

96-344 OCT 181996

# Floodplain Development Below Dams

Mike Lowe, P.E., Leader, TNRCC Dam Safety Team

loodplain administrators and the public sometimes can forget that development below a dam is subject to flooding. In the unlikely event a dam should fail, or if its emergency spillway engages during a large storm, loss of life and property can be expected. To preserve the many benefits of dams, floodplains below them must be managed to minimize or avoid losses.

## Enforcement of Local Floodplain Ordinances

First, local governments, by enforcing their floodplain ordinances, can effectively protect many citizens who would otherwise build homes in the floodplains below dams. In addition, cities can expand their ordinances to provide more protection than normally afforded under the National Flood Insurance Program (NFIP).

#### Dam Owners' Role

All dam owners should encourage their local governments to participate in the NFIP and enforce floodplain ordinances. Such enforcement protects downstream life and property, helps minimize the owners' liability risks, and reduces their chance of incurring large costs to upgrade their dams after downstream development occurs.

### Residents and Property Owners

People who live and/or own property below dams

should encourage dam owners to maintain their structures and ensure that the dams have adequate spillway capacity for existing conditions. If dams are properly designed, constructed, and maintained, they can provide significant flood control and security to residents in the downstream floodplains; however, poorly designed, constructed, and maintained dams can increase the risk of catastrophic flooding.

### **Emergency Plans**

Finally, dam owners and local governments should develop and maintain appropriate emergency action plans for dams with existing development in their downstream floodplains.

The TNRCC Dam Safety
Team is available to answer
questions related to development below dams, emergency
action plans, and related
questions. Call (512) 2394730 or write to TNRCC, Dam
Safety Team, MC 160, P.O.
Box 13087, Austin, Texas
78711-3087. ♣

### 

Backup and Seepage ...... 4

FEMA Withholds Mitigation Funds Over "Substantial Damage"

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

## **State Wins Appeal Case**

(Reprinted from Floodplain-Shoreland Management Notes - January 1996)

The state of Wisconsin's position was upheld in the Wisconsin Court of Appeals recently in a case involving a Hager City man who completed over \$200,000 worth of improvements to an island home in the Mississippi River floodway.

The existing home was a legal, nonconforming structure in the floodway. However, Pierce County passed a floodplain zoning ordinance in 1968 that prohibited most new structures in the floodway (including residences) and placed certain restrictions on existing, nonconforming structures.

Continued occupation and use of the home is allowed under state laws, but structural improvements and additions are limited to 50 percent of the structure's equalized assessed value. This limitation allows reasonable use of these properties, protecting the owner's investment, but does not allow unlimited expansion or improvements to the structure that would extend its longevity or increase flooding risks and other hazards to residents.

#### **Trial Court's Ruling**

Building inspectors and state officials said Jeffrey Oskey violated these regulations, but Pierce County
Circuit Judge Robert Wing
had dismissed a lawsuit
seeking to force Oskey to
remove the violating structural additions and alterations to his Trenton Island
house.

In dismissing the lawsuit, the court ruled that the state had not met its burden of proof regarding improvements made to the house. It also ruled that Oskey had not created a substantially different building because "the Oskey home was a single family residence before the construction and it was a single family residence after the construction was completed."

## Appeal Court Overrules on "Substantially Different"

The 3rd District Court of Appeals overturned Wing's ruling on January 9, 1996. At trial the state introduced evidence showing that, among other things, Oskey had moved the front wall of his house out four feet to enclose an existing deck, built a new 18- by 24-foot screened porch, and added a half-story to the house, which included

## **Worst Guest List**

Hurricane season runs from June 1 to November 1. Here is a list of the worst guests we have had and those expected through 1998.

| <u>1993</u> | <u>1994</u> | <u> 1995</u> | 1996      | <u>1997</u> | <u>1998</u> |
|-------------|-------------|--------------|-----------|-------------|-------------|
| Arlene      | Alberto     | Allison      | Arthur    | Ana         | Alex        |
| Bret        | Beryl       | Barry        | Bertha    | Bill        | Bonnie      |
| Cindy       | Chris       | Chantal      | Cesar     | Claudette   | Charley     |
| Dennis      | Debby       | Dean         | Dolly     | Danny       | Danielle    |
| Emily       | Ernesto     | Erin         | Edouard   | Erika       | Earl        |
| Floyd       | Florence    | Felix        | Fran      | Fabian      | Frances     |
| Gert        | Gordon      | Gabrielle    | Gustav    | Grace       | Georges     |
| Harvey      | Helene      | Humberto     | Hortense  | Henri       | Hermine     |
| Irene       | Isaac       | Iris         | Isidore   | Isabel      | Ivan        |
| Jose        | Joyce       | Jerry        | Josephine | Juan        | Jeanne      |
| Katrina     | Keith       | Karen        | Kyle      | Kate        | Karl        |
| Lenny       | Leslie      | Luis         | Lili      | Larry       | Lisa        |
| Maria       | Michael     | Marilyn      | Marco     | Mindy       | Mitch       |
| Nate        | Nadine      | Noel         | Nana      | Nicholas    | Nicole      |
| Ophelia     | Oscar       | Opal         | Omar      | Odette      | Otto        |
| Philippe    | Patty       | Pablo        | Paloma    | Peter       | Paula       |
| Rita        | Rafael      | Roxanne      | Rene      | Rose        | Richard     |
| Stan        | Sandy       | Sebastien    | Sally     | Sam         | Shary       |
| Tammy       | Tony        | Tanya        | Teddy     | Teresa      | Tomas       |
| Vince       | Valerie     | Van          | Vicky     | Victor      | Virginie    |
| Wilma       | William     | Wendy        | Wilfred   | Wanda       | Walter      |

