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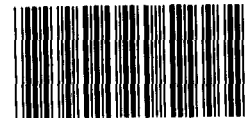
United States General Accounting Office

Report to the Chairman, Environment,
Energy and Natural Resources
Subcommittee, Committee on
Government Operations, House of
Representatives

September 1990

RECREATION FACILITIES

Weaknesses in the Corps' Procedures Highlighted by Arcadia Lake Dispute



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**Resources, Community, and
Economic Development Division**

B-239654.2

September 28, 1990

The Honorable Mike Synar
Chairman, Environment, Energy,
and Natural Resources Subcommittee
Committee on Government Operations
House of Representatives

Dear Mr. Chairman:

This report responds to your request regarding the U.S. Army Corps of Engineers' design and construction of recreation facilities at the Arcadia Lake Project in Edmond, Oklahoma. As agreed with your office, this report (1) describes the events that led to an ongoing lawsuit between the Corps and the city of Edmond—the Corps' cost-share partner and (2) evaluates whether the Corps' new procedures for all cost-share projects nationwide, developed in response to the Water Resources Development Act of 1986, will address the underlying issues in the dispute and thereby prevent similar disputes at these projects. In addition, the report provides the status of seven design and construction concerns about project roads, parking, handicapped access, and other issues that Edmond identified during your tour of the project in August 1988.

We made no attempt to determine how the dispute should be resolved. That determination properly belongs to the federal court, which will examine the detailed arguments and documentary evidence submitted by both parties. Instead, we limited our review to obtaining sufficient information to understand the issues involved in the dispute.

Results in Brief

In September 1987, when the Edmond City Council determined that project costs had increased 2-1/2 times since 1979, Edmond refused to pay the Corps its 50-percent share of costs for three completed parks at Arcadia Lake. Following unsuccessful negotiations between the Corps and Edmond, the Department of Justice took the unprecedented action of suing Edmond in February 1989 to force the city to pay its share of costs. The federal court is expected to act on the suit in November 1990.

The underlying issues in the dispute between Edmond and the Corps concern whether (1) Edmond's governing body approved changes in project design and increases in project cost, (2) the Corps adequately involved Edmond in project design and development, and (3) the Corps

overstated its estimate of visitors to the project, which was a factor in Edmond's decision to participate in the project.

The Corps' new procedures for all cost-share projects nationwide do not adequately address two of the three issues underlying the Arcadia Lake dispute. Disputes about cost-share partner approval of changes in project design and cost could occur at other cost-share projects. This is so because the procedures do not ensure that persons approving changes in project design and cost for the cost-share partners have received authority to legally obligate the partners. Likewise, disputes about cost-share partner involvement in project design and development could occur at other projects. Such disputes could occur because the procedures do not ensure that cost-share partners have information needed to fully participate in project design and development, such as the construction and facilities options available within the overall design of the project or information about the changes the Corps can approve.

The new procedures require the cost-share partner and the Corps to jointly prepare visitation estimates. The cost-share partner may use such estimates to calculate potential revenues that could be used to pay the project's operation and maintenance costs after construction is completed. Thus, disputes about the adequacy of these estimates should be prevented. In addition, the new procedures require cost-share partners to pay their share when costs are incurred. This should reveal disputes in the future before significant costs are incurred by the Corps and cost-share partners.

The seven design and construction concerns that you asked us to address have not been resolved. These involve road quality, road width, roadside slopes, campsite entrance safety, parking availability, a pull-through parking lot, and handicapped access. However, the Tulsa District generally followed the Corps' criteria in designing and constructing these facilities.

Background

The Corps has been involved in the design and construction of recreation facilities since 1944. The Flood Control Act of 1944 authorized the Corps to build, operate, and maintain recreation facilities at the Corps' reservoirs. The Federal Water Project Recreation Act of 1965 required nonfederal public entity cost-share partners to pay 50 percent of recreation facilities costs and to operate and maintain the completed facilities. This act allowed the cost-share partner to pay its share of the cost, with interest, over a 50-year period after the recreation facilities were

first used. However, under the Water Resources Development Act of 1986, a cost-share partner generally pays its share of recreation facilities costs during construction.

Arcadia Lake Project

The Flood Control Act of 1970 and the Water Resources Development Act of 1976 authorized, among other projects, the Arcadia Lake Project to provide flood control, water supply, and recreation. It is located on the Deep Fork River northeast of Oklahoma City generally within the city of Edmond. The earth embankment dam for the project reduces downstream flooding by controlling runoff from a 105 square-mile watershed, supplies about 11 million gallons of water a day to the city of Edmond, and provides an 1,800-acre lake for water-related recreation. Recreation facilities planned or completed for the project include seven parks and recreation areas located on 1,500 acres of land along 26 miles of shoreline, providing opportunities for such activities as fishing, boating, skiing, swimming, camping, picnicking, hiking, bicycling, and softball.

The Corps' Tulsa District is responsible for the Arcadia Lake Project, and the Edmond Public Works Authority (EPWA) is the cost-share partner. EPWA is a public authority that finances and manages revenue-generating activities of the city of Edmond, including Arcadia Lake. Edmond's officials—the Edmond City Council, the mayor, city manager, and city attorney—serve respectively as the EPWA Board of Trustees, Board Chairman, General Manager, and General Counsel.

The Corps and EPWA entered into a cost-share agreement in 1979 for the recreation facilities at Arcadia Lake. The Corps agreed to design and build the facilities under a plan developed jointly with the city of Edmond. Edmond agreed to pay 50 percent of the cost of the facilities. In the agreement the Corps estimated recreation facilities costs at \$8.4 million, though it noted that this estimate was subject to reasonable increases.

Events Leading to the Lawsuit

In September 1987 Edmond's City Council members reviewed Corps estimates showing that costs for completing the seven parks had increased from the \$8.4 million in its 1979 cost-share agreement with the Corps to \$21.1 million. City Council members acting as the EPWA Board of Trustees asserted that cost increases of this magnitude without their authorization were not reasonable and represented a breach of contract, excusing Edmond from further performance under the 1979 agreement.

Officials from the Tulsa District argued that these increases resulted from inflation and changes in project design approved by Edmond's mayor and project director. Although subsequent efforts to resolve this dispute were unsuccessful, officials from the Tulsa District and Edmond agreed that Edmond could operate the three parks which were completed in September 1987 and that the District would suspend work on the remaining facilities until the dispute was resolved.

In February 1988 the Tulsa District tendered the three completed parks to EPWA, requested EPWA to make the first of 50 annual installments to pay \$8.42 million—its 50-percent share of the \$14.16 million in construction cost plus \$2.68 million in interest—for the three completed parks, and asked EPWA to execute a lease to operate and maintain the parks in accordance with the 1979 cost-share agreement. EPWA refused to accept the parks, pay the annual installment, or execute the lease because the parks were too costly and the recreation facilities were not complete. After further efforts to resolve this dispute were unsuccessful, the Tulsa District declared EPWA in default in July 1988 and referred the matter to the Department of Justice in August 1988.

The Department of Justice filed a civil suit in federal court in February 1989 seeking enforcement of the cost-share agreement. The dispute is now with the Western District Court of Oklahoma, which is considering the suit, a counterclaim by Edmond, and a motion for summary judgment by the federal government. (See app. I.)

The Corps' New Procedures Do Not Address Two of the Three Issues Underlying the Dispute

Under the Water Resources Development Act of 1986, the Corps is to study and evaluate measures to significantly reduce the time (over 20 years) the Corps historically needed to design and construct water resource projects. In addition, the act requires cost-share partners to share in planning costs previously paid by the Corps and to pay their share when costs are incurred. In response to the act, the Corps revised its cost-share procedures in an effort to improve its nationwide management of all cost-share projects and its relationship with all cost-share partners. However, these new procedures do not adequately address two of the three issues underlying the dispute between the Corps and the city of Edmond.

Approval of Design and Cost Changes

The newly developed procedures applicable to all cost-share projects do not require the Corps to obtain written assurance that persons approving changes in project design and cost for the cost-share partners

have authority to legally obligate the partners. Thus, disputes about cost-share partner approval of changes in project design and cost can occur at the Corps' other cost-share projects.

EPWA's refusal to pay its share of the costs for three completed parks at Arcadia Lake was based in part on its claim that its Board of Trustees did not approve changes in project design and costs and that individual Edmond officials or employees who approved these changes did not have the authority to do so. Officials from the Tulsa District did not obtain written assurance that Edmond's mayor and project director, who approved the changes, were authorized to do so. As a result, the court will have to determine if the mayor and project director exercised that authority in a manner that legally obligated Edmond to pay for these changes.

