

# NEWS

FROM TUTTLE CREEK DAM

September 2004



**US Army Corps  
of Engineers**®  
Kansas City District

## Public Meeting Scheduled for September 21, 2004

You are invited to a public meeting on the Tuttle Creek Dam Failure Warning System

**Date:** September 21, 2004

**Time:** 6:00 - 8:00 p.m.

**Location:** Eisenhower  
Middle School  
800 Walters Drive  
Manhattan, KS  
66502

From 6 - 6:30 p.m., an open house will be held to enable you to view exhibits and ask questions of U.S. Army Corps of Engineers representatives. A short presentation will be given at 7 p.m., followed by a public discussion period.

SEPTEMBER 2004

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## Protecting the Community with a Dam Failure Warning System

In August 2004, construction began at six locations across Manhattan. Concrete slabs were poured and various metal components were delivered to each of the sites. But these were not new buildings or houses. They were the first sign of new siren towers that are an integral part of the Tuttle Creek Dam Failure Warning System now being completed by the U.S. Army Corps of Engineers, Kansas City District. For this same system, construction crews have been busy installing sensors to measure earthquake movement at Tuttle Creek Dam itself.

### Why a Dam Failure Warning System?

It may be surprising to some, but Manhattan is located in an earthquake zone. When a 1971 earthquake nearly caused the failure of a dam in California's San Fernando Valley, it could have resulted in loss of life and property downstream of the dam. This prompted the U.S. Army Corps of Engineers to begin its Dam Safety Assurance Program to test earthen dams across the country for their ability to withstand earthquake forces. Tuttle Creek Dam was one of those dams evaluated and found to be vulnerable to serious damage in the event of a major earthquake.

In 2002, the Corps of Engineers completed a Final Evaluation Report and Final Environmental Impact Statement for Tuttle Creek Dam with input from the local community. These reports presented an approach for making modifications to the dam and the spillway that would prevent major damage during an earthquake. Construction of these modifications will begin in 2005.

In the meantime, the community requested a system to protect the downstream neighborhoods from a possible earthquake that might occur before the Tuttle Creek Dam modifications are complete. Failure of the dam caused by an earthquake would potentially result in loss of life and substantial property damage in downstream areas including the city of Manhattan.

### Warning System Consists of Several Elements

The Dam Failure Warning System is made up of several components:

- Instruments to detect earthquake-induced damage to Tuttle Creek Dam;
- Six new warning sirens;

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## Protecting the Community (cont.)

- An evacuation plan for the nearby downstream areas of Manhattan; and
- A community outreach program to educate the public about the warning system.

The instruments to detect earthquake damage are linked to a central control system that will alert the Corps of Engineers and Riley and Pottawatomie County emergency management officials of an earthquake and the potential for dam failure.

The most visible of the warning system components, the siren towers, are what you will be seeing soon. These sirens, which will also sound tornado warnings, will sound both voice and siren evacuation warnings that sound distinctly different from tornado sirens. The sirens are located at Sojourner Truth Park, the City of Manhattan Water Treatment Facility, Northeast Community Park, Eisenhower Baseball Complex, the intersection of Casement and Barnes roads, and Tuttle Creek Outlet Park.

In addition to the sirens, indoor alarms will be located at facilities that require special evacuation attention such as school facilities and large apartment houses or other facilities for the elderly or handicapped.

Construction of the Dam Failure Warning System will be completed by October 2004. The system will be tested during a Dam Safety preparedness exercise on October 20, 2004. The exercise will allow the Corps of Engineers, together with local, state, federal, and volunteer



*Tuttle Creek Dam*

agencies and jurisdictions, to evaluate their emergency procedures; clarify responsibilities; and improve communication and coordination before an emergency.

