

Mountain Park Project

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Mountain Park Project

The Mountain Park Project originally came into being as part of the irrigation surveys conducted by the Bureau of Reclamation in the Red River valley, then morphed into a municipal and industrial (M&I) water project designed to serve the water needs of cities in southwest Oklahoma. Water is a highly valuable commodity in southwest Oklahoma, and despite the relatively low urban population, local and national authorities determined that the best use of surface water resources was domestic, not agricultural. Although by no means the largest or most controversial Bureau of Reclamation water project, the Mountain Park Project was built during the recent past when the nation began to rethink the economic viability and environmental impact of large-scale water projects. Its history reflects the challenge of managing water resources in the New West and the changing priorities of a nation.

Mountain Park Dam regulates the natural flows of West Otter Creek and diverts water from Elk Creek to the cities of Altus, Snyder, and Frederick. An aqueduct system consisting of thirty-eight miles of pipeline, two pumping plants, a chlorination station, and other appurtenant facilities convey the water to the cities.

Project Location

The Mountain Park Project lies on the eastern border of the Southern Plains, a rather flat, dry, and unromantic region that stretches from the southern border of Colorado and Kansas to central Texas. Aridity and drought define this region. Although once teeming with grasslands and bison, over the last several hundred years the resources

have been depleted and communities have faced outmigration.¹ Climate and environment provide context and backdrop to the Mountain Park Project.

To the northwest of the project location is the north fork of the Red River, the site of Altus Dam of the W. C. Austin Project, an irrigation project built by Reclamation in the 1940s. Otter Creek flows south for forty-three miles from its head in Comanche County to its confluence with the North Fork. Elk Creek heads in Beckham County and runs south 65 miles to its confluence with the North Fork. River flows are often unreliable; the North Fork's peak flow is as high as 30,000 cubic feet per second (cfs) in the spring and autumn. In southwest Oklahoma, on the far western edge of a sub-humid climatic strip that extends from the Canadian border to the Gulf of Mexico, the average annual rainfall is twenty-six inches, but some years it can be as low as ten inches, and much of that falls in surges during the summer and evaporates in the dry heat. The land is blanketed by dark, rich soil that had once supported native vegetation like bluestem and buffalo grasses before being converted to cotton.

Historic Setting

Oklahoma, as a place not only where different geographies but also different people have historically converged, has a checkered and colorful past. At various times Spain, France, and England each claimed dominion over what is now Oklahoma. In the nineteenth century the United States carved much of the territory into reservations for native tribes, but by the early twentieth century the government broke up the reservations, forcing Indians to take individual allotments and sold surplus lands to white settlers.

¹ Sherry L. Smith, editor, *The Future of the Southern Plains* (Norman: University of Oklahoma Press, 2003), 3-16.

Over the years Indians, cattlemen, oilmen, farmers, and others settled Oklahoma, giving rise to the towns and cities that dot its landscape.

The prehistory of Oklahoma dates back to the Paleo Indian period, 10,000 to 40,000 years ago. The Cooperton Mammoth Site, in present Kiowa County, contains artifacts from nomadic hunter-gatherers who subsisted on bison and other megamammals. Archeological sites are also found from the Archaic, the Woodland, and Plains Village peoples. We know considerably more about the Plains Village peoples who inhabited the region in the five hundred years prior to European contact. The environment of the plains appeared much different before European contact than it does now. The plains of western Oklahoma was a sea of tall-grasses interspersed with stands of oak and inhabited by bison and other mammals. In this abundant environment, the Plains people settled on high ground near water sources where timber could be found and their homes would be protected from flood waters. Primary means of subsistence to support relatively small villages included agriculture and hunting—garden plots were prepared in the spring and cultivated in the summer and fall, while hunting was a year-round activity.²

Plains Indians on the southern Plains varied widely in lineage and culture. The Wichita tribe, for example, spoke a Northern Caddoan language, lived in grass houses, hunted buffalo, and grew maize, squash, and beans. By contrast, the Comanche and Kiowa relied on the buffalo hunt, while the Plains Apache hunted smaller game and gathered for subsistence. The first European contact in the region brought incremental

² Burna Cole, "Kiowa County," *Encyclopedia of Oklahoma History and Culture*, <http://digital.library.okstate.edu/encyclopedia>; David T. Hughes, "The Foragers: Western Oklahoma," and Jack L. Hofman, "The Plains Villagers: The Custer Phase," in *Prehistory of Oklahoma*, Robert E. Bell, editor (Orlando, Florida: Academic Press, Inc., 1984), 109, 287-94.

yet mighty changes to native peoples and cultures. The acquisition of the horse led to the opening of trading networks with the Europeans, an increase in wealth and social status, and dependence on buffalo for subsistence. Over time, increasing hostility among neighboring native groups, devastating epidemics, and Anglo encroachment on the southern Plains weakened many native tribes' hold on their traditional homeland.³

In 1830 Congress created an Indian Territory west of the Mississippi River for the purpose of opening up Indian lands in the east to white settlers. Over the next decade, a presidential order forced thousands of Native Americans from five autonomous tribes to leave their ancestral lands and relocate in Indian Territory. The Five Civilized Tribes—Cherokee, Chickasaw, Choctaw, Creek, and Seminole—primarily migrated to the eastern portion of present Oklahoma. The creation of Indian Territory precipitated conflicts and dislocations between native and transplanted groups. Even as eastern tribes like the Chickasaw moved west, the Caddo, native to the area, either relinquished their homelands in exchange for annuity payments or relocated to a reservation on the lower Brazos River then in western Oklahoma.⁴

Americans moved west, too, as they heeded the call of “manifest destiny” to expand the country to the Pacific Ocean and to settle the inland territory. The mass movement of men, women, and children west could be felt even in Indian Territory, one of the last areas to be opened to Euro American settlement. In an effort to safeguard peaceful relations, the United States military maintained a presence in Oklahoma

³ Raymond J. DeMallie, editor, *Plains*, Volume 13, of *The Handbook of North American Indians*, William C. Sturtevant, editor (Washington, D.C.: Smithsonian Institution, 2001), 548-51, 907-8, 928-9; Raymond D. Fogelson, editor, *Southeast*, volume 14, of *The Handbook of North American Indians*, William C. Sturtevant, editor (Washington, D.C.: Smithsonian Institution, 2004), 619-20.

