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Stormwater Fee Important in Flood Prevention, Management

Reluctant to become another casualty in the perpetual war fought by Oklahoma communities against relentless floodwaters, the Edmond City Council unanimously approved a local drainage utility fee at its June meeting. In doing so, Edmond is the latest in a growing number of cities to implement this novel approach to financing stormwater facility improvements and maintaining systems to safely and efficiently convey floodwaters.

"Recently, there has been renewed interest by cities and towns in this method of financing stormwater maintenance," according to Ken Morris, state coordinator of the National Flood Insurance Program. "Edmond is the fourth Oklahoma community, to my knowledge, to establish a fee specifically dedicated to stormwater facility maintenance and I expect others to follow suit in the near future." Cities who have already initiated the fee include Tulsa, Lawton and Bixby.

Edmond's need for a fee was validated by an independent study in the late 1980's which determined that at least \$20 million was required to bring the city's drainage system up to par -- and additional funds would be needed to maintain the improved system. "During the city's review of the drainage fee concept, we received significant input and support from local property owners and homeowner associations," says Joe Davis, Edmond City Engineer. He added that the fee, attached to monthly utility bills, is two dollars for most households (two dollars per 10,000 square feet) with a maximum charge of \$100 per month.

The stormwater fee concept in Oklahoma was originated by the City

of Tulsa in 1986 and was a direct result of the catastrophic Memorial Day flood of 1984. Ann Patton, Tulsa Community Affairs Manager, estimates that up to 1,000 homes -- of the 4,000 homes damaged -- would have been spared had the city's stormwater system functioned properly.

Through a \$2.58 per month charge for single family residences and a proportionately larger fee (based on the amount of impervious roof and paved area) for commercial developments, Tulsa collects some \$9 million each year. The bulk (more than \$6 million, or 64 percent) of expenditures goes to maintain the city's enormous drainage system -- 20,000 stormwater structures (i.e., bridge and street culverts), 3,000 miles of storm sewer lines, 6,000 acres of detention ponds, 90,000 feet of roadside ditches and 400 miles of creek channels (not including the Arkansas River).

"Tulsa's fee program is based on the fact everyone in a community contributes to runoff and the flooding problem, therefore all should help pay for it," Patton points out. The Tulsa Department of Public Works (formerly Department of Stormwater Management, created in 1985) administers the fee and is responsible for all flood, drainage and stormwater programs.

Although the stormwater fee can serve as a stable funding source for maintenance activities, Morris emphasizes that the fee is not for all communities who experience stormwater management problems. "Obviously, small cities and towns with a limited tax base would find it difficult to levy a stormwater utility fee on local citizens. Others may be in a position to secure enough state

or federal funding to alleviate flooding problems," he says.

Still, Morris hopes that communities will make stormwater management a priority. "I cannot overstate the importance of keeping storm sewers and channels open so they are able to properly carry floodwaters, thereby preventing property damage as well as loss of life." However, he stressed that before cities and towns pursue such action in creeks or streams, they should first check with the U.S. Army Corps of Engineers to verify that the proposed work will not increase downstream flooding problems or harm sensitive wildlife habitats, such as wetlands. □

FEMA Plans Town Meetings

In an effort to identify incentives that will encourage communities to implement measures to reduce flood damages, the Federal Emergency Management Agency is hosting a series of town meetings across the nation.

The meetings, scheduled in each of the 10 FEMA regions from September 7 to October 13, are part of a new federal strategy to strengthen hazard mitigation programs. The meeting for Region VI states, including Oklahoma, will be held in Houston on September 28. Input from local and state officials, as well as the general public, will strongly influence development of a proposed national hazard mitigation strategy which will be submitted to President Clinton.

For more information, contact Albert Ashwood of the Office of Civil Emergency Management at (405) 521-2481.

How to Survive a Community Assistance Visit

Community Assistance Visits (CAVs) are used by the Federal Emergency Management Agency, OWRB and other appropriate state agencies to monitor a community's progress in complying with state and federal floodplain management requirements. So that local officials responsible for their community's participation in the National Flood Insurance Program may know what is required of them during a CAV, the OWRB offers the following advice (reprinted, in part, from the Texas Natural Resource Conservation Commission newsletter) in how to survive this very important obligation.