Cost-Share Partner Involvement in Project Design and Development

While the Corps' new procedures require increased coordination between the Corps and cost-share partners, the procedures do not require the Corps to provide cost-share partners with information they need to fully participate in project design and development. This information includes the Corps' and the cost-share partner's rights and responsibilities in designing and developing projects, the Corps' design criteria, the partner's role in selecting construction and facilities options using these criteria, procedures for selecting options using other criteria, and the Corps' approval processes. As a result, disputes about the extent of the cost-share partner's involvement in project design and development can occur at other projects.

EPWA claimed that the Corps' Tulsa District was totally responsible for the design and development of the recreation facilities and therefore should be responsible for the increased project costs. Officials from the Tulsa District disagreed, stating that Edmond's officials were involved in the process as evidenced by Edmond's review and approval of the Corps' design documents, requests for design changes that the Corps approved and incorporated in the design documents, and requests for information about options within the overall project design and the approval processes that officials from the Tulsa District provided.

Visitation Estimates

The newly developed procedures applicable to all cost-share projects should prevent disputes at other projects about the accuracy of visitation estimates since the cost-share partner will develop these estimates jointly with the Corps. A valid estimate of the number of visitors is

important because the cost-share partner may plan, as Edmond did, to use the revenues generated by daily visitors to pay the operation and maintenance costs of the project after construction is completed. If the estimates are too low, the cost-share partner may seek other sources of income or reduce the project's size. If the estimates are too high, the cost-share partner may anticipate revenues that will never be received.

The Corps' new procedures also require cost-share partners to pay for project costs as these costs are incurred. This should surface any areas of disagreement before significant costs are incurred by the Corps and cost-share partners. (See app. II.)

Design and Construction Concerns Are Unresolved

Edmond's design and construction concerns about the recreation facilities in the three completed parks have not been resolved. The seven concerns involve road quality, road width, roadside slopes, campsite entrance safety, parking availability on busy days, the use of a pull-through parking lot, and handicapped access. In general, the Tulsa District followed the Corps' criteria in designing and constructing the facilities about which Edmond's officials are concerned. However, some road surface is cracking, more parking is needed on busy days, and not all facilities are accessible to the handicapped.

Officials from Edmond and the Tulsa District do not plan to resolve these concerns until the ongoing litigation is settled, even though some concerns could be resolved now at relatively low cost. However, according to Edmond's city attorney, the low-cost options that could resolve some concerns now are not necessarily the options that Edmond will accept or pursue in its lawsuit with the Corps. (See app. III.)

Edmond's officials were also concerned about the cost of prefabricated restrooms at the project. As you requested, we summarized the February 1988 report, issued by the Department of Defense's Inspector General, that addresses the procurement of prefabricated restrooms for Corps projects, including Arcadia Lake. (See app. IV.)

Conclusions

The issues in dispute in the ongoing lawsuit between Edmond and the Corps concern whether (1) Edmond's governing body approved changes in project design and increases in project cost, (2) the Corps adequately involved Edmond in project design and development, and (3) the Corps overstated its estimate of visitors to the project.

The Corps' new cost-share procedures adequately address and should prevent disputes at the Corps' other projects about the accuracy of its estimates of anticipated visitors. In addition, because cost-share partners are now required to pay their share when costs are incurred, disputes about cost increases should come to the surface at an earlier time.

While the Corps has adopted new initiatives to work with cost-share partners under a more cooperative framework, disputes about cost-share partner approval of changes in project design and costs and about the extent of cost-share partner involvement in project design and development could occur in the Corps' other cost-share projects.

The Corps can avoid future disputes about cost-share partner approval of changes in project design and costs by requiring cost-share partners to identify those persons who have been granted appropriate decision-making authority to legally obligate the partner.

In addition, the Corps can avoid future disputes about the extent of cost-share partners' involvement in project design and development by ensuring that partners receive information they need to fully participate in the design and development of projects they help finance.

Recommendations to the Secretary of the Army

To reduce the likelihood of future disputes about a cost-share partner's approval of changes in project design and cost, we recommend that the Secretary of the Army require the Chief, Corps of Engineers, to revise the Corps' procedures so that the Corps must obtain written notification from the cost-share partner's governing body that identifies those persons having authority to legally obligate the partner.

To ensure cost-share partners have the information they need to participate in project design and development, we also recommend that the Secretary of the Army require the Chief, Corps of Engineers, to develop guidance for prospective cost-share partners that provides a clear understanding of the rights, roles, and responsibilities of both the partners and the Corps in designing and developing cost-share projects. The guidance should include, but not be limited to, information about the design options available and the partners' involvement in selecting from these options, as well as the Corps' approval process and the partners' role in the process.

Scope and Methodology

To develop the information contained in this report, we reviewed records maintained by Edmond and the Corps' Tulsa District, documents filed in the ongoing lawsuit between the United States Government and Edmond, and testimony of officials from both the Corps and Edmond before your Subcommittee in August 1988. We analyzed the Corps' new procedures and toured the three completed parks at Arcadia Lake. We also interviewed officials from Edmond; the Corps' headquarters; the Southwest Division; and the Tulsa District. We conducted our review from November 1988 through March 1990. (See app. V.)

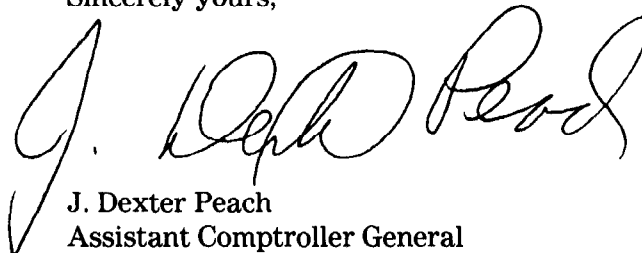
Agency Comments

As requested, we did not obtain official agency comments on a draft of this report. However, we discussed with officials from the city of Edmond, and the Corps' Tulsa District and its headquarters the factual information in this report that pertained specifically to each of them. In general these officials told us that the information was accurate; in a few instances they suggested that we revise data which in their view were not technically accurate. We made changes where appropriate.

As agreed with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the date of this letter. At that time, we will send copies to the Secretary of the Army, the city of Edmond, and other interested parties and make copies available to others upon request.

This report was prepared under the direction of James Duffus III, Director, Natural Resources Management Issues, who may be reached at (202) 275-7756 if you or your staff have any questions. Other major contributors are listed in appendix VI.

Sincerely yours,



J. Dexter Peach
Assistant Comptroller General

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Abbreviations

DOD	Department of Defense
EPWA	Edmond Public Works Authority
GAO	General Accounting Office
GSA	General Services Administration

Background

The United States Government and the city of Edmond, Oklahoma, are currently involved in a civil suit about the payment of recreation facilities costs at Arcadia Lake. In March 1979 the city agreed to pay half the costs for recreation facilities at Arcadia Lake. The U.S. Army Corps of Engineers estimated these facilities would cost \$8.4 million. In September 1987, after the Corps estimated these costs at \$21.1 million, Edmond officials said they had not approved these increased costs and therefore were no longer bound by the 1979 agreement. In July 1988 the Corps declared the city in default on the 1979 agreement. The dispute is now in federal court, which is expected to act in November 1990 on the Department of Justice's suit, a counterclaim by Edmond, and a motion for summary judgment by the federal government.