⁴ *The Handbook of North American Indians*, vol. 14, 162-65.

Territory. In the 1830s the United States signed a peace treaty with the Kiowa and Comanche on the north fork of the Red River, though tense relations between the groups continued. In 1858 the United States established Camp Radziminski at the canyon mouth below present Mountain Park Dam. The military used the camp during the 1859 campaign against hostile Comanche Indians and then abandoned it late in the year. In the post-Civil War period the United States convinced or forced other native groups onto reservations in Oklahoma, though over the years the size of these reservations dwindled. In 1867 several treaties collectively known as the Medicine Lodge Treaty established reservations for the Kiowa, Comanche, and Plains Apache. The treaty dissolved one large reservation for these tribes and other Indian groups, assigning each tribe to a smaller reservation, and opening up certain lands to white settlement. Although most Indians resigned themselves to life on assigned reservations, others continued to raid neighboring tribes and wage war against the United States military.⁵

In short order the United States allocated nearly all of present Oklahoma to multiple Indian tribes throughout the West. But many of these reservations were short lived. By the 1880s farmers, cattlemen, and land-hungry settlers from Kansas, Texas, and Arkansas longingly looked to the open ranges in Oklahoma to expand their operations. These interests, along with the arrival of railroads, pressured the United States to open Oklahoma land to white settlement. In 1889 President Benjamin Harrison gave his consent and the first of several land rushes opened up reservation lands to settlement. In the ensuing years the government forced tribes, one by one, to accept allotment and then sold surplus lands to white settlers. In 1901 it dissolved the Kiowa-

⁵ Burna Cole, "Kiowa County," and Michael D. Pierce, "Red River War (1874-1875)," *Encyclopedia of Oklahoma History and Culture*, <http://digital.library.okstate.edu/encyclopedia>.

Comanche-Apache and Wichita-Caddo reservations and distributed the land in a lottery. Other reservations were dissolved in 1905.⁶

Prior to opening the reservation to white settlement, a buffalo hunter named Frazier was the first to settle the land where Altus now sits; others soon followed and a small community grew. The town, originally situated along Bitter Creek, relocated to an elevated site two miles east of the creek after a devastating flood hit in 1891. Someone in the group with knowledge of Latin christened the new town *Altus*, commemorating the decision to move to higher ground.⁷ However, Mountain Park, Snyder and Frederick—along with many other “tent” towns—got their start from land lotteries following the allotment of Indian reservations. The community of Burford, for example, began as a cowboy and Indian trading post in August 1901; the name changed to Mountain Park in February 1902. The town has never had a population much above 500, no doubt partly due to the fact that the Oklahoma City and Western Railroad bypassed the town in favor of Snyder when a local resident refused the asking price to acquire his land for a depot. The president of the railroad established a township and depot two miles south of Mountain Park. The new railroad town attracted some businesses from Mountain Park, but Snyder’s population has never topped 2,000. Frederick, organized following the opening of a reservation in present Tillman County, also attracted a railroad depot and supports a population more than double that of Snyder.⁸

⁶ Green, “Settlement Patterns”; W. E. H., “Oklahoma,” *The New Encyclopedia of the American West*, Howard R. Lamar, editor (New Haven: Yale University Press, 1998), 814-16.

⁷ Francis L. and Roberta B. Fugate, *Roadside History of Oklahoma* (Missoula, Montana: Mountain Press Publishing Co., 1991), 417.

⁸ Ethel Crisp Taylor, “Mountain Park” and “Snyder,” and Wanda Jo Evaige, “Frederick,” in *Encyclopedia of Oklahoma History and Culture*.

In the heady days of this rapid development, the founding of towns corresponded to the county land tussles. In 1886 the Texas legislature established the north fork of the Red River as the border between Texas and Oklahoma. Ten years later the United States Supreme Court ruled that the land belonged to Oklahoma, and from that land was formed the counties of Jackson, Greer, and Harmon. Although the court firmly established the state borders, county lines shifted in the immediate years following statehood. In 1910 the governor organized Swanson County out of portions of Kiowa and Comanche counties. The move displeased residents of Comanche County, which bristled at the loss of their western strip of land. In a court suit, Oklahoma courts ruled that the creation of a new county required the approval of sixty percent of the citizens—a decision that effectively dissolved the new county less than a year after its creation.⁹

The opening of Indian lands to settlement ushered in a new era in Oklahoma, brought about by a convergence of social, economic, political, and social forces. Agriculture quickly became the state's staple industry. Before the land rush agriculture was a marginal enterprise in the territory with only 8,826 farms, according to the 1890 census, by 1910 that number had grown to 190,192. The principal crops were corn, winter wheat, and cotton, though increasingly farmers attempted to diversify production in the hope of avoiding the devastation of cyclical drops in crop prices.¹⁰ At the same time urban growth and development also took off. In 1889, the same year as the first land rush, Oklahoma City sprang into being with a population of 10,000, and in 1910, it became the state capitol. New railway lines leading to new towns and cities gave rise to

⁹ Burna Cole, "Kiowa County," and Linda D. Wilson, "Swanson County," in *Encyclopedia of Oklahoma History and Culture*.

¹⁰ Gilbert C. Fite, "Farming," in *Encyclopedia of Oklahoma History and Culture*.

flour and cotton mills and meat processing plants, which in turn facilitated further demographic and economic expansion.

