

United States Department of the Interior
National Park Service
National Register of Historic Places
Registration Form

NATIONAL REGISTER
LISTED

411 05 07

This form is for use in nominating or requesting determination for individual properties and districts. See instruction in How to Complete the National Register of Historic Places Registration Form (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

historic name Lake Overholser Dam

other names/site number

2. Location

street & number NW 16th Street and East Lake Overholser Drive [N/A] not for publication

city or town Oklahoma City [N/A] vicinity

state Oklahoma code OK county Oklahoma code 109 zip code 73127

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this
[nomination] request for determination of eligibility meets the documentation standards for registering properties in the
National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In
my opinion, the property [meets] does not meet the National Register criteria. I recommend that this property be
considered significant [nationally] statewide locally. ( See continuation sheet for additional comments.)

Signature of certifying official/Title State Historic Preservation Officer Date April 24, 2007

Oklahoma Historical Society
State or Federal agency and bureau

In my opinion, the property [ ] meets [ ] does not meet the National Register criteria.
( See continuation sheet for additional comments.)

Signature of certifying official/Title Date

State or Federal agency and bureau

4. National Park Service Certification

I hereby certify that the property is:

Signature of the Keeper

Date of Action

- [ ] entered in the National Register
[ ] See continuation sheet.
[ ] determined eligible for the
National Register
[ ] See continuation sheet.
[ ] determined not eligible for the
National Register.
[ ] removed from the National Register
[ ] See continuation sheet.
[ ] other, explain
[ ] See continuation sheet.

Four horizontal lines for signature and date input.

Lake Overholser Dam  
Name of Property

Oklahoma County, Oklahoma  
County/State

### 5. Classification

**Ownership of Property**  
(Check as many boxes as apply)

- private
- public-local
- public-State
- public-Federal

**Category of Property**  
(Check only one box)

- building(s)
- district
- site
- structure
- object

**Number of Resources within Property**  
(Do not count previously listed resources.)

| Contributing | Noncontributing |            |
|--------------|-----------------|------------|
| <u>0</u>     | <u>0</u>        | buildings  |
| <u>0</u>     | <u>0</u>        | sites      |
| <u>1</u>     | <u>0</u>        | structures |
| <u>0</u>     | <u>0</u>        | objects    |
| <u>1</u>     | <u>0</u>        | Total      |

**Name of related multiple property listing.**  
(Enter "N/A" if property is not part of a multiple property listing.)

N/A

**Number of contributing resources previously listed in the National Register.**

0

### 6. Function or Use

**Historic Function**

(Enter categories from instructions)

INDUSTRY/PROCESSING/EXTRACTION:

Waterworks

**Current Functions**

(Enter categories from instructions)

INDUSTRY/PROCESSING/EXTRACTION:

Waterworks

### 7. Description

**Architectural Classification**

(Enter categories from instructions)

OTHER: Concrete Buttress Dam

**Materials**

(Enter categories from instructions)

foundation CONCRETE  
walls CONCRETE  
BRICK  
roof CERAMIC TILE  
other \_\_\_\_\_

**Narrative Description**

(Describe the historic and current condition of the property on one or more continuation sheets.)

Lake Overholser Dam  
Name of Property

Oklahoma County, Oklahoma  
County/State

## 8. Statement of Significance

### Applicable National Register Criteria

(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

- A** Property is associated with events that have made a significant contribution to the broad patterns of our history.
- B** Property is associated with the lives of persons significant in our past.
- C** Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- D** Property has yielded, or is likely to yield, information important in prehistory or history.

### Criteria Considerations

(Mark "x" in all the boxes that apply.)

Property is:

- A** owned by a religious institution or used for religious purposes.
- B** removed from its original location.
- C** a birthplace or grave.
- D** a cemetery.
- E** a reconstructed building, object, or structure.
- F** a commemorative property.
- G** less than 50 years of age or achieved significance within the past 50 years.

### Narrative Statement of Significance

(Explain the significance of the property on one or more continuation sheets.)

## 9. Major Bibliographical References

### Bibliography

(Cite the books, articles and other sources used in preparing this form on one or more continuation sheets.)