The Corps' Recreation Facilities

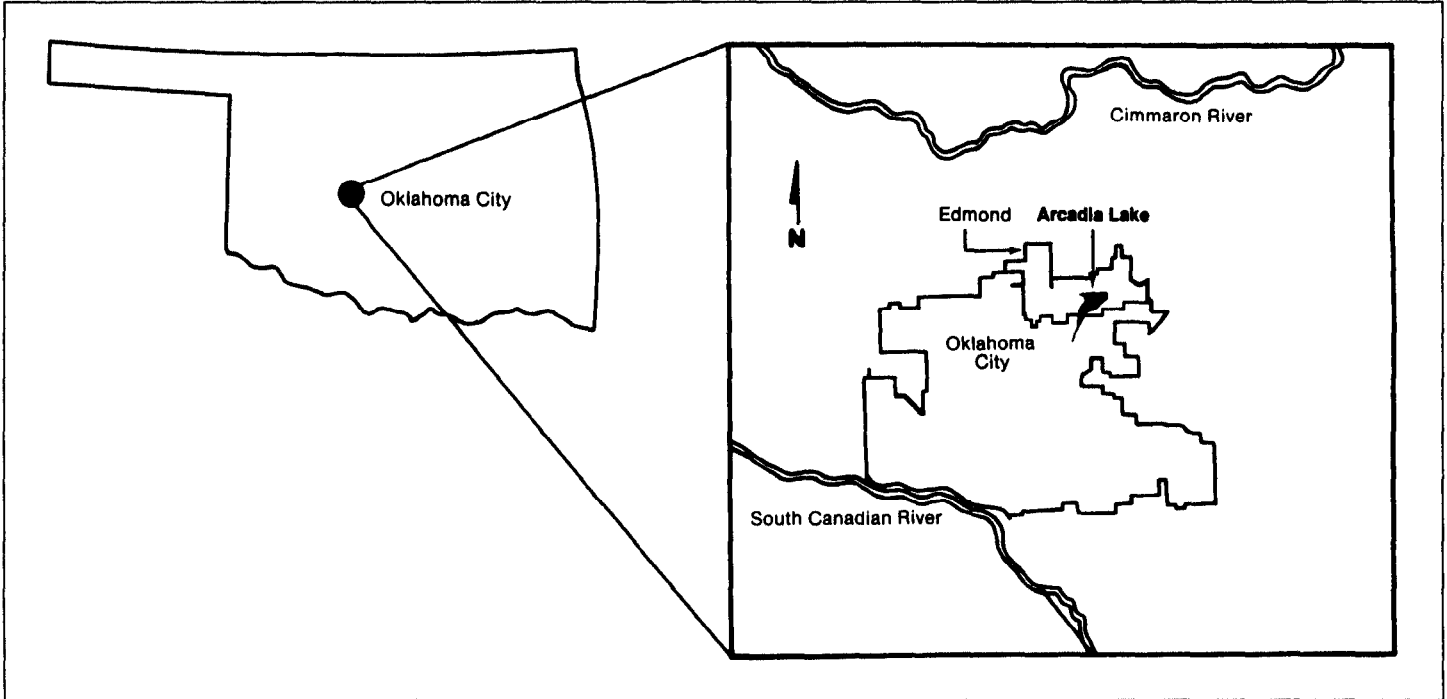
Before they begin detailed planning of recreation facilities, the Corps and its cost-share partner enter into a cost-sharing agreement that sets out the duties and responsibilities of each party and the Corps' estimate of recreation facility costs, an estimate that is subject to reasonable increases. The Corps normally agrees to design and build the recreation facility in accordance with a plan developed jointly by the Corps and the cost-share partner. The cost-share partner agrees to pay 50 percent of the recreation facility costs.

The Corps' procedures require the Corps and the cost-share partner to develop a master plan and a feature design memorandum for the recreation facility after signing the cost-share agreement. The master plan provides the overall design for the facility, including the number and type of recreation features, the location of these features, and an updated cost estimate for the facility. Next the Corps develops the feature design memorandum, which provides the more detailed design information needed to construct the facility, and updates the cost estimate. Subsequent changes in design concept or detail are made through supplements to the master plan and the feature design memorandum.

The Arcadia Lake Project

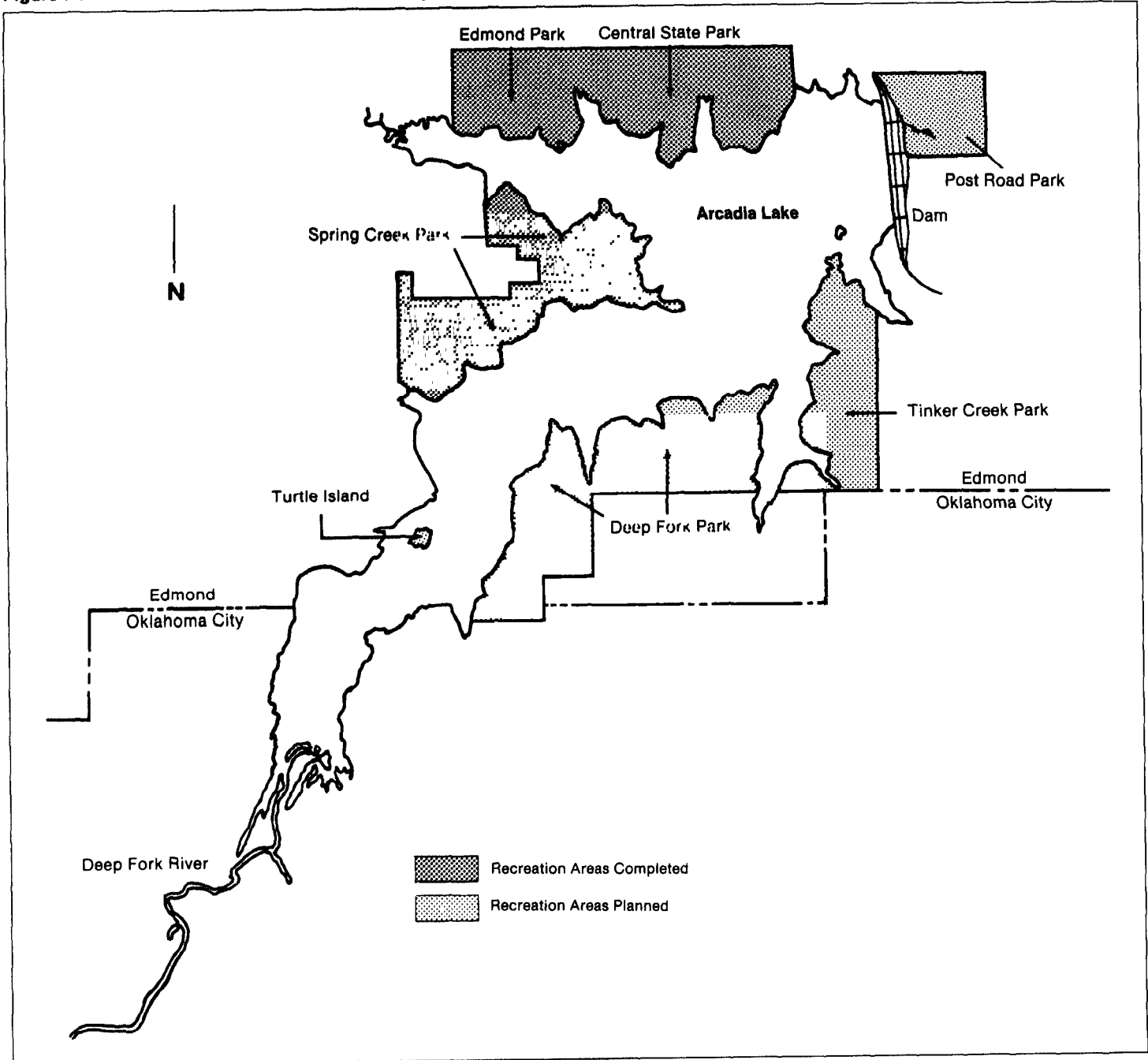
The Arcadia Lake Project is located on the Deep Fork River between Edmond and Oklahoma City. (See fig. I.1.) Recreation facilities planned or completed for the project include seven parks and recreation areas located on 1,500 acres of land along 26 miles of shoreline. (See fig. I.2.)

Figure I.1: Location of Arcadia Lake Project



Source: U.S. Army Corps of Engineers.

Figure I.2: Recreation Facilities Planned or Completed for the Project



Source: U.S. Army Corps of Engineers.

Edmond's mayor signed the cost-share agreement in March 1979 as Chairman of the EPWA Board of Trustees. The mayor approved the master plan, and Edmond's project director for the Arcadia Lake Project, who reported to the city manager, approved the feature design memorandum and requested or approved supplements to the master plan and feature design memorandum. The Corps' Tulsa District, which is responsible for the Corps' projects in Oklahoma and is under the command of the Corps' Southwest Division in Dallas, Texas, prepared the master plan, the feature design memorandum, and the supplements to these documents; purchased the land for planned parks and recreation areas; supervised construction of three parks and preliminary work on other parks; and began the process to complete the remaining parks and recreation areas.

The Corps' records show the following estimated facility costs at various times during the project's development:

- \$8.4 million—in the March 1979 cost-share agreement between Edmond and the Corps;
- \$11 million—in the master plan approved by Edmond's mayor in October 1979;
- \$14.7 million—\$13.1 million of which was included in the initial draft of the feature design memorandum and an additional \$1.6 million of which was included in the cover letter transmitting the memorandum to Edmond's project director in September 1981;
- \$18.6 million—in the feature design memorandum provided to Edmond's project director in May 1983;
- \$20.3 million—in a hand-written estimate provided to Edmond's project director in August 1985 by the Tulsa District project manager; and
- \$21.1 million—in cost estimates presented to the Edmond City Council in September 1987.