These lists recycle every six years, and the names are changed occasionally.

### Appeal Case (continued from page 2)

a bedroom, recreation room, storage area, and closet. The roof of the house was redesigned to accommodate the new half-story.

The contractor estimated the cost of the new porch was \$15,000, moving the outside wall to enclose the existing deck was an additional \$15,000, and the cost of the new story and roof alterations was \$62,000. Oskey had obtained a permit to expand his house, which limited improvements to \$18,401.

Based on this uncontested evidence, the appeals court ruled that the trial court had interpreted "substantially different" too narrowly. The appeals court concluded that adding a new porch, enclosing an existing deck, and adding a half-story to a house does create a "substantially different" building as contemplated in a recent Wisconsin Supreme Court decision, Jean E. Marris v. City of

Cedarburg, 176 Wis. 2d 14 (May 11, 1993).

#### Applying the Marris Guidelines

In Marris, the court recognized the need to balance two competing policies in dealing with nonconforming uses: (1) the protection of property ownership rights and (2) protection of the community's interest in the elimination of nonconforming uses. To allow property owners to make reasonable renovations to prevent deterioration and yet limit structural repairs or alterations to ensure that these uses are gradually eliminated, the Marris court set out three guidelines to judge what should be construed as structural repairs or alterations:

 work that would convert an existing building into a new or substantially different building; or work that would affect the structural quality of the building; or

proposed improvements that would contribute to the longevity or permanence of the building.

In reviewing these guidelines, the appeals court found that the improvements made by Oskey were not necessary to prevent deterioration, and were thus properly classified by the state as structural repairs or alterations, subject to the 50 percent rule. Oskey's records indicate that he paid the contractor a total of \$134,761.64 for remodeling and reconstruction.

Since Oskey did not dispute the contractor's cost estimates for the work performed on his house, the

appeals court
accepted these
costs as actual
costs and
remanded the
matter to the
circuit court to
determine what
improvements

to the house violated state and county regulations that only allow \$18,401 worth of structural repairs and alterations.

Assistant Attorney General Shari Eggleson said the state will continue to argue that the improvements which exceed the 50 percent limit must be removed.

The appeals court also concluded that the state administrative laws and county code sections that restrict structural repairs and alterations in floodplains are not unconstitutionally vague.

The appeals court ruling may affect enforcement actions involving questionable building improvements against other homeowners on Trenton Island. There are about 86 structures on the island, including some businesses. •

## **TNRCC Names Drought Coordinator**

rought conditions in Texas are not expected to improve soon. In view of this, Commissioner John Baker has designated his executive assistant, John B. Hofmann, as drought coordinator for the Commissioners' Office. Mr. Hofmann will also coordinate TNRCC's internal and external drought activities. He can be reached at 512/239-5543.

## Trinity River Virtual Tour Being Developed for Internet

Reprinted from Reflections on the Trinity 5 (Winter 1996)

Thanks to new directions in computer technology, the ability to manage, process, and access information is becoming easier and more interesting. On-line services such as the Internet have provided computer users with an opportunity to scan information remotely.

The North Central Texas Council of Governments (NCTCOG) is being very proactive in the creation of a detailed and thorough Internet information site, with the goal of providing easy access to programmatic information for member cities, the region, and other national and international users. The Trinity River Information Network (TRIN) can be accessed at http:// www.nctcog.dst.tx.us/envir/ trin/trinity.html. The development of a Trinity River virtual tour is under way at NCTCOG's Internet site to expand TRIN.

The virtual tour is being designed to operate on any of today's popular Internet access software. It is a graphically oriented way to access data, photos, maps and

information about sites, projects and activities located along the Trinity Corridor. The tour features numerous point-and-click maps where users can point to a location on a corridor map, click the mouse, and have information about that location appear on the computer screen.