The forces of urbanization and growth, however, were less pronounced in the southwest corner of the state—a backwater, sparsely populated province dependent on agriculture and ranching. Jackson County was a major cotton producer, averaging 92,000 bales annually during a five-year period in the 1920s. Almost everyone in the county depended on a bumper crop. Growers, ginners, compressors, cotton seed oil mill operators, and marketers all had a stake in its success. A few farsighted growers wanted to ensure and expand cotton’s profitability with irrigation. Yet the conversion from dry land farming to irrigation did not come soon enough to avoid the onset of the dry, “dirty thirties,” when the Southern Plains faced an ecological crisis. Drought compounded by over-production on the land left the plains dry and rootless, eventually driving thousands of destitute “Okies” from their homes. During the 1930s, the population of Jackson County declined by 6,000. The dust storms blowing through the state cast the national spotlight on a group possessing “not quite the twang of the midwest nor the drawl of the Deep South, but a composite of both”—the rural poor of the Southwest—and on the best solution to the problem—irrigation.¹¹

Investigations

For years the Bureau of Reclamation and the Army Corps of Engineers considered potential development on the Red River for agricultural and flood control use. Even in its first full year, in 1903, as it scanned the West for potential water projects,

¹¹ U.S. Department of the Interior, Bureau of Reclamation, “The W. C. Austin Project,” by Robert Autabee, Denver, Colorado: Bureau of Reclamation History Program, 1994; the story of the farmer’s plight during the 1930s is told in Donald Worster, *Dust Bowl: The Southern Plains in the 1930s* (New York: Oxford University Press, 1982).

Reclamation began mapping the Mountain Park dam site for development of Otter Creek. Two decades later, in 1924, it again explored the possibility of developing Otter Creek for irrigation, but excessive costs and inadequate water supplies led the Bureau to deem it unfeasible. The Corps of Engineers surveyed the Red River basin and tributaries but suggested no course of action on Elk Creek or Otter Creek. In July 1940 the Corps concluded in an unpublished report on the north fork of Red River that improvements necessary to alleviate flooding were not economically justified; that further irrigation studies should be deferred until such time as results of the W. C. Austin Project had been determined. The Corps also reported that there was no need for stream pollution control, or for new water supply facilities in addition to those existing or planned, and that improvements for hydropower and navigation were not warranted.¹²

By 1948 Reclamation was again engaged in an intensive inventory of water resources in the Red River basin. Meanwhile, the Arkansas-White-Red Basin Interagency Committee, formed in 1950 at the behest of the President of the United States, began to prepare a comprehensive long-range plan for development in those basins. Among the water developments investigated by the interagency committee as part of the overall basin study was the Mountain Park Project. Proposals that came out of investigations by both Reclamation and the interagency committee included a reservoir on Otter Creek, a diversion dam on Elk Creek, a diversion canal between Elk and Otter creeks, and a distribution system to deliver water to irrigable lands near Tipton. Nothing came of this plan because it was found economically unfeasible, but local interests would

¹² U.S. Department of the Interior, Bureau of Reclamation, *Plan for Development for Mountain Park Project, Oklahoma*, August 1962, revised June 1963, 7-9. The Corps report on the Red River Basin in 1936 as House Document 378, 74th Congress, 2nd session.

eventually find success pushing for a municipal and industrial water project in southwest Oklahoma.¹³

By mid century the Bureau of Reclamation began to consider providing water to the West's fastest growing areas—cities. Postwar urban growth in West had a hand in this shift as municipalities and cities clamored for better infrastructure and a larger share of the region's finite water resources. Construction of municipal and industrial (M&I) projects constituted a major transformation in Reclamation policy from primarily irrigation use to multiple water use. As Commissioner Floyd Dominy stated before the House Irrigation and Reclamation Sub-committee in February 1959, Reclamation “would construct many of its present reservoirs on a different basis making maximum use of reservoir sites for multiple-purpose development.”¹⁴

The United States responded to the need for domestic water supplies in Oklahoma by authorizing the Norman and the McGee projects, two early M&I projects built by the Bureau of Reclamation. It was a different story in southwest Oklahoma where the proposed Mountain Park Project sought to provide domestic water to relatively small hamlets in three rural counties. That part of the state had never sustained a sizable population, which, in fact, had steadily decreased since 1930. For example, Kiowa County had a population of nearly 30,000 people in 1930, compared to about 12,500 in 1970; Tillman County saw similar declines. Jackson County fared better and remained

¹³ U.S. Department of the Interior, Bureau of Reclamation, “Annual Project History, Mountain Park Project” Volume I, 1971, 1, in Record Group 115, Records of the Bureau of Reclamation, Accession 8NN-115-85-019, Box 2, National Archives and Records Administration, Denver, Colorado. Hereafter “Project History” followed by appropriate volume and page numbers.

¹⁴ House Committee on Interior and Insular Affairs, *Cheney Division, Wichita Project, Kansas: Hearing before the Subcommittee on Irrigation and Reclamation*, 86th Cong., 2nd sess. (June 3, 1960), 23.

steady (aside from a period of out migration during the 1940s and 1950s) at about 30,000 people.¹⁵

Why, then, if growth languished in southwestern Oklahoma, did Congress authorize the multi-million dollar Mountain Park Project? The fact is that there existed a pressing need in southwest Oklahoma for more municipal and industrial water. Although county populations either declined or remained flat, water use in some cities increased, like in Altus where it nearly doubled between 1950 and 1958 from 1.38 to 2.55 million gallons per day. The water supply provided by the W.C. Austin Project was proving inadequate because city reservoirs were losing water from evaporation and seepage. For years the city attempted to locate suitable groundwater sources, drilling wells in the Duke area about fifteen to twenty miles west of Altus, the Salt Fork area, north of Altus near Blair, and Altus Air Force Base. In the Duke area explorations found groundwater in abundance, but the water quality there, and in the other drill areas, was extremely poor, laden with heavy minerals and sulfates.

