

# THE FLOOD CURRENT

## Channel Upkeep Important

JULY–AUGUST 1992

Channel maintenance is always important, but no more so than during the summer when culverts, bridges and channels become clogged with trees, brush and garbage. Floodways become even more dangerous when this material subsequently reduces their flood carrying capacity. As a result, floodwaters leave their banks and cause extensive damage to houses, businesses, roads and farmland. Similar circumstances have prompted Choctaw residents and officials to pool their efforts in an attempt to seek relief from repeated flooding problems.

The majority of Choctaw's business district lies just north of Choctaw Creek in eastern Oklahoma County. As development has increased upstream in Nicoma Park, Spencer and Midwest City, so has the amount of stormwater runoff flowing into Choctaw Creek. And, because the creek has overgrown with trees and brush, waters frequently overflow the congested channel and flood area businesses.

To alleviate the growing problem, Choctaw City Manager Robert Floyd

recently spearheaded an effort to clean out the creek. Using funds from several businesses, the city and the Board of Oklahoma County Commissioners, Floyd was able to amass \$22,000 to clear two miles of Choctaw Creek.

"This spring, for the first time, Choctaw experienced no flooding as a direct result of this project," said Ken Morris, state NFIP coordinator. "Next year, the city plans to clean out the adjacent two miles of the creek to its confluence with the Canadian river."

Morris commends Choctaw and other communities with sound floodplain management programs. "Regular channel maintenance is extremely important, especially in frequently flooded areas. Choctaw officials have recognized this problem and made a concerted effort to pool limited funds to correct the situation. We encourage all communities to practice regular channel maintenance—it pays for itself by reducing flood damages," he pointed out.

For more information on channel maintenance and floodplain management, contact Morris at (405) 231-2533.



To alleviate flooding problems, area businesses, Choctaw officials and the county pooled \$22,000 to clear a two-mile section of Choctaw Creek.

### Facts You Should Know About the NATIONAL FLOOD INSURANCE PROGRAM

- ❖ There are currently 347 Oklahoma communities (including cities, towns, counties and one Indian tribe) participating in the NFIP.
- ❖ Of the 592 incorporated cities and towns in Oklahoma (representing 2,411,116 million people), 309 communities (2,277,544 million people, or 94.1 percent of the incorporated populous) participate in the NFIP and have access to the purchase of flood insurance.
- ❖ Thirty-eight of 77 Oklahoma counties participate in the NFIP. These counties represent 503,370 people, or 54.1 percent of the unincorporated township population.
- ❖ Overall, 88.4 percent of the state's population have access to federal flood insurance as a result of community participation in the NFIP. Only 364,666 of Oklahoma's 3,145,585 citizens live in areas not participating in the program.
- ❖ Unfortunately, only 11,232 possess a flood policy. These insured citizens pay more than \$3 million annually for flood insurance.



Workshops to update and inform community officials about the NFIP's Community Rating System (CRS)—such as the one shown at left held last October at the Metro-Tech Springlake campus in Oklahoma City—have proven to be an invaluable tool in communicating the benefits of the program to Oklahoma communities. The CRS program offers substantial savings to those exceeding minimum NFIP standards. Already this year, 10 cities and towns have signed up for the program, compared to five in 1991. A special CRS workshop for the top 50 communities participating in the NFIP will be held Wednesday, October 14 at Springlake Metro-Tech.

## River Flooding, Erosion Normal

Although we consider rivers steady and constant, in truth, they are moving and changing all the time. With some regularity, restless rivers remind us that the floodplain really belongs to them and that flooding is a natural component of their life cycle.

The floodplain is actually part of the river channel. As a river moves along its channel (and more of the valley at flood stage), the river sweeps up particles of sand and clay and carries them along as sediment. In a moving stream, the motion of the water holds the particles in suspension. Larger particles remain suspended longer in a swift mountain stream than in a smooth flowing river at a lower altitude.

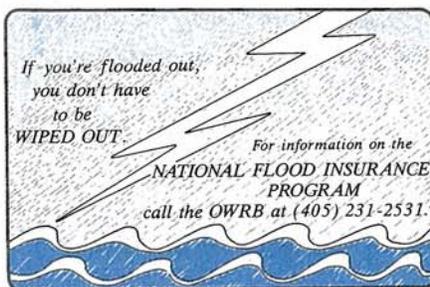
The vast Mississippi is the most sediment-laden river in the U.S., carrying an annual sediment load of 300 million metric tons. The load carried by rivers varies greatly from river to river and season to season. Watersheds of fine soil and sparse ground cover contribute enormous amounts of sediment with every rainstorm. Such an area may lose as much as 64,000 tons from each square mile in one year.

The amount of sediment carried by the world's major rivers is immense. China's Yellow River carries an annual sediment load of 1,600 million metric tons; the Ganges of India, 1,455 million metric tons; the Amazon of South America, 363 million metric tons; the Irrawaddy River in Burma, 299 million metric tons; and the Kosi of India, 172 million metric tons.

## Biennial Reports Due

The Federal Emergency Management Agency (FEMA) and OWRB are asking Oklahoma communities participating in the NFIP to complete required biennial reports describing progress made in implementation of local floodplain management measures.

"Biennial progress reports provide us with accurate, up-to-date statistics on community populations and the number of houses and other structures in special flood hazard areas,"



says the OWRB's Ken Morris. "While much of this information was supplied by community officials when they first entered the program, these reports enable state and federal agencies to remain responsive to NFIP participants."

Previously, progress reports were required on an annual basis; they are now conducted on a two-year reporting cycle, Morris added. To date, FEMA has received approximately two-thirds of the 347 report forms sent to Oklahoma communities particip-

ating in the federal program.

Morris encourages communities who have not yet completed their reports to do so as soon as possible and send them to the OWRB.

## NEXRAD Manages Floods

Next Generation Radar (NEXRAD), a revolutionary new system which allows weather forecasters to better predict the movement and intensity of severe storms, may also reduce flooding problems.

NEXRAD's improved rainfall forecasting capabilities provide more accurate information on the contribution of runoff to major rivers and federal reservoirs, according to Don Burgess of the NEXRAD Operational Support Facility in Norman.

"By knowing how much rain falls in Ponca City, we'll know how it will contribute to the Arkansas River and what they should do to prevent flooding," Burgess said. As a result, a major benefit of the radar will be improved management of reservoirs during flood season by the U.S. Army Corps of Engineers.

More accurate and prompt precipitation data will give lake managers additional time to plan the timing and amount of floodwater releases from dams, thus preventing a repeat of past flooding problems experienced in Oklahoma and elsewhere. Burgess also pointed out that the radar's technological advancement will allow reservoir operators to impound additional supplies of drinking water for use during drier periods.

*Information courtesy the "Tulsa World."*

*The Flood Current is supported by funding through the Federal Emergency Management Agency Cooperative Agreement No. EMT-92-K-0230 as part of the Community Assistance Program—State Support Services Element of the National Flood Insurance Program. The contents do not necessarily reflect the views and policies of the federal government.*