

Mingo is an innocent-looking creek that drains the eastern one-third of the city of Tulsa. But on its frequent flood rampages, Mingo becomes a killer creek that rams through neighborhoods like a wet tornado, as much as a mile wide, with only minutes' warning. Its toll of death and destruction stretches back to early development of the floodplain in the 1950s. Mingo caused \$11 million damage in 1974, \$26 million in 1976, and \$125 million in 1984.

Since 1974 the city and the Corps have worked to develop the most cost-effective plan to reduce Mingo flooding. The \$155-million plan that evolved includes expanded channels and 23 detention basins where flood waters will be captured and stored, then released slowly downstream after the danger of flooding is past.

Under unique legislation, the city of Tulsa has been building portions of the Mingo project, while the planning and negotiations continued. With the authorization from the 1986 federal omnibus water bill and the historic signing of the local cost-sharing agreement in early 1988, the Corps was able to move forward with construction of its first project, beginning in October 1988.

SALT OF THE EARTH. It was in some ways the cruelest joke of all: Even in the dust-bowl days, water flowed freely down the Arkansas and Red Rivers — but it was laced with salt . . . unusable . . . poisoned, for all practical purposes, by an ancient accident of geology.

Over many years, the Tulsa District has looked for cost-effective — and politically acceptable — solutions to the natural salt pollution of both the Arkansas and Red Rivers.

As the District's first 50 years was drawing to a close, this frustratingly slow endeavor appeared on the brink of at least partial success.

The problem has been traced back in geologic time some 250 million years, when an inland sea covered what is now the Texas Panhandle and western Oklahoma. At some point the sea became isolated and all the water evaporated, leaving salt deposits that eventually were covered with rock and silt.

Now salt from these buried beds bubbles up as springs — salt seeps, as they are called — and is carried by rain runoff to rivers and streams which are salt-laden and nearly useless.⁶



Above: A salt-encrusted tumbleweed from the Red River valley where workers (right) prepared a test site for the District's experimental chloride control project.