The water demand in Snyder was more immediate. Before 1958 the city obtained water from a small lake on Otter Creek near the Mountain Park dam site. The city discontinued use of the lake because of a deteriorated pipeline and demand outstripped supply. For water the city pumped from a few wells either within or close by the city limits, but these were seen as a temporary measure because the water contained a dangerously high content of nitrates.

The need, then, for additional water supplies became a matter of urgent concern. In Snyder, not only had the deteriorated existing water facilities become unusable, but its

¹⁵ Cole, "Kiowa County," and Wilson, "Jackson County" and "Tillman County," in *Encyclopedia of Oklahoma History and Culture*.

vested water rights were under threat absent any new plans for development. In Altus, the city expected to more than triple its demand for water over the next forty-five years. Altus estimated that the existing water supply from Altus Reservoir was capable of maximum 3.42 million gallons per day, about the same as the estimated needs of the city in the year 1966, but significantly less than the projected 7.5 million gallons per day by 1985 and 11.5 million gallons per day by 2015. Beyond this, Altus Air Force Base required another two million gallons a day. All this meant that Altus required a project that could deliver upwards of 10 million gallons per day.¹⁶

The cities of Altus, Snyder, Frederick, and Tipton considered surface water sources a last option. These communities formally petitioned the secretary of the interior to withdraw unappropriated waters on the Otter and Elk creeks above the Mountain Park Dam and the Bretch Diversion Dam sites for potential development. At the same time, in late 1954 and early 1955, the cities expressed interest in the water resources of Otter and Elk creeks for municipal and industrial and agricultural uses. Reclamation responded to local interest by initiating a reconnaissance investigation of the Mountain Park Project. Released in December 1955, the reconnaissance report concluded that there was enough water of good quality from Elk and Otter creeks to make the project worthwhile, though it did not state specifically how the project would look when completed and who it would serve. Later, in 1959, at the continued urging of local interests, Reclamation initiated feasibility investigations in the project area. When the estimated cost of the project became public in mid-1961, one of the cities that petitioned for the project—Roosevelt—withdrawed. Later, Frederick also withdrew its support for the project due to the exorbitant

¹⁶ *Plan for Development for Mountain Park Project, Oklahoma*, 11-13, 67-8.

costs of constructing the long aqueduct system. Reclamation therefore modified the plan to provide water service only to Altus and Snyder. Reclamation proposed developing waters of Otter Creek to meet the demands for the first ten years, and construction of the Bretch Diversion Dam was put on hold until such time as the need to store more water arose.¹⁷

Project Authorization

The release of the feasibility report on August 24, 1962, directly paved the way for the project's authorization. Local and state interests enthusiastically endorsed the plan laid out in the 1962 report. The secretary of the interior transmitted the report to the Red River basin states, the secretary of the army, and appropriate federal government agencies for review. Elmer B. Staats of the Bureau of the Budget only recommended that a non-governmental entity be found to cover the cost of the \$5 million aqueduct. Commissioner Floyd Dominy concluded that since none of the state and federal agencies objected to the proposed water project, no revisions to the report would be made. Therefore, he transmitted the House Document No. 358 to the secretary of the interior, who then relayed it to the House of Representatives for authorization.

On March 9, 1967, the legislation moved into the Senate. Almer Stillwell "Mike" Monroney, U.S. Senator from Oklahoma, justified the projected construction costs (estimated at \$19,978,000) based on the assignable benefits valued at nearly \$1.5 million annually. The costs associated with the municipal water supply would be reimbursable with interest, while the costs allocated to flood control, recreation, and fish and wildlife would be non-reimbursable. Moreover, state entities would assume responsibility for

¹⁷ "Project History," Volume I, 1971, 2-4.

operation and maintenance of recreational facilities and the wildlife management area “without cost to the United States.”¹⁸

The next spring the Senate Committee on Interior and Insular Affairs held subcommittee hearings on S. 1234. Oklahoma’s congressional delegation, Commissioner Floyd Dominy, representatives of the Mountain Park Master Conservancy District, the mayor of Snyder, a member of a city council of Altus, and the president of the Altus Chamber of Commerce testified on behalf of the bill. S. 1234 sailed through the Senate committee, passed in the House under suspension of the rules, then entered the Senate for final authorization. The Senate authorized the project on September 21, 1968, for the “purposes of storing, regulating, and furnishing water for municipal, domestic, and industrial uses, conserving and developing fish and wildlife resources, providing outdoor recreation opportunities, and controlling floods.”¹⁹

As originally authorized, the project would operate something like this. A diversion dam and canal would divert water from Elk Creek to a storage reservoir on Otter Creek. Aqueducts would then be built from the toe of the dam to the cities of Snyder to the south and Altus to the west. The water to Snyder would be chlorinated at a control station, diverted to the Mountain Park forebay tank, and then flow by gravity approximately 5.6 miles to Snyder. The water to Altus would find its way to the control station, to the forebay tank, then to a pumping plant where it would be lifted to the Altus Regulating Tank from there continuing on by gravity to Altus. As planned, construction

¹⁸ Mountain Park Reclamation Project, in Southwestern Oklahoma, *Congressional Record* (March 9, 1967): 5940-1; U.S. Department of the Interior, Bureau of Reclamation, *Federal Reclamation and Related Laws Annotated*, Vol. IV, 1967-1982, Louis D. Mauro and Richard K. Pelz, editors (Denver: United States Government Printing Office, 1989), 2390.