Through this method, one can go up and down the corridor virtually, accessing information at site after site.

In its initial stages, the tour is being designed to provide access to information about specific sites of interest in the corridor and about flooding, which has been a primary focus of recent studies in the corridor. A large collection of both data and sites is already being compiled and prepared for access. The virtual tour will provide a gateway to corridor cities, parks, mapping, statistics, events, river

conditions, modeling, and digital movies.

With the significant work being done by local jurisdictions in the Trinity COMMON VISION program and the numerous products of the Feasibility Study, the virtual tour is a significant opportunity to make information available to the many users of these resources. Look for it in the upcoming months.

## Flood Insurance Covers Sewer Backup and Seepage

Since a policy change in late 1994, the National Flood Insurance Program (NFIP) covers losses due to sewer backup and seepage if **all** of the conditions below are true:

- there is a general and temporary condition of flooding in the area, and the flooding is the proximate cause of the sewer backup or seepage of water;
- the sewer backup or seepage of water occurs no later than 72 hours after the flood has receded; and

the building must be insured at the time of loss for at least 80 percent of its replacement cost.

### **Previous Policy**

In the past, the NFIP covered losses related to high water table or seepage *only* when concurrent surface water damage affected the insured building during a general condition of flooding.

#### **Definitions Used in NFIP**

According to Article 2,
Definitions of the National

Flood Insurance Program Dwelling Policy, a flood is defined as a general and temporary condition of partial or complete inundation of normally dry land area from the overflow of inland or tidal waters; the unusual and rapid accumulation or runoff of surface waters from any source. The term general condition of flooding has been further defined as widespread flooding displaced over two acres of insured property, or two or more adjacent properties. •

## FEMA Withholds Mitigation Funds Over "Substantial Damage" Issue

The Federal Emergency Management Agency is holding up post-flood mitigation assistance money to 14 Illinois communities that were hit by the Great Flood of 1993 and to one community flooded in the spring of 1994.

Four of the communities were identified as in serious noncompliance. FEMA is withholding their remaining funds. The other 11 are having their money meted out as FEMA monitors their progress.

FEMA's main concern is the lack of an effective enforcement program to regulate reconstruction of substantially damaged buildings. Some communities had no records of checking to see if buildings were substantially

damaged, others

were only

enforcing the requirement if people applied for a permit, and other communities had no permit system at all.

The "substantially damaged" requirement is a tough one to enforce; substantial damage occurs when the cost of restoring the structure to its pre-damaged condition would equal or exceed 50 percent of the pre-damage market value.

Local ordinances and the federal regulations require a substantially damaged building to comply with the same regulations as a new building. This also holds true for improvements that total 50 percent of the market value. If repair of damage and further improvements total over the 50 percent threshold, the combination would also be treated as if the structure were new. The regulations make the following requirements for substantially damaged and/or improved buildings:

- **Residential**: must be elevated above the base flood elevation or relocated out of the floodplain.
  - Nonresidential: must be elevated, floodproofed, or relocated out of the floodplain. ❖

This reprint from the Floodplain Management Association News was most recently seen in the Arizona Dept. of Water Resources' Flood Management News. Considering the flood damage to Texas in the October 1994

Southeast Texas Flood, Texas communities should ensure their enforcement of the substantially damaged requirement does not give FEMA cause to hold up post-flood mitigation assistance.

U OF NT DEP. LIBRARIES 76203

## Important Phone Numbers For Floodplain Administrators

## Federal Emergency Management Agency (FEMA),

Region VI (817) 898-5127
FEMA Publications (800) 480-2520
FEMA Floodplain Maps & Flood Insurance Studies
(800) 358-9616

## U.S. Army Corps of Engineers District Offices

Tulsa District (918) 669-7401 Albuquerque District (915) 568-1359 Fort Worth District (817) 334-2681 Galveston District (409) 766-3930

#### **Texas Natural Resource Conservation Commission**

Floodplain Coordination Team (512) 239-4730
Water Utilities District Administration (512) 239-6161
General Information (512) 239-1000

The Texas Natural Resource Conservation Commission is an equal opportunity / affirmative action employer. The agency does not allow discrimination on the basis of race, color, religion, national origin, sex, disability, age, sexual orientation or veteran status. In compliance with the Americans with Disabilities Act, this document may be requested in alternate formats by contacting the TNRCC at (512)239-0010, Fax 239-0055 or 1-800-RELAY-TX (TDD), or by writing P.O. Box 13087, Austin, TX 78711-3087.

PD-005/96-3

A printed on recycled paper using soy-based ink



BULK RATE U.S. POSTAGE PAID AUSTIN, TEXAS PERMIT NO. 1967