA be informed of the “unacceptable” rating of the Dallas Levee System?**

The Corps is likely to issue a letter to FEMA stating they have withdrawn their support for the Dallas Levee System. At that time, FEMA will schedule a meeting with the City of Dallas to review the letter and the Periodic Inspection Report Number 9.

**When will FEMA be informed of the new rating?**

The Corps is expected to send their letter to FEMA at the same time the final report findings are submitted to the City of Dallas.

**What is the purpose of a levee certification?**

The purpose of the levee certification is to determine how FEMA will map the floodplain behind the levee for flood insurance purposes.

**What is the difference between the Corps certification and a FEMA accreditation?**

The Corps can review and analyze a levee to determine if it will safely pass a flood event and if the levee can do so, the Corps can certify that levee. This certification is then used by FEMA to accredit the levee system for flood insurance purposes. FEMA provides the accreditation that is shown as flood protection on the Flood Insurance Rate Maps (FIRM). These FIRM maps show those areas deemed by FEMA as having the possibility of being effected if a 100-year flood event occurs.

FEMA accredits levees that meet the criteria of 44CFR65.10 as providing protection from the 100-year or one percent annual flood chance based on the certification provided by the levee owner (City of Dallas). Certification does not have to be made by the Corps.

**Who provides FEMA with the accreditation documents?**

The City of Dallas will conduct analysis and provide the information to FEMA for accreditation purposes.

**What is the process FEMA and the City of Dallas will be using to move forward?**

- The Corps will notify the City of Dallas and copy FEMA on their decision to withdraw the previous letter of certification.
- The City of Dallas will provide an official letter formally notifying FEMA that a portion of the levee system certification has been withdrawn.
- FEMA will send an official letter to the City of Dallas notifying and identifying the steps forward.
- FEMA will work with the City of Dallas to determine and coordinate the next steps.
- FEMA will work with the City of Dallas throughout this process and assist with outreach activities as appropriate.

**How do I get more information about flood insurance?**

Living behind a levee always has a risk. The City has a comprehensive emergency evacuation plan for the entire City to help notify you before a flooding emergency. FEMA recommends anyone living near levees and other creeks should have flood insurance. Individuals interested in learning more about flood insurance should visit FEMA's website:

[WWW.FLOODSMART.GOV](http://WWW.FLOODSMART.GOV)

**What are some insurance considerations?**

- Mandatory purchase and flood insurance rates are based on **current effective** Flood Insurance Rate Map (FIRM).
- Flood Insurance rates are not changing at this time.
- Residential and business owners with property behind a flood control structure, such as a levee are always encouraged to purchase flood insurance.
- Flood insurance is available behind levees and may be offered to residents and business owners at a discount.

**What type of community meeting and outreach will be conducted by the City of Dallas?**

Throughout this process, the City of Dallas will provide up-to-date information [www.dallascityhall.com](http://www.dallascityhall.com) on the homepage. In addition, an extensive communications and outreach plan is in progress to provide flyers, brochures, community meetings, updated Q&A's, advertisements, and many additional forms of information for the residential and business owners.

## **Where can I find additional information on FEMA and this new rating?**

You can visit the following Web sites for additional information listed below:

- The NFIP and Levee System: [www.fema.gov/library/viewRecord.do?id=2609](http://www.fema.gov/library/viewRecord.do?id=2609)
- Saving on Flood Insurance, grandfathering rule: [www.fema.gov/library/viewRecord.do?id=2845](http://www.fema.gov/library/viewRecord.do?id=2845)
- Meeting the Criteria for Accrediting Levee Systems on NFIP Flood Maps: [www.fema.gov/library/viewRecord.do?id=2517](http://www.fema.gov/library/viewRecord.do?id=2517)
- Living with Levee Systems: [www.fema.gov/library/file?type=publishedFile&file=lv\\_lwls\\_0708.pdf&fileid=052fa6c0-478e-11dd-b61a-001185636a87](http://www.fema.gov/library/file?type=publishedFile&file=lv_lwls_0708.pdf&fileid=052fa6c0-478e-11dd-b61a-001185636a87)
- Requirements for Mapping Levees: [www.fema.gov/library/file?type=publishedFile&file=sec65\\_10\\_req\\_nov08.pdf&fileid=d79281f0-ad1e-11dd-a65f-001185636a87](http://www.fema.gov/library/file?type=publishedFile&file=sec65_10_req_nov08.pdf&fileid=d79281f0-ad1e-11dd-a65f-001185636a87)