Events Leading to the Lawsuit

In September 1987 Edmond City Council members reviewed the Corps' estimates showing that costs for the recreation facilities had increased from the \$8.4 million in its 1979 cost-share agreement with the Corps to \$21.1 million. Subsequently, City Council members acting as the EPWA Board of Trustees asserted that cost increases of this magnitude without their authorization were not reasonable and represented a breach of contract, excusing the city from further performance under the 1979 agreement. Officials from the city and the Corps were unsuccessful in resolving this dispute. They did agree, however, that Edmond would open the three completed parks and that the Tulsa District would suspend work on the remaining facilities until the dispute was resolved.

During the time that officials from Edmond and the Corps were trying to resolve this dispute, officials from the Tulsa District updated and revised their cost estimates.

In February 1988 the Tulsa District tendered the three completed parks to EPWA, requested EPWA to make the first of 50 annual installments to pay its share of the \$14.16 million construction costs for these parks and the \$2.68 million interest costs that accrued during construction, and asked EPWA to execute a lease to operate and maintain the parks in accordance with the 1979 cost-share agreement. EPWA refused to accept the parks, pay the annual installment, or execute the lease because the parks were too costly and the recreation facilities were not complete. After further efforts to resolve this dispute were unsuccessful, Tulsa District declared EPWA in default in July 1988 and referred the matter to the Department of Justice in August 1988.

Congressional Hearing

Some members and staff of the Environment, Energy, and Natural Resources Subcommittee of the House Committee on Government Operations toured the recreation facilities at Arcadia Lake and held field hearings concerning the status of the facilities in August 1988. At those hearings, the mayor explained Edmond's position. According to the mayor, City Council members were not informed of and did not approve cost increases or changes in the planned recreation facilities as either the Edmond City Council or the EPWA Board of Trustees. He also said that the Edmond project director, who was informed of the cost increases and who approved the feature design memorandum and supplements to the master plan and feature design memorandum, did not have the authority to obligate the city. As a result, the mayor contended that Edmond is responsible for only 50 percent of the \$8.4 estimated cost for recreation facilities included in the cost-share agreement.

At the hearing the Assistant Secretary of the Army for Civil Works and officials from the Tulsa District explained the Corps' position. They said that about half of the cost increases resulted from inflation and half from increases in the facilities provided and the changes the city had requested. They maintained that Edmond's officials were informed of all cost increases and changes to the recreation facilities. According to these officials, Edmond's project director did have the authority to obligate the city as indicated by his October 22, 1980, letter to the Tulsa District stating this and by the city's action in having him respond to correspondence addressed to EPWA. Therefore, they concluded that

Edmond is responsible for 50 percent of the actual construction cost under the terms of the 1979 cost-share agreement.

The Assistant Secretary and officials from the Tulsa District also discussed (1) Edmond officials' concerns about the design or construction of some facilities at Arcadia Lake and (2) the Corps' new procedures that should minimize disputes between the Corps and its cost-share partners. Regarding the design and construction concerns, the Corps maintained that it had taken necessary corrective action and that the concerns did not indicate, as alleged by Edmond officials, that recreation facilities at Arcadia Lake were poorly designed or constructed. They also discussed the Corps' new procedures requiring cost-share partners to pay as costs are incurred, as well as an improved cost-share agreement and a new life-cycle project management design to improve coordination and cooperation with cost-share partners.

New Cost-Share Procedures Do Not Adequately Address Two of the Three Issues Underlying the Dispute

Since the Arcadia Lake Project was designed and partially developed, the Corps has changed its cost-share procedures in an effort to improve its management of cost-share projects and its relationship with cost-share partners. Corps officials believe that these new procedures should help minimize future disputes between the Corps and its cost-share partners and that an improved cost-share agreement and a new life-cycle project management design should improve coordination and cooperation among cost-share partners.

The new procedures, however, will not prevent disputes relating to two of the three issues underlying the ongoing lawsuit between the Corps and Edmond. These procedures do not adequately address the issue of cost-share partner approval of changes in project design and cost or the issue of cost-share partner involvement in project design and development. Therefore disputes caused by these problems can occur at other projects. The procedures do address the problem of the Corps' estimates of project visitors and should prevent disputes about these estimates at other projects. In addition, the new procedures require cost-share partners to pay their share of costs as these costs are incurred. This should surface any areas of disagreement before significant costs are incurred by the Corps and the cost-share partners.

New Procedures Do Not Address the Issue of Cost-Share Partner Approval of Changes in Project Design and Cost

EPWA's refusal to pay its share of the costs for the three completed parks at Arcadia Lake is based, in part, on its claim that its Board of Trustees did not approve changes in project design and costs and that the individual Edmond officials who approved the changes did not have the authority to do so. While officials from the Tulsa District did not obtain written assurance from EPWA that Edmond's mayor and project director who approved the changes had the authority to do so, Tulsa's officials told us that the record demonstrates that these EPWA officials exercised that authority. The Corps' new procedures will not prevent similar disputes at other projects because they do not ensure that changes in project design or cost are approved by the cost-share partners' governing bodies or others whom the governing bodies have authorized to legally obligate the partners.

Officials from the Tulsa District did not obtain written assurance from EPWA that the mayor and project director could legally obligate EPWA when the mayor approved the master plan and the project director approved the feature design memorandum and requested or approved supplements to these documents. According to officials from the Tulsa District, the record demonstrates that the mayor and the project director

exercised that authority, as evidenced by the city attorney's certification that the mayor could obligate EPWA when he signed the cost-share agreement; an October 22, 1980, letter from the project director stating he was the final authority for the project; EPWA's actions in having the project director respond to correspondence that the Tulsa District had mailed to EPWA; and letters from the Edmond city manager, who serves as EPWA's general manager, designating the project director as the person with whom the Tulsa District should coordinate planning and construction activities.

New Procedures Do Not Adequately Address the Issue of Cost-Share Partner Involvement in Project Design and Development

EPWA also claims that the Corps' Tulsa District assumed all responsibility for the design and development of the recreation facilities and did not treat Edmond as an equal partner. The Tulsa District's officials disagree, stating that Edmond officials were involved, as evidenced by their review and approval of the master plan and feature design memorandum, and their request for design changes that the Corps approved. The Corps' new procedures will not prevent similar disputes at other projects. These procedures do not ensure that cost-share partners, for example, have the information about construction and facilities options available within the overall design of the project, options which they would need to participate fully in project design and development.

We found that Edmond's officials did review and approve the master plan and feature design memorandum and that the Tulsa District's officials did incorporate design changes requested by Edmond's officials that met the Corps' criteria. Officials from the Tulsa District provided information to Edmond's officials about options to the project design and the Corps' approval processes when asked by city officials to do so.

At the request of Edmond's officials during the design and development of the Arcadia Lake facilities, officials from the Tulsa District

- set aside land for special purposes such as a fire station, golf course, riding stables, and a research station for Central State University;
- added running water and flush toilets to the restrooms, combined restrooms and change houses at the beach areas, and used prefabricated restrooms rather than Corps-designed restrooms;
- added a sports complex, and when this was disallowed by the Army Audit Agency, added softball playing fields which were allowed; and
- revised plans for a recreation area to enhance handicapped recreation.

In addition, officials from the Tulsa District were incorporating other changes requested by Edmond when further development of the facilities was stopped because of the dispute.

Officials from the Tulsa District also said that Edmond's officials could have asked for different road width, ditch slope, campsite entrance, or parking options they expressed concern about during the August 1988 congressional field hearings and tour of the project. At another recreation facility the Corps built at about the same time, the cost-share partner insisted on wider roads and less severe ditch slopes.

When requested by Edmond's officials, officials from the Tulsa District provided the following information about design options and the Corps' approval processes. Officials from the Tulsa District arranged a tour of another district recreation project and presented slides to illustrate the type of facilities that could be built. These officials also arranged a tour of a project of the Corps that had handicapped recreation areas when Edmond's project director asked about the possibility of a similar area at Arcadia Lake. When Edmond's mayor stated the City Council wished to hold a number of items in the master plans in abeyance until the city's staff research was complete, Tulsa's officials explained that any changes could be incorporated in the feature design memorandum or supplements to the master plan.

Other cost-share partners have told the Corps that they need more information to participate effectively in the design and development of cost-share projects, according to the Assistant Chief of the Corps' Civil Works Project Management Division. He said this need was expressed at a December 1989 conference, designed to explore ways to strengthen federal and local partnerships, where participating cost-share partners requested that the Corps provide information about design options they can select from and changes the Corps can approve. However, the Assistant Chief does not plan to revise the Corps' new procedures to require that this information be provided. He said that the Corps' officials can provide this information to cost-share partners during their joint development of project management plans now required by the new procedures.