¹⁹ Mountain Park, Oklahoma, *Congressional Record—Daily Digest* (May 22, 1968), D234; USDO, BR, *Federal Reclamation and Related Laws Annotated*, 2388.

entailed acquiring about 14,000 acres of private land and relocating portions of rail lines, roads, and electric transmission lines. The project would also contain recreational facilities and fish and wildlife development.²⁰

The city of Frederick also had storage rights in the reservoir—approximately 3.5 million gallons of water per day—but opted not to buy into the federal water project when it was originally authorized on the grounds that it could obtain supplemental water from ground water sources. That plan ran aground when the Oklahoma Supreme Court ruled against the city’s right to groundwater sources. Thus, with no alternative except for conservation and no progress, Frederick approved a plan to construct an aqueduct to the city. In 1972 the Board of Directors of the conservancy district passed a resolution urging Congress “to fund and construct that portion of the aqueduct from the Mountain Park Dam to the Snyder terminus.”²¹

Congressmen Tom Steed introduced H.R. 8192 in the House and senators Henry Bellmon and Dewey Bartlett introduced S. 3704 in the Senate to amend section 1 of Public Law 90-503 (82 Stat. 853) by deleting “Altus and Snyder, Oklahoma,” and substituting “Altus, Snyder, and Frederick, Oklahoma.” On October 27, 1974, Congress passed authorizing legislation to construct the Frederick Aqueduct at an estimated cost of just over six million dollars. The pipeline would extend about thirteen miles southeast from the Snyder regulating tank to a pumping plant near the confluence of Coffin Creek and Deep Red Creek. The City of Frederick had constructed a pipeline from the Soil

²⁰ “Project History,” Volume II, 1972, 55-56.

²¹ “Project History,” Volume II, 1972, 12.

Conservation Service's Deep Red Creek Reservoir in anticipation of receiving water from the Mountain Park Project.²²

In recent years, the authorizing legislation underwent modification. In 1972 engineers revised the construction cost estimate to \$27,145,000. In December 1974 currency, the costs rose to \$41,068,000. In a special election held on February 25, 1975, voters approved the increase in the repayment obligation to cover the \$33,536,000 reimbursable costs.²³ Years later, in the 1990s, Congress passed legislation that did two things simultaneously: helped the conservancy district remain solvent and introduced environmental activities to the stated benefits of the project. The background and purpose of this legislation will be explained later on in this history, under the subsection "Post-Construction History."

Environmental Impact Statement

Congress authorized the Mountain Park Project in the wake of also passing a flurry of environmental laws, including the National Environmental Policy Act of 1969 (NEPA). In compliance with NEPA, Reclamation drafted an environmental impact statement (EIS) that discussed the impacts of the proposed project on the environment. The statement not only addressed impacts to the environment but possible alternatives in lieu of the project, such as groundwater supplies, the use of water from other areas, new dam sites, and no project. The report offered little in the way of environmental or ecological reasons to abandon planned construction at Mountain Park.

²² Senate Committee on Interior and Insular Affairs, *Mountain Park Reclamation Project, Oklahoma—Nueces River Project, Texas: Hearing before the Subcommittee on Water and Power Resources on S. 3704 and S. 3513, 93rd Cong., 2nd sess.* (July 18, 1974), 3-5, 17-9; U.S. Department of the Interior, Bureau of Reclamation, *Supplement to the Final Environmental Statement on Mountain Park Project, Oklahoma, Frederick Aqueduct*, 1975, A-1.

²³ "Project History," Volume II, 1972, 9; "Project History," Volume V, 1975, 7.

This conclusion was not unanimously shared by groups that commented on the bureau's report. Henry M. Zeller of the Sierra Club called the EIS "inadequate" and "superficial." Reflecting a growing sentiment that dams and reservoirs create adverse affects on the affected terrain, he wrote:

The riparian communities as they now exist will be destroyed in the project area. Elk Creek for all practical purposes will become dry below the diversion dam for most of the life of the project. Otter Creek will suffer substantial destruction of the natural ecosystem as it now exists. Inundation will destroy that part of the creek above the MPD for a considerable distance. Downstream, the natural balance of both the stream and the riparian community will be destroyed first by disruption during dam construction, the destruction being confirmed by subsequent changes due to increased salt concentrations from poor quality water releases. The constant flow from the reservoir at all seasons of the year will eliminate some of the organisms adapted to the intermittent nature and still pools of the natural stream. As for terrestrial biota, there will be a loss of some 6,700 acres of wildlife habitat. It appears that what the project may offer waterfowl may be overbalanced by the destruction of habitat for resident wildlife.

Zeller then went on to advocate conservation and the elimination of waste before committing to a large-scale water project, since present water supplies were sufficient to serve the existing population. Because the project was based, in part, on attracting population and industrial growth, "the funds to be spent on the project are in a sense, then, to be invested in a gamble, since there is no indication of present need or any definite future need." He even predicted—rightly, it turns out—that the Great Plains would likely see population declines in the future. Despite these comments, there is no evidence that Reclamation revised or redid the report in response.²⁴

²⁴ Henry M. Zeller, Chairman of the Natural Resources Committee, Sierra Club, to Leon W. Hill, Regional Director of Region 5, Reclamation, August 5, 1972, in U.S. Department of the Interior, Bureau of Reclamation, *Final Environmental Statement: Mountain Park Project, Oklahoma*, [1972], in "Project History," Volume II, 1972, 74-7, 92.

Construction History

In contrast to the length of time between the first studies and authorization of the Mountain Park Project, the construction phase of the project was relatively short. This is not to say that construction was simple and inexpensive. Reclamation issued literally dozens of contracts, large and small, to construction companies based primarily in Oklahoma and Texas. For a brief spell in late 1972 through April 1973, the president put a freeze on new hires and implemented conservation measures to reduce energy and expense during hard economic times. Yet, despite that brief time and a continued lag in the economy, construction activities moved forward as planned until their final completion by the end of the decade.²⁵

To begin construction work on the project, Reclamation moved temporarily into the Lugert-Altus Irrigation District Building and established duty stations in Altus and the Mountain Park field office. In May 1971 a design engineer arrived at the project site and with his team began to gather data on the project buildings, relocation of a portion of U.S. Highway 183, access roads, and utility lines. The planning and design team also collected information for specifications for construction of the Bretch Diversion Dam and canal, the Mountain Park Dam and dikes, and other large construction contracts.²⁶ Later that year Reclamation also began to award construction contracts: the dismantling of old Snyder Dam, construction of a warehouse-shop and garage building, drilling on the dam foundation, and relocation of a segment of the railway. These were moderate sized contracts. The larger contracts—relocation of U.S. Highway 183, Mountain Park Dam

²⁵ “Project History,” Volume III, 1973, 5, 7, 10

²⁶ “Project History,” Volume I, 1971, 14, 21.

and dikes, Altus aqueduct and pumping plant, Frederick aqueduct and pumping plant, Bretch Diversion Dam and canal—spanned several years.