### Previous documentation on file (NPS):

- preliminary determination of individual listing (36 CFR 67) has been requested
- previously listed in the National Register
- previously determined eligible by the National Register
- designated a National Historic Landmark
- recorded by Historic American Buildings Survey

# \_\_\_\_\_

- recorded by Historic American Engineering Record

# \_\_\_\_\_

### Areas of Significance

(Enter categories from instructions)

Community Development and Planning

### Periods of Significance

1916-1947

### Significant Dates

1918

1922

### Significant Person(s)

(Complete if Criterion B is marked above.)

N/A

### Cultural Affiliation

N/A

### Architect/Builder

Ambursen Construction Company, designer

Ambursen Construction Company, builder

### Primary location of additional data:

- State Historic Preservation Office
- Other State Agency
- Federal Agency
- Local Government
- University
- Other

Name of repository:

Oklahoma Historical Society/SHPO

Lake Overholser Dam  
Name of Property

Oklahoma County, Oklahoma  
County/State

**10. Geographical Data**

**Acreage of Property** 5

**UTM References**

(Place additional UTM references on a continuation sheet.)

1. 14 620730 3927540  
Zone Easting Northing

2. 14 621100 3927560  
Zone Easting Northing

3. Zone Easting Northing

4. Zone Easting Northing

[ ] See continuation sheet

**Verbal Boundary Description**

(Describe the boundaries of the property on a continuation sheet.)

**Boundary Justification**

(Explain why the boundaries were selected on a continuation sheet.)

**11. Form Prepared By**

name/title Leslie Dixon, student (edited by Jim Gabbert, architectural historian, OK/SHPO)

organization University of Central Oklahoma date 12/2006

street & number 100 N University Drive telephone \_\_\_\_\_

city or town Edmond state OK zip code 73034

**Additional Documentation**

Submit the following items with the completed form:

**Continuation Sheets**

**Maps**

A **USGS map** (7.5 or 15 minute series) indicating the property's location.

A **Sketch map** for historic districts and properties having large acreage or numerous resources.

**Photographs**

Representative **black and white photographs** of the property.

**Additional Items**

(Check with the SHPO or FPO for any additional items)

**Property Owner**

(Complete this item at the request of SHPO or FPO.)

name City of Oklahoma City (James D. Couch, City Manager)

street & number 200 North Walker Ave. telephone (405) 297-2345

city or town Oklahoma City state OK zip code 73102

**Paperwork Reduction Act Statement:** This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 *et seq.*)

**Estimated Burden Statement:** Public reporting burden for this form is estimated to average 18.1 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Projects (1024-0018), Washington, DC 20503.

**National Register of Historic Places  
Continuation Sheet****United States Department of the Interior  
National Park Service**Lake Overholser Dam  
Oklahoma County, OklahomaSection number 7 Page 1**DESCRIPTION**

Lake Overholser Dam is a reinforced concrete dam across the North Canadian River that impounds a lake of 700+ acres and a bypass channel that once served as the primary water supply for the City of Oklahoma City. The dam was completed in 1918. It is located on the west side of Oklahoma City; Lake Overholser straddles the Oklahoma and Canadian county lines. The dam stretches east/west across the river channel. Its immediate environs are a city park, with manicured lawns, parking areas and a driveway.

The dam is approximately 1,650 feet long and 68 feet high, constructed of reinforced, poured concrete. A brick and tile pump house is located at the east end atop an arched, buttressed spillway, over the bypass channel. The balance of the dam stretches westward. There are four distinct sections of buttresses spillways and a large, solid spillway. A concrete walkway carried by the buttresses covers the entire length of the dam, except at the large spillway. There, due to the lack of buttresses, the walkway is carried by a Pratt through truss.

The east end of the dam is anchored into the bank by a large, concrete wing wall. Two sets of stairs give access to an upper and a lower walkway. The support for the upper stairs has a bronze plaque denoting the various officials and engineers involved in the project. The first span of the dam is wide, between the wing wall and the pump house. The lower walkway is carried from shore to the first buttress, which also marks the first of a series of arched spillway gates and that support the pump house. The walkway carries on to the rest of the dam. The upper walkway, reached by a set of iron stairs, leads to and just beyond the pump house, where a second set of stairs returns to the lower walkway level. This first section is located at the bypass channel. The pump house is situated atop a series of four arched sluiceway openings. It has a side-gabled, tile roof with a small brick chimney on the west end and two round ventilators equidistant on the ridge. The walls are brick; each side elevation has four windows bays with large, steel sash industrial windows. There are 36 rectangular panes, in a 6x6 configuration, in each window. The east and west gable ends each have two windows. The north elevation's west-most window is truncated and a pair of steel slab door allows entrance to the building. On the east wall of the first arched buttress is a bronze plaque that identifies the Ambursen Construction Company as the builder and lists patent numbers for designs used in the dam. Just below the bronze plaque is the cornerstone denoting the day of dedication, April 22, 1918, and acknowledging the Grand Lodge of Masons.