While officials from the Corps' headquarters advised us that it is the Corps' policy to provide cost-share partners with information needed to participate effectively in project design, we found that this may not occur. For example, we found that opinions differed among the Corps'

personnel within the Tulsa District, Southwest Division, and headquarters offices about whether they would advise a cost-share partner of available design options and the opportunity to select from these options. Those who would advise the partners of the options said that a cost-share partner needed this information to participate effectively. Those who would not advise the partners of these options said they were concerned that the cost-share partner would chose options that the Corps did not believe were most appropriate or economical.

Both the old and new cost-share agreements include a clause that states that the plan to build the recreation facilities will be developed jointly by the Corps and the cost-share partner. In contrast to earlier procedures, which were silent about how this was to be accomplished, the new procedures require the Corps and the cost-share partner to appoint representatives who co-chair the study group that develops this plan. These representatives then coordinate the development of plans and specifications, schedules, and changes in project design and cost. This increased coordination can decrease the likelihood of disputes about the extent of cost-share partner involvement in project design and development, provided that the Corps' representatives ensure that partners have the information they need to participate effectively.

New Procedures Do Address the Issue of Visitation Information

The Corps' new cost-share procedures should prevent future partners from claiming, as EPWA does, that they based their decision to share costs in part on inaccurate visitation information obtained by the Corps. Under the Corps' new procedures, cost-share partners will not rely on the Corps' information as EPWA did. Instead, they will be responsible for developing this information jointly with the Corps.

In its counterclaim, EPWA alleged that it relied on a Corps study that the Corps knew or should have known was inaccurate because the facilities built will not generate the revenue promised or accommodate the visitors anticipated by the study. The Department of Justice denied these allegations since it could not identify the specific study EPWA referred to.

Edmond's city attorney advised us that this study was the Tulsa District's cost-benefit analysis for the Arcadia Lake Project. Officials from the Tulsa District included this analysis in a planning document for the project, which they provided to the city before the cost-share agreement was signed. The planning document did not include an estimate of anticipated revenues, but the city used the Tulsa District's estimate of 1,150,000 annual visitors and the Corps' estimated economic value of

Appendix II
New Cost-Share Procedures Do Not
Adequately Address Two of the Three Issues
Underlying the Dispute

\$1.50 per visitor from this document to project revenues from the project.

The Corps' new procedures distinguish between a cost-benefit analysis and an analysis of anticipated expenditures and sources of funds, including anticipated revenues. These procedures require representatives from the Corps and its cost-share partner to jointly analyze and explain all assumptions used.

New Procedures
Should Reveal
Disputes Before
Significant Costs Are
Incurred

The Corps' new procedures require cost-share partners to pay for project costs as they are incurred. Under these procedures, cost-share partners pay or place in escrow at the beginning of each year an amount equal to their share of cost that the Corps estimates will be incurred that year. This should alert the partners to changes in project design or cost that they have not approved. This in turn will allow disputes to be resolved before significant expenditures of funds or, if this involves the initial payment requested by the Corps, before the expenditure of any funds.

Design and Construction Concerns Have Not Been Resolved

Edmond's concerns about the design and construction of the recreation facilities in the three completed parks at Arcadia Lake—Central State Park, Edmond Park, and Spring Creek Park—have not been resolved. Their concerns involve road quality, road width, roadside slopes, campsite entrance safety, parking availability, a pull-through parking lot, and handicapped access. The design and construction concerns were expressed by Edmond's officials during the 1988 congressional field hearing and tour of the Arcadia Lake Project by Subcommittee members and staff.

Neither the city nor the Tulsa District plans to resolve these concerns until the ongoing litigation is settled, even though some concerns could be resolved now at relatively low cost. The Edmond city attorney said, however, that the low-cost options were not necessarily the options that Edmond would accept or pursue in its lawsuit with the Corps.

In general, the Tulsa District designed and constructed the facilities in accordance with the Corps' criteria. However, some of the road surface in Spring Creek Park has cracked, and repairs have been unsuccessful. The cause of the cracking is unknown and the road base will have to be tested by highway engineers to determine the reasons. In addition, not all facilities are accessible to the handicapped, and more parking is needed on busy days.

Because of the ongoing lawsuit, we limited our work to obtaining information on the status of each concern as of the completion of our fieldwork in March 1990.

Road Quality

Edmond's officials were concerned about the quality of the roads in the three completed parks. They cited as the reasons for their concern (1) Tulsa District's reduction of payments to a construction contractor in lieu of corrective action for work that did not meet specifications in Central State Park and Edmond Park and (2) cracked roads in Spring Creek Park. According to Edmond's city attorney, Edmond's officials are considering an evaluation of the roads by independent technical experts for use in their lawsuit, but this evaluation had not been made as of March 1990.

Tulsa District's records show that asphalt used in Central State Park and Edmond Park did not meet the Corps' density standards at some locations. The contractor offered to accept a \$2,000 reduction in payment in lieu of corrective action, but the officials from the Tulsa District

refused. They required the contractor to rebuild or resurface those portions of the road where asphalt did not meet density standards, as well as apply a protective sealant to all road surfaces before they would accept the roads.

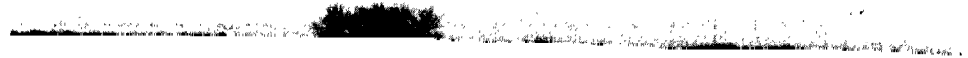
Tulsa District's records show no construction problems with the roads in Spring Creek Park. However, prior to construction, the contractor removed soil from a 180-foot section of roadway and replaced it with clay when it would not dry sufficiently to allow construction of the road. Once constructed, this section of the road had to be repaired because of cracking, and it continued to crack after being repaired.

The geo-technical engineer from the Tulsa District inspected the roads at Arcadia Lake in August 1988 after Edmond complained about cracks in the Spring Creek Park roads. He reported minor cracking in Spring Creek Park, stating that this type of cracking usually resulted from climatic conditions, lack of use, and improper maintenance rather than design or construction problems. Officials from the Tulsa District said they apply a protective sealant to roads to prevent this type of cracking as part of their regular maintenance in facilities they maintain and that Edmond should have done this in Spring Creek Park. The District sealed the cracks at a cost of \$900 as a one-time cooperative gesture to Edmond.

The geo-technical engineer inspected roads again in January 1989. He reported continued minor cracking of the Spring Creek Park roads. He again attributed the continued cracking to climatic conditions, lack of use, and improper maintenance. He stated that Edmond should apply a sealant to Spring Creek Park road surfaces to prevent the continued minor cracking in these roads. According to the District's officials, as of March 1990 Edmond had not applied the sealant to these road surfaces.

To indicate the extent of cracking of the roads in Spring Creek Park, we inspected the 3.4 miles of road in February 1990 and estimated that about 20 to 30 percent of the roads were cracked, including areas previously sealed by the Tulsa District. Our estimate was not intended to be an exact measurement. An example of the cracking is shown in figure III.1. Officials from the Oklahoma State Highway Department advised us that minor cracking can occur in asphalt surfaces for the reasons cited by the District's geo-technical engineer, as well as for other reasons. They said, however, that the reason the roads were cracking could not be determined without obtaining core samples.

Figure III.1: Cracking of the Road



Road Width

Edmond's officials were concerned that the single lane circulation roads at Arcadia Lake were too narrow and may contribute to unsafe conditions at some locations. These roads have a 10-foot paved surface and 2-

foot shoulders on each side. (See fig. III.2.) Officials from the Tulsa District said this road width met the Corps' criteria and is safe. Edmond's officials advised us that there have been no accidents in the parks that can be attributed to the width of these roads.

Figure III.2: Single Lane Circulation Road



The Corps' criteria in effect when the parks were designed did not mandate a specific width for one-lane circulation roads. These criteria suggested 8- to 12-foot paved surfaces with 2-foot shoulders on each side. The National Park Service's criteria from the same period also did not mandate a specific width but allowed paved surface up to 12 feet wide with 2-foot shoulders on each side.

Officials from the Tulsa District advised us that they prefer 10-foot paved surfaces for one-lane circulation roads because this surface is wide enough for safety and narrow enough to discourage speeding in camping and picnicking areas where speed limits are 15 miles per hour. In three of the four recreation facilities constructed during the 1980s, the District built one-lane paved circulation roads with 10-foot surfaces. In the fourth facility, it built one-lane roads with paved surfaces up to 14 feet wide at the cost-share partner's request. Officials from the Tulsa District said that during the design phase, Edmond could have requested wider roads.