On August 4, 1972, the low bidder, Cornell Construction Company, Inc., of Clinton, Oklahoma, received the first large contract—the relocation of U.S. Highway 183.²⁷ Reclamation opened the bids for the largest contract—the construction of Mountain Park Dam—a few months later on December 12. That day the Bureau received eleven separate bids (Universal Constructors, Inc., of Albuquerque submitted the low bid at \$2,671,876), but awarded the contract to none of them because a representative of the Operating Engineers Labor Union based in Tulsa, Oklahoma, filed a complaint that the wage rates in the contract specifications were too low. In a hearing on December 12, the court decided to enjoin the bid opening, and at a hearing on the following week in federal court “the bids were voided and a permanent injunction was issued prohibiting award of the dam contract until [the incorporation of] new wage rates” into the contract. The court also cited the project construction engineer for contempt of court “for opening bids after having been told not to proceed.” Reclamation suspended the contract for the dam and the dikes until the dispute could be resolved.²⁸

Not until June 22, 1973, did Reclamation award the contract for the Mountain Park dikes and, shortly after that on July 26, Mountain Park Dam. Westhoff Brothers Construction Company of Pratt, Kansas, and O’Neal Construction Company, Inc., bid low and won the contracts, respectively. In late September the Mountain Park Master Conservancy District hosted the groundbreaking ceremony at the dam site.²⁹

²⁷ “Project History,” Volume II, 1972, 21; Volume III, 1973, 20-21.

²⁸ “Project History,” Volume II, 1972, 5, 23.

²⁹ “Project History,” Volume III, 1973, 26.

In 1973 work commenced on the west dike embankment and the next year moved to the east dike. The Bayer Construction Company, a subcontractor, placed the bedding and riprap on the west and east dikes.³⁰ At the dam site, the O'Neal Construction Company, Inc. initiated work by excavating loose rock from the hillsides. The work of drilling and blasting at the project site was done under subcontract to WADCO International, but the subcontractor turned out to be slow and incompetent and was dismissed. The prime contractor resumed work on the drilling and blasting on the foundation and left and right abutments. The excavation revealed severe structural deficiencies in the rock foundation. The rock was not continuous but broken into what the official project records describe as “detached blocks of granite with soil and decomposed granite in the joints.” Engineers from the Denver Office visited the site and determined that the contractor needed to remove the joint planes of soft rock and soil and patch with concrete. The contractor began “coring” in early 1974.³¹

Even with coring operations, the foundation's instability created fits. Heavy rains in late April led to the collapse of the temporary diversion channel or pipe constructed to carry the creek around the dam site during construction. The collapse of the diversion channel flooded the excavation area and wiped out part of the cofferdam. The problem was, apparently, one of the wooden towers supporting the pipe. Placed on unstable ground, the tower gave way when the soil surrounding it became wet. The pipe had to be replaced, and Reclamation made plans to place the pipe along the left abutment.³²

³⁰ “Project History,” Volume III, 1973, 26; “Project History,” Vol. IV, 1974, 23.

³¹ “Project History,” Volume III, 1973, 10; “Project History,” Volume IV, 1974, 17-18.

³² “Project History,” Volume IV, 1974, 18.

Prior to awarding the contract for the dam, Reclamation had settled on a thin-arch concrete dam rather than an earth dam as originally planned. The contractor erected a batch plant and placed the first concrete on the dam in 1974 and finished the concrete placements and grouting operations in 1975. The reservoir was then ready for filling.³³

The other project features were still a year or two away from completion. On April 25, 1974, the Perini Corporation of San Francisco, California, submitted the low bid of \$7,653,951 and received the contract for the Altus and Snyder aqueducts and pumping plant. In the first year the contractor set up offices, hired subcontractors for the concrete structures and cylinder pipe, and built an access road to the joint use pipeline. The aqueducts entailed trench excavation, pipe placement, and pumping operations to remove seepage from the trenches. The contractor placed concrete pipe at the North Fork of Red River crossing and also tunnel lining at the St. Louis-San Francisco Railroad crossing on the Snyder aqueduct. By the end of the year it had completed the excavation and pipeline placement and made considerable progress on the pumping plant.³⁴

In 1976 the pipelines were tested for leaks and work continued on the pipeline structures and the pumping plant. Save for electrical modifications and testing, the plant stood complete by mid year. Yet although the contractor finished the contract within the allotted time—720 days—the full payout was delayed several years because of a claim filed by the contractor.³⁵

The next major contract, the Bretch Diversion Dam and canal, was awarded to the Seven K Corporation of Texarkana, Texas, on September 12, 1975, for the low bid of

³³ “Project History,” Volume IV, 1974, 19-20; “Project History,” Volume V, 1975, 16-17.

³⁴ “Project History,” Volume IV, 1974, 29-30; “Project History,” Volume V, 1975, 19-20.

³⁵ “Project History,” Volume VI, 1976, 14-15; “Project History,” Volume VIII, 1978, 14; “Project History,” Vol. IX, 1979, 11-12.