Just west of the pump house section is a solid wall section, consisting of a five-part, open box system with a solid headwall. Beyond that is the first section of gated spillways. There are seven gates, each set between sloping buttresses, and each having a convex sloped wall that terminates approximately halfway down to normal river level. Each sloped wall is supported by a small buttress centered between the main buttresses. Pinned and riveted steel frames anchor the gates.

To the west of this section is another open box wall, this time with three sections. Four more gated spillways are west of this. The large, ungated spillway is next. This section has a spillway sloped wall that extends from the top of the dam all the way to the bottom. The height of the wall equals the height of the gates; it relieves pressure on the dam when flooding is not serious, but still high enough to breach the dam. A Pratt through truss bridge spans the spillway, carrying the walkway. Beyond this spillway

**National Register of Historic Places  
Continuation Sheet****United States Department of the Interior  
National Park Service**Lake Overholser Dam  
Oklahoma County, OklahomaSection number 7 Page 2

are four more standard gated spillways. Just beyond these is the last section of dam, altered in 1924. Here, eight more gated spillways were added. These differ from the original in that the slopewall extends to the bottom of the dam.

The top of the dam is spanned by a walkway. In the late 1990s, the walkway was "upgraded." Historic photographs show pipe rail and lantern-type streetlamps on the south edge of the walkway. In the 1920s and later in the 1930s, when the city raised and reconfigured the dam in response to floods, the form and location of the walkway changed. The 1990s work was meant to bring the dam back into its earliest design intent. New, tubular steel balustrades were added for safety concerns. A series of "period" street lamps was added to the north edge of the walkway. These are black-painted steel posts, while the original 1918 were concrete posts.

At one time, there was a small building located in the middle of the dam that housed equipment to power the gate machinery. This building, identical in style to the existing pump/machinery building, was removed when the dam was raised in the 1930s. The original gate-lifting machinery is exposed along the walkway. Geared iron wheels connected by long axles are located over each floodgate.

The dam reflects its period of significance. It was completed in 1918, but changes over the years were necessary. Twice the dam was raised, first in 1922 and then again in 1934. Other changes were made to the spillways and gates. But the dam as it is today looks much the same as it did in the late 1940s, when Lake Hefner came online and diminished the importance of Lake Overholser as the city's main water supply.

**National Register of Historic Places  
Continuation Sheet****United States Department of the Interior  
National Park Service**Lake Overholser Dam  
Oklahoma County, OklahomaSection number 8 Page 3**SIGNIFICANCE**

The Lake Overholser Dam is eligible for the National Register of Historic Places under Criterion A for its role in community development and planning for the City of Oklahoma City. The explosive growth of the city after its founding in 1889 necessitated a reliable and safe source of potable water. Relying for years on the North Canadian River, city leaders sought a more dependable source of water, one that would carry it through the drier summer months. In addition, city leaders sought to alleviate the damage inflicted by the oft-flooding, shallow river.

In 1918, the city of Oklahoma City, led by Mayor Edward Overholser, completed a reinforced concrete gravity dam across the North Canadian River. The purpose of dam and the lake behind it was to serve as a supply of water for the growing city as well as flood control for the city and surrounding areas. It was one of the city's largest public works projects. Soon after the dam's completion, the lake created was named Lake Overholser in honor of the mayor who championed it. The lake served as the primary water supply for the city until 1947.

The dam constructed across the North Canadian River is classified as a concrete buttress dam.<sup>1</sup> This type of dam is rare in a state where earthen or earthen & gravity dams predominate. It is also the earliest large dam constructed in the state that retains its historic design.