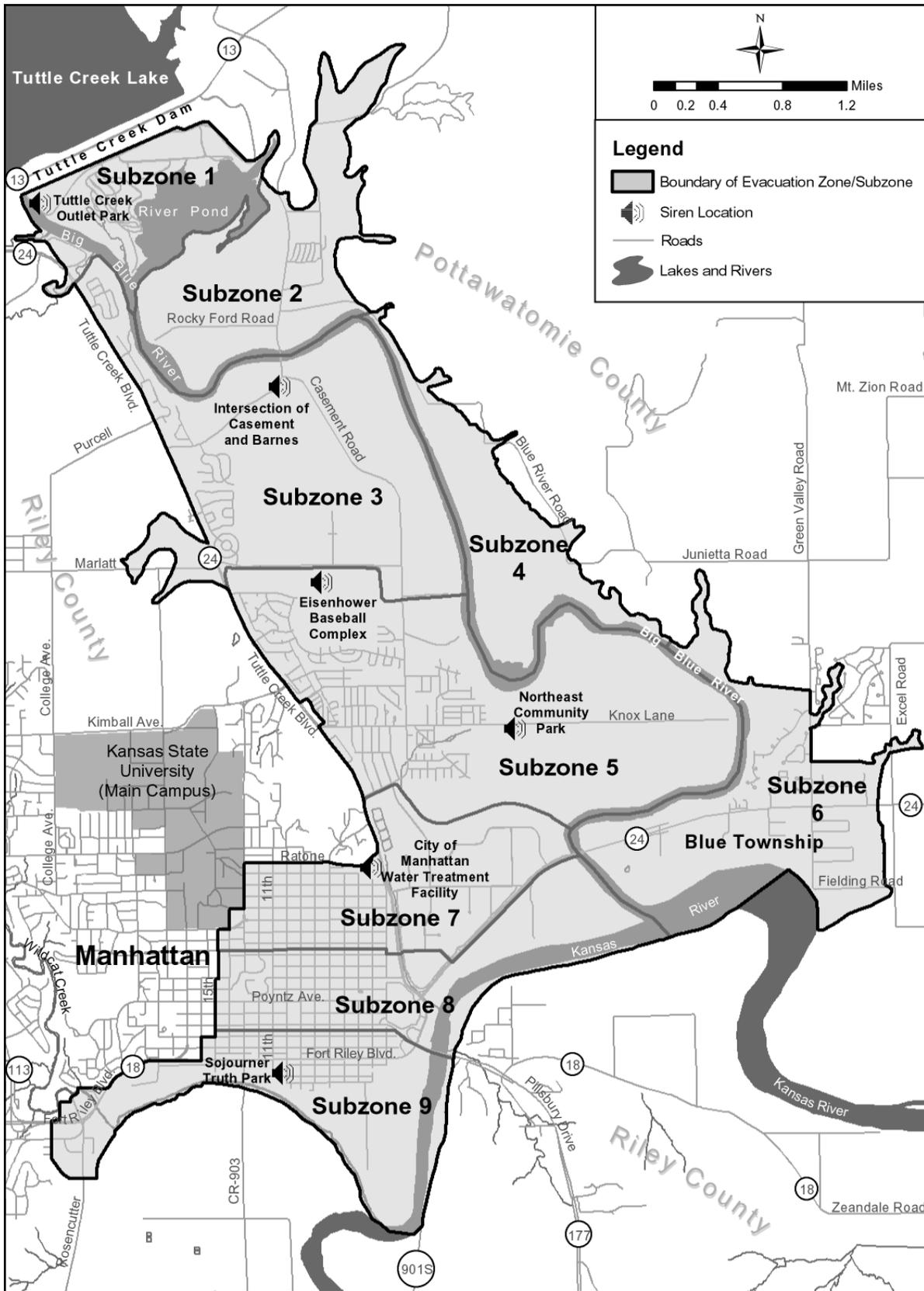
### **Evacuation Plan a Key Element of Warning System**

If Tuttle Creek Dam were to fail as the result of an earthquake, the downstream community would need to evacuate their homes, schools, and places of work within two to six hours depending on the severity of the earthquake. The flooding caused by a dam failure would extend downstream into an area shown on the map as the evacuation zone.

In this event, residents of these areas would need to evacuate by walking out of their area and moving to nearby gathering places outside of the evacuation zone. As shown on the map, the evacuation zone is broken into nine subzones, each with its own evacuation routes.

Detailed maps of each subzone and gathering places will be available at the public meeting on September 21, as well as on the Tuttle Creek Dam Safety Assurance Program website at

<http://www.nwk.usace.army.mil/projects/tcdam/index.htm> under the "Dam Failure Warning System."



*The evacuation zone (shaded area) is the area in the Big Blue River Valley downstream of Tuttle Creek Dam between the dam and the Kansas River. Each of the nine subzones has its own evacuation routes.*

# Community Outreach Activities Offer Chance to Get Information and Provide Feedback

To ensure that the community understands the Dam Failure Warning System and specifically the evacuation plan associated with it, a community outreach program has been set up to provide information. This program also offers the public an opportunity to provide comments on the system.

Community outreach activities include the following:

- This and future newsletters
- Fact sheets describing the Dam Failure Warning System and its components;
- A public meeting to be held on September 21, 2004 (see page 1);
- An evacuation brochure and copies of evacuation sub-zone maps;
- Website (see address below); and
- Exhibits containing information on the system.

## **For more information**

If you would like additional information on the Dam Failure Warning System, visit our website at:  
<http://www.nwk.usace.army.mil/projects/tcdam/index.htm>

Or contact Bill Empson, Project Manager, U.S. Army Corps of Engineers, Kansas City District at 816-983-3556 or Brian McNulty Operations Manager, U.S. Army Corps of Engineers, Kansas City District at 785-539-8511 or at [tcdam.nwk@usace.army.mil](mailto:tcdam.nwk@usace.army.mil)

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