\$7,441,774. Reclamation gave notice to proceed on September 15, with all work to be completed in two years' time. The contractor's first task was to build an access road and excavate the diversion channel from Elk Creek. The excavation at the siphon areas was dewatered using electric pumps. By September 1976 the contractor began placing concrete at select sites along the diversion dam and canal, and at the end of the month to trim and line the canal. This work was suspended on November 1 for winter then resumed the following spring. The only work left to perform after 1977 was spreading topsoil along the canal slopes, seeding the soil, and applying fertilizer. Although the work was accepted as completed on June 17, 1978, the Seven K Corporation, like the contractor working on Altus and Snyder aqueducts and pumping plant, filed claims for additional compensation.³⁶

The Bretch Diversion Dam and canal was the last major contract awarded for the construction of originally authorized project features. After Congress authorized an extension of the project to include the city of Frederick, Reclamation prepared specifications for a new contract for an aqueduct and pumping plant. On August 5, 1976, it awarded the contract to the low bidder, Rollings Construction, Inc., of Tulsa, Oklahoma, for \$2,552,163.55. The work entailed construction of an access road, regulating tank, pumping plant, and a twelve-mile-long aqueduct to the Frederick terminal.³⁷ The contract remained in construction status well after estimated time of

³⁶ "Project History," Volume V, 1975, 22; "Project History," Volume VI, 1976, 15-16; "Project History," Volume VIII, 1978, 13; "Project History," Volume IX, 1979, 12.

³⁷ "Project History," Volume VI, 1976, 19-20; "Project History," Volume VIII, 1978, 13-14.

completion—January 19, 1978—partly because of electrical and mechanical system problems and partly because the city of Frederick had no use for the water.³⁸

Post-Construction History

Project activities in the late 1970s reflected the transition of the project from construction to operation and maintenance. In 1978 Reclamation awarded a contract to relocate a damaged section of the Altus aqueduct. It converted the construction shop and warehouse into an office and maintenance building, rehabilitated the Bretch Canal where the lining had failed, and made miscellaneous repairs. In the immediate years following completion of the project, Reclamation engineers and officials inspected the new project features and recommended additional modifications and repairs.³⁹

On August 9, 1975, in Public Law 94–77, Congress honored Thomas Steed, a journalist, military man, and Democratic congressional representative from Oklahoma, by renaming the reservoir the Tom Steed Reservoir.⁴⁰ Reclamation worked closely with the National Park Service and Oklahoma Tourism and Recreation Department on the design and plan of the reservoir and awarded contracts for clearing the reservoir area and the construction of the facilities. The Oklahoma State Division of Parks prepared a report, “Mountain Park Project—A Study of its Outdoor Recreation Potential,” that became the basis for recommendations by the State Park Director to the Tourism and Recreation Commission. The commission explored the possibility of creating a state park administered by the State Division of Parks. Reclamation looked to the Oklahoma

³⁸ “Project History,” Volume XI, 1981-1983, 26-7.

³⁹ “Project History,” Volume XI, 1981-1983, 24-7.

⁴⁰ Biographical Directory of the United States Congress, 1774-Present, “Thomas Jefferson Steed (1904-1983),” <http://bioguide.congress.gov/scripts/biodisplay.pl?index=S000829>; AltLaw, <http://www.altlaw.org/v1/codes/us/619686/notes>.

Department of Wildlife Conservation to assume administration of fish and wildlife in the project area.⁴¹ The Mountain Park Master Conservancy District, organized on July 21, 1967, operated and managed the dam and diversions, while the Oklahoma Department of Wildlife Conservation supervised the fish and wildlife area with funds from agricultural leases. In 1978 the state department of wildlife signed an agreement to oversee certain lands being transferred from the Oklahoma Tourism and Recreation Department.⁴²

In May 1982 heavy flooding on Elk and Little Elk Creeks inundated and damaged some 2,000 acres of agricultural land. The damaged area extended from the diversion dam to over sixteen river miles upstream. The damage resulted in claims and congressional investigation. Although according to Eugene Hinds, regional director of Reclamation, the damage was the result of “three heavy, closely spaced rainstorms,” certain people blamed it on the fact that “no gates were open for the water to flow through at the time water was standing or backing up.” Hinds insisted that no gates had been closed during the flooding and that the management of the diversion dam was in no way responsible for the damage.⁴³

The biggest problem facing the project was not Mother Nature or mismanagement but outmigration in rural Oklahoma and decline in the demand for project water. For all the work and capital that went into the project, the demand and means to pay for water was hard to come by in Jackson, Greer, and Kiowa counties. When the Mountain Park Conservancy District organized in the early 1970s and entered into a repayment contract with Reclamation, it assumed that population and water usage would steadily rise and

⁴¹ “Project History,” Volume II, 1972, 43; “Project History,” Volume III, 1973, 11-13, 27-8.

⁴² “Project History,” Volume V, 1975, 10; “Project History,” Volume VIII, 1978, 8.

⁴³ D. W. Webber, Regional Director, to Sen. David L. Boren, May 1982, in “Project History,” Volume XI, 1981-1983, 59-60, 62-5.

thus cover the costs of construction. The project itself had been built to meet the water needs of a population in excess of 80,000 by 2015. Instead of a predicted doubling in population and tripling of water consumption, Altus, Snyder, and Frederick declined in population in the years since construction began on the project. In 1995 the district languished at only about forty percent of expected population and, most severely, water use was only twenty-eight percent of the predicted projection.⁴⁴

The situation became more serious when it is considered that project costs exceeded original estimates by over 200 percent. The original estimates in 1964 earmarked the project at a price tag of \$13.4 million, only to inflate to \$35.5 million in 1993. The three cities had the obligation to repay every cent of the reimbursable M&I water supply construction costs over a fifty-year period. The faulty estimates on the part of Reclamation were partly to blame, but the most serious mistake was the decision to construct the Bretch Diversion Dam and canal. Originally plans for the diversion dam called for construction when “water usage of the member cities increased to a level which would justify these facilities.” But in 1971 Reclamation proposed constructing the diversion dam based on its findings that water flows from Otter Creek were insufficient to meet the needs of Altus and Snyder. Thus the decision was made to proceed with the pricey dam and canal although the need for them did not yet exist. Subsequently, one of each three repayment dollars paid by Altus and Snyder covered the cost of construction, although their water requirements “could have been met without these expensive diversion features.”