Roadside Slopes

Edmond's officials were concerned that steep slopes in the parks, like those shown in figure III.3, were not safe and required use of hand-held equipment for mowing, which increases maintenance costs. Officials from the Tulsa District designed these slopes to have a maximum 3:1 slope ratio or, stated another way, a 1-foot vertical drop for each 3 feet of distance from the shoulder of the road. According to the District's officials, these slopes met established Corps criteria when designed and are safe. The officials agree that hand-held equipment may be required when mowing. Officials from Edmond and the Tulsa District also agree that flatter slopes are safer. However, Edmond's officials said there have been no accidents attributable to roadside slopes.

Figure III.3: Steep Slopes in the Parks



According to the Corps' criteria in effect when the parks were designed, the slopes should be safe, environmentally acceptable, and maintainable. They should also require minimal tree removal. The criteria did not establish a specific slope ratio.

Officials from the Tulsa District said that they were using both a 3:1 and a 4:1 slope ratio for recreation facilities when Arcadia was designed, generally using 3:1 slopes in hilly terrain with trees, and 4:1 slopes in level terrain with few trees. For the four recreation areas the District built in the 1980s, they used 3:1 slopes in two of the areas and 4:1 slopes

in the other two. The cost-share partner requested 4:1 slopes in one area. The officials said that Edmond also could have requested 4:1 slopes.

We inspected the slopes in the three parks in order to determine their steepness. We did not intend to obtain a precise measurement. We estimated that about 20 percent of the slopes are steeper than 3:1, 40 percent are from 3:1 to 4:1, and 40 percent are flatter than 4:1. Slopes steeper than 3:1 are generally located near intersections or culverts or along relatively flat sections of roadway. About half of these slopes are protected by guard rails or posts, and the unprotected slopes generally are located along the sections of roadway built up to level the roads. (See fig. III.4.)

**Appendix III
Design and Construction Concerns Have Not
Been Resolved**

**Figure III.4: Unprotected Slope Greater
Than 3:1**

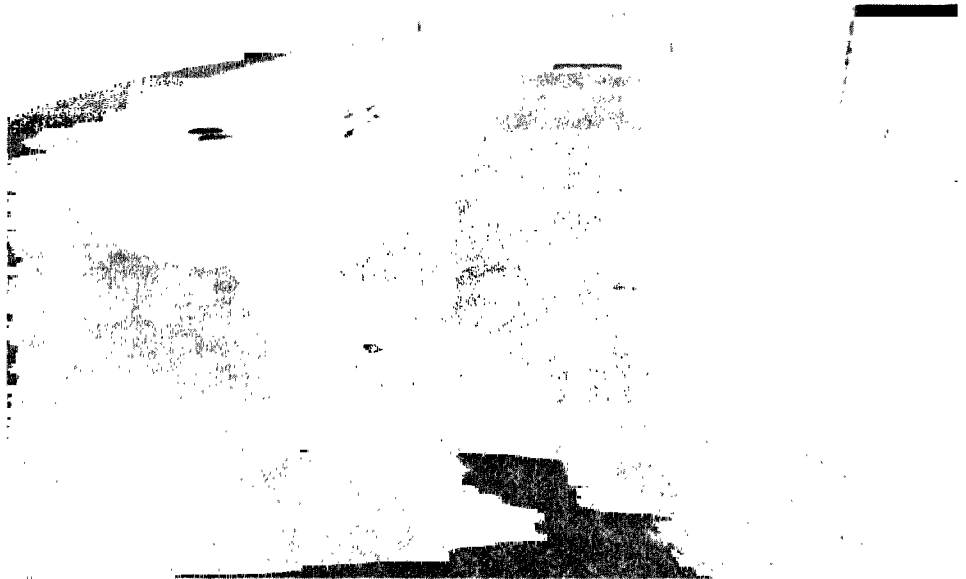


Officials from the Tulsa District note that speed is a factor in safety considerations about slopes. The maximum speed limit at Arcadia Lake is 25 miles per hour and 15 miles per hour in most areas with unprotected slopes steeper than 3:1.

Campsite Entrance Safety

Edmond's officials were concerned that the entrances to 20 of the 34 campsites in Spring Creek Park were too narrow and thus unsafe. These entrances cross drainage ditches and are built over metal pipe culverts in ditches. (See fig. III.5.) Because campsite entrance widths are limited by the length of the culverts, and campers back their vehicles into these campsites, Edmond's officials would like longer culverts and wider entrances to reduce the chance of campers backing into the drainage ditches. The District's officials said that all campsite entrances can be used safely by vehicles with trailers.

Figure III.5: Entrance to Campsite



The Corps' criteria require campsite entrances to be at least 10 feet wide, with drop-offs not to exceed a 2:1 ratio. From the 20 campsites Edmond identified as too narrow, we selected 10 that we thought a camper might have the most difficulty backing into. We found the entrances measured 12 to 17 feet in width and had drop-offs within the established limit.

Officials from Edmond and the Tulsa District told us that there had not been any accidents at Arcadia Lake's campsite entrances through 1989. They also agreed that campsite entrances can be widened by extending the metal pipe culverts and covering the extension with dirt at a cost of about \$100 to \$125 per campsite, or for about \$2,000 to \$2,500 for the 20 campsites Edmond identified as too narrow.

Parking Availability

Edmond's officials were concerned that there was not enough paved parking at the swimming beaches, group shelters, and picnic sites for busy days. Parking to accommodate anticipated busy day crowds would require about 3 times the amount of paved parking provided at swimming beaches and about 2.5 times the paved parking provided at group shelters and picnic sites.

An engineer from the Tulsa District advised us that the District does not design paved parking on the basis of busy day attendance because it would be too expensive. Instead, after use patterns are established, they build turf or gravel overflow parking to accommodate busy day crowds. Officials from Edmond and the Tulsa District agree that many locations exist in the three completed parks where such parking could be built at little cost.