Before an OWRB or FEMA representative formally visits your community, **are you:**

- ◆ Making locally adopted floodplain management regulations consistent with minimum criteria established under state and federal law?
- ◆ Enforcing local regulations?
- ◆ Reviewing all development permits to determine if a flood hazard exists?
- ◆ Ensuring that new residential structures are elevated to (or above) the 100-year base-flood elevation?
- ◆ Ensuring that new non-residential structures are elevated or floodproofed up to (or above) the 100-year base-flood elevation?
- ◆ Keeping records of elevations of the lowest first floor (including basements); elevations of floodproofed buildings; the number of permits and variances issued in flood hazard areas; the number of other permits issued for filling, dredging or other changes to the

100-year floodplain; and are you prepared to produce these records upon request?

- ◆ Inspecting community developments to verify "as-built" elevations?
- ◆ Performing periodic inspections in the community to determine if structures have been altered or substantially improved?
- ◆ Requiring a certification that no increase in the community base-flood elevation will occur as a result of any encroachments in your community floodway?

If you answered no to any of these questions, your community could receive an unsatisfactory CAV report. Extensive problems could result in suspension of your community from the NFIP. Most importantly, failure to enforce floodplain management regulations could make your community susceptible to future floods. Don't wait. Make the necessary changes to get your local program in compliance and stop the flood damages. □

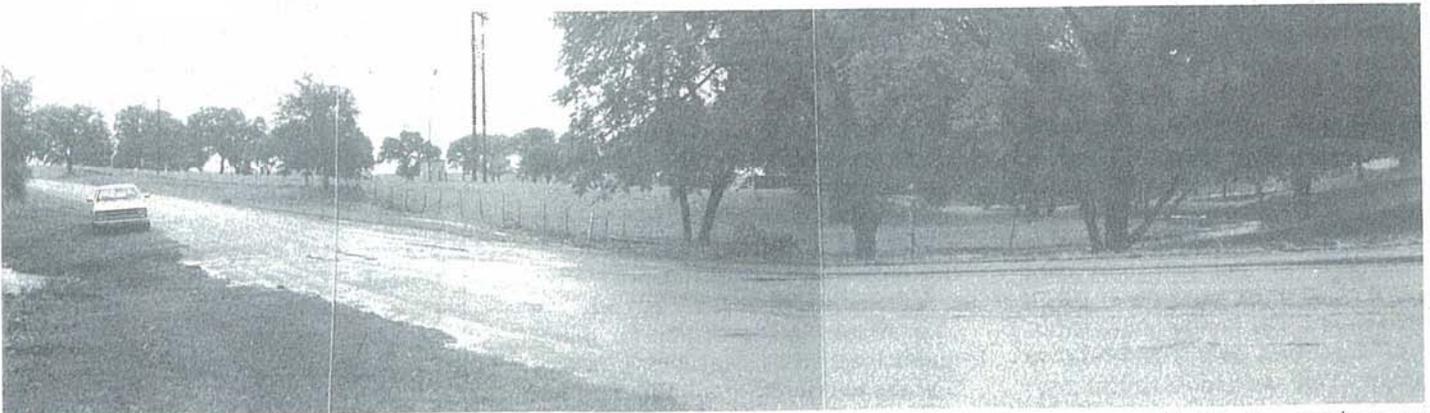
Hazard Video Available

The OWRB has created a video to inform community officials of measures to decrease their risk of flooding as well as funding and related benefits available to them through the federal Hazard Mitigation Grant Program (HMGP). According to Ken Morris, National Flood Insurance Program coordinator, OWRB staff plan to utilize the 10-minute video in conjunction with community assistance visits (CAVs) to NFIP members. CAVs or community assistance contacts (CACs) are conducted at least once every two years for each member entity.

"This video will serve as a valuable communication tool in our ongoing effort to educate members on various aspects of floodplain management. Hazard mitigation, in particular, offers significant opportunities to reduce a community's vulnerability to flooding," Morris explained.

He added that the agency is currently planning additional videos on local administration of the National Flood Insurance Program and a series of 30-second public service announcements.

The hazard mitigation video was produced by the Oklahoma State University Telecommunications Center and funded through a grant from the Federal Emergency Management Agency. Loan copies of the production are available to interested communities by calling the OWRB at (405) 231-2576. If you are interested in obtaining HMGP funds, call the Department of Civil Emergency Management at (405) 521-2481. □



An intense 5-inch rain the night of May 25 flooded the creek in the background at right, hurling a car occupied by five children and their grandparents into floodwaters near Duncan. Three of the young children died in the turbulent waters as their grandmother held two more children and clung to a tree until rescuers came. The stormwater was estimated three feet deep over the roadway; more than 8 feet deep, measured from the creekbed to the top of the floodwaters. Drivers often underestimate the depth and velocity of floodwaters on the roadway. It is even more treacherous after dark, when visibility is reduced by darkness and falling rain. Since the tragic accident, signs have been erected warning motorists of the hazard of water on the roadway.