⁴⁴ House Committee on Energy and Natural Resources, *Mountain Park Project; Elwha River Amendments; and Recreation Management Act Amendments: Hearing before the Subcommittee on Water and Power on S. 2253, S. 2262, and S. 2266*, 103rd Cong., 2nd sess. (July 8, 1994), 25.

Altus and Snyder's financial problems were not as serious as Frederick's, which considered defaulting on its loan. Although Altus and Snyder had been forced to raise water rates well above market value, Frederick raised them higher than any other city in the state. That city never had a need for the project water because its population declined about 1,000 people per decade after 1970. Although the city had deferred payment under the 1958 Water Supply Act, when annual repayments came due in 1990 Frederick did not have enough funds to pay them. The district worried that if Frederick defaulted on its loan, it would not be in a position to make payments.⁴⁵

In light of the seriousness of the situation, Senators David L. Boren and Don Nickles of Oklahoma introduced legislation in Congress that would adjust the repayment contract and keep the district solvent and prevent it from defaulting on its loan. In hearings before the Senate Committee on Energy and Natural Resources, the senators and proponents presented a stark choice: either the United States modifies the repayment contract or the district goes under and/or defaults on its loan. The legislation transferred a portion of the reimbursable M&I water costs to non-reimbursable environmental purposes, such as increased flow releases or wetlands development. The main purpose of the legislation was to reduce the district's repayment obligation to a fair market value, which according to the estimates would reduce the cities' repayment obligations to just under twenty million dollars. For instance, if Frederick transferred 2,000 acre feet of water for environmental purposes, its repayment obligation would drop from \$11.8 to

⁴⁵ House Committee on Energy and Natural Resources, *Mountain Park Project*, 5, 25-6, 9, 30-3.

about \$7 million. Altus, Frederick, and Snyder would have the option of paying these new costs upfront.⁴⁶

The compromise agreement seemed to satisfy all parties involved. Representatives from Reclamation and the district spoke glowingly of the proposed plan. Reclamation Commissioner Daniel Beard blamed increased costs of the project and the district's overly optimistic estimates as to their ability to repay but also praised it for preserving the financial integrity of the district and providing environmental benefits to the area. Thomas Archer, district manager, emphasized the urgency of the situation and the financial strains on the district in his endorsement of the legislation. At the end of the hearing, Senator Bill Bradley, chair of the subcommittee, called the bill "an ingenious solution" because it will "enhance the quality of life for those that remain as well as provide water for people and keep the whole district from going bankrupt."⁴⁷ Congress passed S. 2253 in July 1994.

Since 2000, the Mountain Park Project continues to serve a population of nearly 23,000 in Altus and Snyder and other water users in the area. Mountain Park Project water users use less than the average rate of 194 gallons per capita per day in Oklahoma in 1995, according to the U.S. Geological Survey. Frederick has yet to receive project water for M&I purposes, though between 1995 and 1998 the aqueduct released about 9.2 million gallons per year for canal testing and maintenance purposes. Since 1999 sixty percent of Frederick's allocation has been used by the Oklahoma Department of Wildlife

⁴⁶ House Committee on Energy and Natural Resources, *Mountain Park Project*, 3, 7, 26, 37.

⁴⁷ *Ibid.*, 6-7, 38.

Conservation's Hackberry Flat Wildlife Management Area—7,120 acres that are home to a variety of wetland species.⁴⁸

Project Benefits and Uses of Project Water

The project delivers water to Altus and Snyder, Oklahoma, and to the Hackberry Flat Wildlife Management Area. Aside from the municipal water, the main benefits of the project are recreational. Tom Steed Lake provides 6,400 acres of open water for boaters and anglers looking for crappie, walleye, hybrid striped bass, and saugeye. Public recreation facilities on the east side of the lake include picnic areas, a boat launching ramp, and a swimming beach. On the south side of Otter Creek are picnic facilities and a nature trail that meanders through large cottonwood, ash, elm, walnut, and pecan trees. The Oklahoma Department of Wildlife Conservation manages 5,150 acres of the west and north side of the reservoir area for the benefit of wildlife and fish.

The other major benefit of the project is flood control. The Tom Steed Reservoir has 20,305 acre feet of capacity assigned to this purpose. In 1962 the plan on the Mountain Park Project estimated the total economic benefits of flood control over a fifty-year period to be in excess of six million dollars. Since 1981 the annual flood control benefits have been tracked, totaling \$1,550,000 up to 1999.⁴⁹

Conclusion

The final analysis of the Mountain Park Project is mixed. A long time in coming, the project promised a reliable water source and the means for growth for small cities in

⁴⁸ Mountain Park Master Conservancy District Board, *Water Conservation Plan of the Mountain Park Master Conservancy District Board*, Plan adopted January 24, 2002, 3-4, 8-9.

⁴⁹ *Plan for Development for Mountain Park Project, Oklahoma*, 69; U.S. Department of the Interior, Bureau of Reclamation, "Mountain Park Project, Oklahoma," <http://www.usbr.gov/dataweb/html/mountainpark.html>.

southwest Oklahoma. While the project provided municipal water to Altus and Snyder, the cost of the project exceeded the original estimates and the demand for project water never materialized as expected. To be sure, the cities could not have accurately predicted these developments, and at the time of authorization the need to develop and utilize local surface water resources was acute. In the end, the United States and participating cities reached an equitable agreement by providing water for environmental and recreational uses thus reducing repayment obligations to the “fair market value” of the water.

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