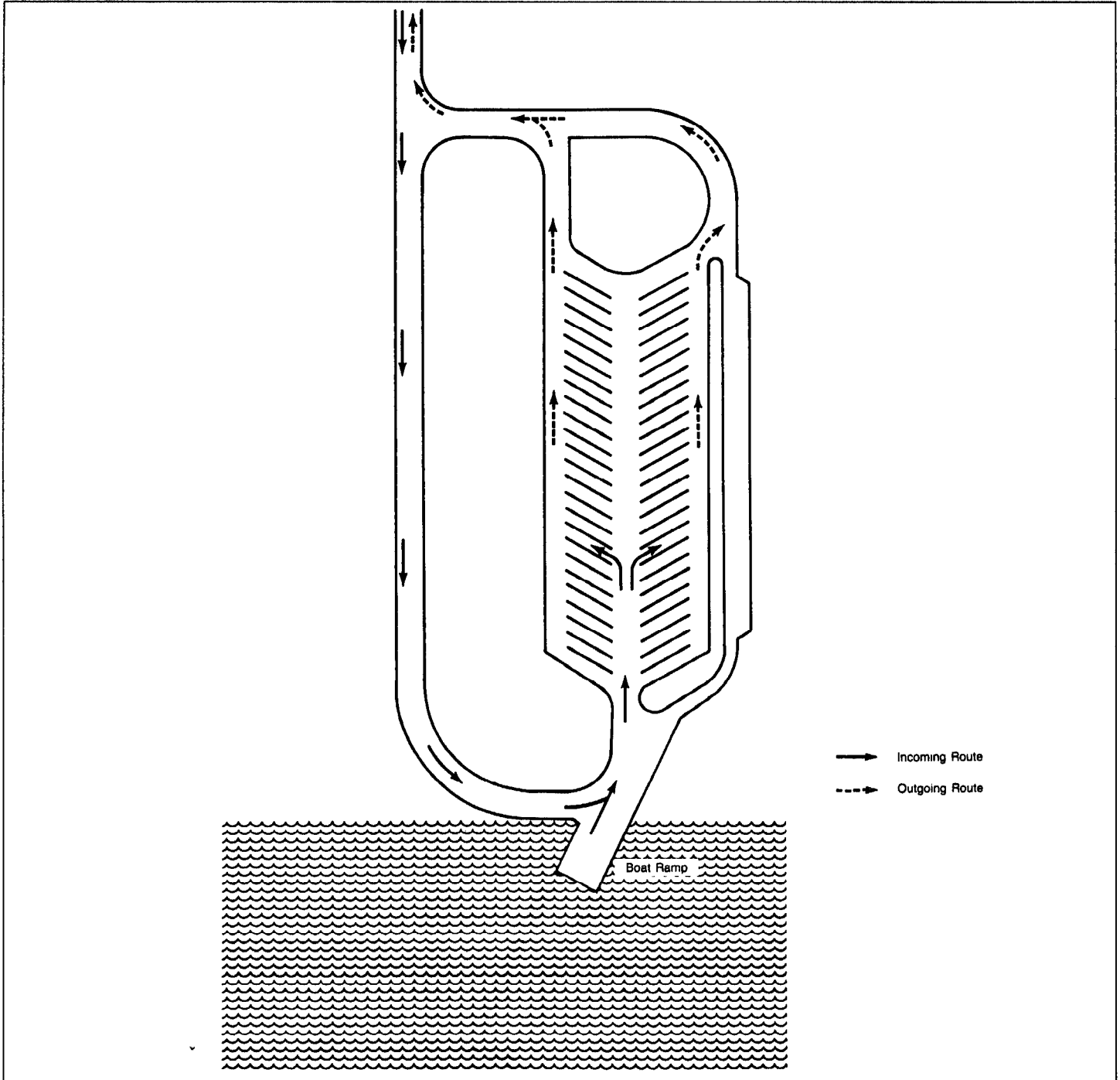
Pull-Through Parking Lot

Edmond's officials were concerned that the pull-through boat ramp parking lot in Spring Creek Park was not being used as designed. The parking lot was designed to allow drivers towing boat trailers to drive into parking spaces from a center lane and to drive out of the parking spaces via exit lanes on each side of the parking lot without backing up. (See fig. III.6.) During final inspection of Spring Creek Park, officials from Edmond and the District overlooked the fact that painted stripes designating parking spaces in this lot extended into the exit lanes, making these lanes too narrow for drivers to use properly. As a result, drivers pull into and then back out of the parking spaces. Edmond's officials told us that some drivers have difficulty in backing their trailers out of the lanes, and the pull-through lanes are easier to use.

Officials from Edmond and the Tulsa District agree that this problem can be corrected at little cost by repainting the parking stripe

Appendix III
Design and Construction Concerns Have Not
Been Resolved

Figure III.6: Pull-Through Parking Lot in Spring Creek Park



Source: U.S. Army Corps of Engineers.

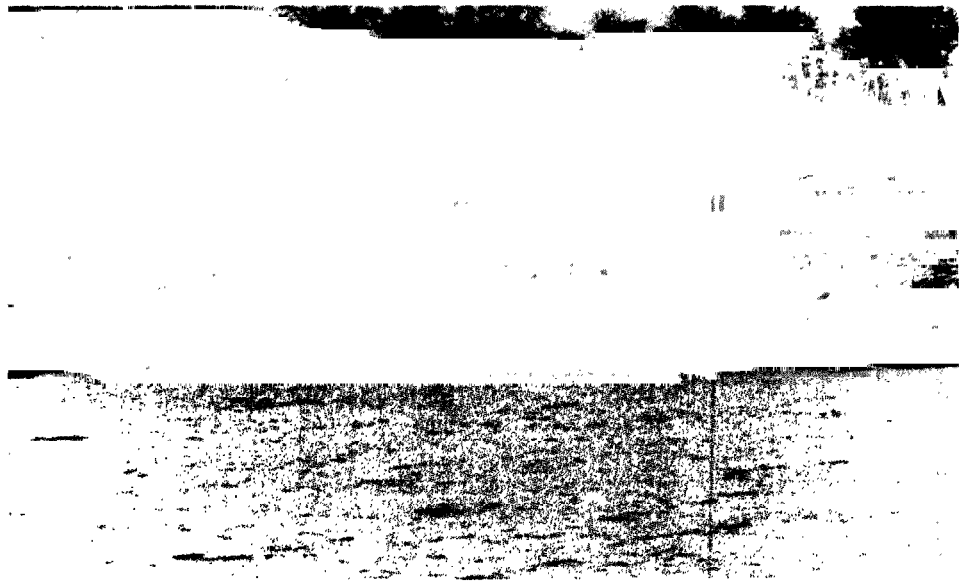
Handicapped Access to Facilities

Edmond's officials were concerned about the lack of handicapped access to some facilities. The Corps' criteria do not require all facilities to be accessible to handicapped individuals, but they do require equal access for the handicapped to the maximum extent possible. Officials from Edmond and the Tulsa District agree that the following recreation facilities are not accessible to the handicapped: courtesy boat docks at the boat ramps, swimming beaches, some roadside picnic tables, and the sidewalk from the Central State Park boat ramp parking lot to the restroom for that parking lot.

Courtesy Boat Docks

Courtesy boat docks are located near each boat ramp to provide access to boats in the water and to serve as fishing piers. Concrete stairs to the courtesy boat docks, however, make these docks inaccessible to handicapped individuals. (See fig. III.7.) Officials from the Tulsa District designed the courtesy boat docks to be accessible to both non-handicapped and handicapped individuals by means of a ramp from the parking lots to the docks.

Figure III.7: Courtesy Boat Dock



The District's officials discovered during construction that the parking lots were too far above the water to construct the ramps as designed. The officials then redesigned access to the docks. The new design consisted of concrete steps and longer handicapped ramps from the parking lots to concrete landings near the water. These concrete landings, in

turn, would be connected to the docks by the original ramps for the handicapped.

The District decided not to use the longer ramps because (1) the ramps could cost about \$10,000 each and (2) the remaining parks scheduled for construction, including one park redesigned specifically for the handicapped, would provide fishing and access to boats in the water for the handicapped. However, these areas have not been built because the Tulsa District and Edmond agreed to suspend work on these areas until the ongoing lawsuit was resolved.

An engineer from the Tulsa District said the redesigned ramps could still be built to provide handicapped access to the courtesy docks if the city wanted this.

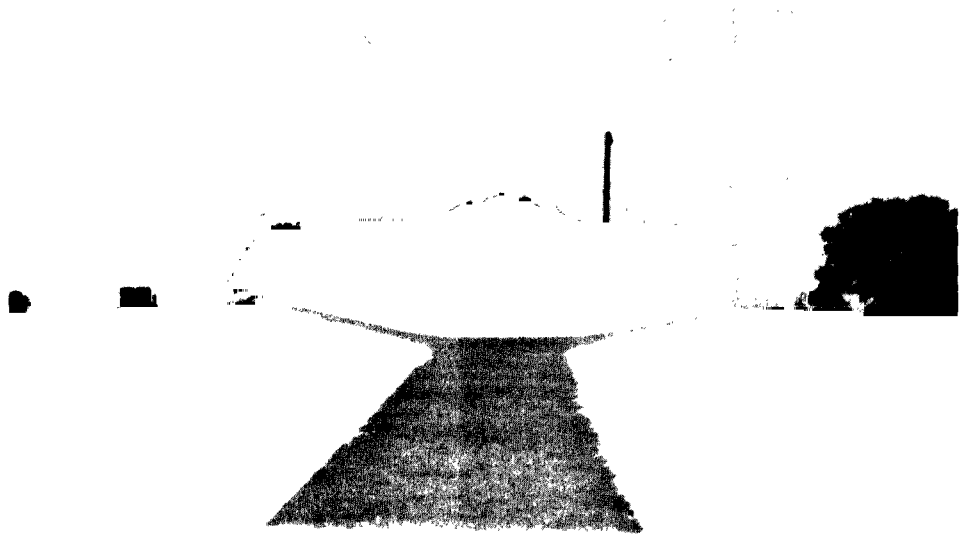
The District's officials said the former project director of Edmond Arcadia Lake had approved their decision to eliminate the redesigned ramps and build only concrete steps, but they had no documentation of this agreement. The former project director could not remember this decision when we asked him about it. However, he had approved the redesign of the recreation area for the handicapped.

Swimming Beaches

Sidewalks from the change houses to the swimming beaches do not extend into the beaches and therefore do not provide the handicapped with access to the beaches. (See fig. III.8.) Officials from the Tulsa District said they did not extend the sidewalks into the beaches because support for the sidewalks would erode during periods when high water inundates the beaches. Officials from Edmond and the Tulsa District agree that handicapped access to the beaches could be provided at very little cost by extending wooden boardwalks into the beaches.

**Appendix III
Design and Construction Concerns Have Not
Been Resolved**

**Figure III.8: Sidewalk From Change
House to Swim Beach**



Picnic Tables

Some roadside picnic tables are not accessible to the handicapped because of steep slopes along some portions of the roads. (See fig. III.9.) The number of tables that are not accessible depends on the degree of

**Appendix III
Design and Construction Concerns Have Not
Been Resolved**

physical impairment of the handicapped person. Edmond's officials estimate that 143 of the 324 picnic tables in the three parks are not easily accessible to handicapped persons, while officials from the Tulsa District estimate that 26 of these tables are not accessible to persons with severe physical impairments.

Figure III.9: Steep Slope to Roadside Picnic Table



Sidewalk From Boat Ramp Parking Lot to Restrooms

The sidewalk between the boat ramp parking lot in Central State Park and the restrooms for that parking lot is too steep for the handicapped to use. (See fig. III.10.) Officials from the Tulsa District advised us they could have built a series of sidewalks in a switch-back arrangement connected by concrete landings that would have been accessible to the handicapped. They chose not to do this because of the expense involved and because another restroom is accessible by road 0.3 miles from the parking lot. However, they said this arrangement could be built if the city wants it.

**Appendix III
Design and Construction Concerns Have Not
Been Resolved**

**Figure III.10: Sidewalk From Boat Ramp
Parking Lot to Restrooms**



DOD Inspector General's Report on the Corps' Procurement of Prefabricated Restrooms

The Department of Defense's (DOD) Inspector General reported in February 1988¹ that three of the Corps' districts improperly procured prefabricated restrooms at a cost of \$5.7 million. This included Tulsa District's procurement of prefabricated restrooms for the three completed Arcadia Lake parks at a cost of \$1 million.

The Inspector General found that these districts improperly divided procurements to avoid the purchase limitations of the General Services Administration (GSA) and made inadequate cost comparisons to justify buying prefabricated restrooms rather than building conventional restrooms. DOD, GSA, and the Corps have taken corrective action to prevent the recurrence of these problems.

Districts Avoided Purchase Limitation

According to the February 1988 report, the Corps' district officials divided procurements to avoid the \$200,000 maximum purchase limitation for prefabricated restrooms procured from the GSA multiple award schedule. GSA's multiple award schedule is one of GSA's Federal Supply Schedules that provide federal agencies with a simplified process for obtaining supplies or services. DOD allows its agencies to use GSA's multiple award schedule, unless their procurement would exceed GSA's maximum purchase limitation shown on the schedule for the item being procured. For procurements above this limit, DOD requires its agencies to use competitive procedures in an effort to obtain lower prices normally available for purchases exceeding the limit.

The Corps' district officials divided procurements to avoid the maximum purchase limit for prefabricated restrooms so they could use GSA's multiple award schedule since this was the most convenient way for them to obtain these restrooms. For example, the Tulsa District prepared seven separate orders totaling over \$1 million to purchase the prefabricated restrooms for Arcadia Lake from this schedule. This allowed the District to avoid GSA's \$200,000 maximum purchase limit for prefabricated restrooms and the process of soliciting bids for the entire procurement. Similar practices were followed for projects in the other two districts included in the Inspector General's audit.

According to the Inspector General's report, GSA discontinued use of the multiple award schedule for prefabricated structures because abuses

¹Report on the Audit of the DOD Hotline Allegation of Procurement Irregularities, U.S. Army Corps of Engineers, Report Number 88-086 (Feb. 12, 1988).

were found in the system and decided that if it restored the schedule, prefabricated restrooms would not be included.

Inadequate Cost Comparisons

The Inspector General's report also stated that the Corps' district officials made inadequate cost comparisons to justify their decisions to purchase prefabricated restrooms rather than construct conventional restrooms. The Inspector General did not conclude that the districts' decisions to purchase prefabricated restrooms were wrong. He did find, however, that the cost comparisons justifying these decisions (1) did not consider life-cycle costs, (2) included costs for conventionally constructed restrooms exceeding costs actually incurred by the districts, and (3) did not consider that costs per square foot for conventional restrooms were less than costs per square foot for prefabricated restrooms.

For example, the Tulsa District's cost comparisons justifying the \$1 million purchase of prefabricated restrooms for Arcadia Lake (1) did not consider life-cycle costs, (2) included estimated costs for conventionally constructed restrooms that ranged from \$127 to \$162 per square foot when actual costs incurred by the District for similar facilities between January 1984 and April 1987 ranged from \$73 to \$116 per square foot, and (3) compared the \$57,300 unit cost of prefabricated restrooms for Arcadia Lake with the \$69,000 cost for conventional restrooms without considering the size of these restrooms. The prefabricated restrooms were 288 square feet, and conventional restrooms were 585 square feet. When size was considered, the \$240 per square foot of the prefabricated restrooms exceeded the \$162 per square foot cost of the larger conventional restrooms.

According to the Inspector General's report, the Corps revised its criteria for cost comparisons between prefabricated restrooms and Corps-designed restrooms to prevent these problems in the future. The revised criteria for cost comparison require cost comparisons on a life-cycle basis and provides guidance on costs to be included.

Additional Information on the Prefabricated Restrooms at Arcadia Lake

Tulsa District officials included conventionally constructed restrooms in the master plan and feature design memorandum for the recreation facilities at Arcadia Lake. Edmond's Arcadia Lake project director, however, recommended use of prefabricated restrooms after inspecting similar restrooms constructed by the manufacturer of the prefabricated restrooms used at Arcadia Lake.

Officials from the Tulsa District compared the cost of prefabricated restrooms with the cost of Corps-designed restrooms planned for Arcadia Lake. They estimated the use of prefabricated restrooms throughout the project would cost \$450,000 less than conventional restrooms.

After officials from the Corps' Southwest Division reviewed Tulsa District's cost comparisons, they directed Tulsa District's officials to give Edmond a chance to reconsider its request, because they believed anticipated savings would be eliminated by engineering and design changes necessary to make the prefabricated restrooms compatible with the Corps' designs. Edmond's Arcadia Lake project director advised Tulsa District's officials that Edmond continued to prefer prefabricated restrooms.

Objectives, Scope, and Methodology

The Chairman, Environment, Energy, and Natural Resources Subcommittee, House Committee on Government Operations, requested that we review various aspects of the Corps' recreation facilities, including the facilities at the Arcadia Lake Project, located near Edmond, Oklahoma. On the basis of his request and subsequent discussions with his office, we focused our review on

- describing the events involving the Corps and the city of Edmond that led to the ongoing lawsuit between the Department of Justice and Edmond (see app. I);
- evaluating whether the Corps' new cost-share procedures would address the issues underlying the lawsuit and thereby prevent similar disputes (see app. II);
- providing the status of the design and construction concerns that Edmond identified during the Subcommittee's tour of the project in August 1988 (see app. III); and
- summarizing the DOD Inspector General's findings on the use of prefabricated restroom facilities at the Corps' projects, including Arcadia Lake. (See app. IV.)

Events Leading to the Lawsuit

To understand and describe the events leading to the current litigation between the United States Government and the city of Edmond, we reviewed (1) the August 1988 testimony of officials from the Corps and from Edmond before the Environment, Energy, and Natural Resources Subcommittee of the House Committee on Government Operations and (2) motions and supporting documents filed with the court by the Department of Justice and Edmond.

While our objectives required us to understand the dispute between the city of Edmond and the Corps, which is now before the court, our objective in reviewing information about this dispute was not to determine how it should be resolved. That determination is properly with the court.

New Cost-Share Procedures

To evaluate whether the Corps' new cost-share procedures address the issues underlying the lawsuit, we (1) reviewed information about the lawsuit and Edmond's design and construction concerns to identify the basic arguments of Edmond's city officials in their dispute with the Corps, (2) analyzed the Corps' current procedures, and (3) discussed planned changes in these procedures with officials from the Corps' headquarters.

Design and Construction Concerns

To describe Edmond's design and construction concerns, and determine the status of these concerns, we inspected the facilities, interviewed officials from Edmond and the Tulsa District, reviewed Edmond's and the Tulsa District's records, and reviewed the Corps' design criteria. As agreed with the requester's office, we analyzed information made available by officials from the city as well as from the Corps. We also analyzed records and other sources but did not make an independent determination of how the concerns should be resolved or obtain technical evaluations of the road construction. As part of our analysis, we compared Arcadia Lake's recreation facilities with the facilities at the Tulsa District's other projects.

DOD Inspector General's Findings on the Use of Prefabricated Restrooms

We reviewed the DOD Inspector General's February 1988 report on the use of prefabricated restrooms at the Corps' projects, including Arcadia Lake, and reviewed Tulsa District's and Edmond's records to determine why prefabricated restrooms were used at Arcadia Lake.

We conducted our review from November 1988 through March 1990 at the Corps' headquarters in Washington, D.C.; the Corps' Southwestern Division office in Dallas, Texas; the Corps' Tulsa District offices in Tulsa, Oklahoma; and the Corps' project office at Arcadia Lake. We also reviewed records at the city of Edmond's offices.

We conducted our review in accordance with generally accepted government auditing standards. However, our efforts were affected by the litigation. While no one refused to talk to us or provide us with information, we believe the ongoing litigation restricted the free exchange of information that might otherwise have occurred. Some employees from the Corps and from Edmond were understandably cautious in their responses to our questions, carefully constructing their answers in a manner that supported—or at least did not conflict with—their employer's position in the lawsuit.

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