**Background and Significance**

Oklahoma City came into being with the opening of the Unassigned Lands in 1889. The story is well known, of folks on horseback, on mules, on foot, racing across the bare prairie to stake claims on quarter sections of land, or of jumping off rail lines at already-platted town sites to claim favorable town lots. Oklahoma sprang up as a tent city overnight; eventually the tents gave way to rude cabins, prefabricated buildings, and eventually substantial buildings. The new city – a city with a population of over 10,000 within the first week – had for its main water source the North Canadian River. The river, tenuously contained in low banks, was prone to alternatives of flood and drought. Floodwaters swept the low valley; as waters receded, the course of the river often changed. In between floods, the climate of the central plains often robbed the river of nourishing water, leaving a wide channel of sand broken by bare braids of water. The river was always thought of as the primary source for water, but since its inception, the city looked toward ways to improve its reliability.

By 1894, a brick pumping station had been constructed on the North Canadian River just west of South Walker Avenue, approximately a mile from downtown. A fourteen-inch main piped the treated river water into the city. Wells supplemented the river water; many of these were private, serving only the owner or his clients. The city looked to other places, other methods of obtaining water. Schemes for pumping water from the Arbuckle Mountains and the great aquifer there were proposed, as were plans for a similar pipeline from Woodward. These were all rejects due to costs. The North Canadian always came out as the most feasible water source.<sup>2</sup>

<sup>1</sup> Mermel, T. W., ed., Register of Dams in the United States, New York: McGraw Hill Book Company, 1958. Page 150.

<sup>2</sup> "New Water Plan" *The Daily Oklahoman*, 21 December 1910.

**National Register of Historic Places  
Continuation Sheet****United States Department of the Interior  
National Park Service**Lake Overholser Dam  
Oklahoma County, OklahomaSection number 8 Page 4

In 1906, the city began construction of a modern waterworks plant located on the north bank of the North Canadian River, near present-day NW 4th Street and Pennsylvania Avenue. At that time, the river flowed up to that point (later, through improvements to the waterworks plant, the river's course would be cut off south of Reno Avenue, 7 blocks to the south). A year's worth of construction saw the establishment of a modern, sanitary system, drawing water directly from the river, supplemented by a low dam that helped create a ready water supply. The plant drew water from the river using three motor driven pumps and passed it through various stages of filtration and sterilization until it was forced into the main by a pump with a capacity of 10,000,000 gallons every day. The pumps, at the level of the riverbank, would in take the water and force it through a solution of sulfate of iron, and hydrate lime into settling basins. Here, much of the dirt and other suspended materials were removed from the water. From the settling basin, the water was pumped into the filter beds. After having passed through the filter bed, the water was then pumped through the last stage of sterilization, where it was treated with chlorine, and then pumped into two covered wells from which it was taken up by the large pumps that forced the water into the city mains.<sup>3</sup> The original small dam in the river soon proved to be inadequately designed; after a series of small breeches, a new dam was commissioned by the city in 1911. The dam would create a volume of water from the North Canadian River great enough to supply the city, or so the city commissioners thought.<sup>4</sup>

In 1913, engineers Hiram Phillips of St. Louis, J. W. Alford of Chicago, and J. W. Billingly of Houston, investigated a water supply for Oklahoma City. They recommended to the Oklahoma City Commission eight alternatives for increasing the water supply for the city. The most feasible involved the securing of water from the North Canadian River near El Reno, Oklahoma. By securing the water with gravity canal and storing in a reservoir, water would be diverted from the North Canadian River sufficiently above El Reno without contamination from sewage. At that point, silt-settling basins would be constructed to remove all sand and heavy silt. The canal would convey the water twenty-seven miles to a location three miles west of the waterworks plant to the reservoir. The reservoir would cover 688 acres. It would involve the construction of a dam, which would be sixty feet high and 240 feet long. The impounded water could then be diverted through an aqueduct to the waterworks plant. Pumps would not be needed due to the elevation change. The reservoir would have the capacity of 10,200 acre-feet with an average depth of eighteen feet. The engineers estimated the total cost of such project for Oklahoma City would be \$1,525,500. This was not the only recommendation, there were eight others; however, all of the other seven were million dollar projects.<sup>5</sup> However, the project was shelved due to a lack of funding and was not promoted again until Mayor Edward Overholser championed it in 1916.

Between 1911 and 1915, city administrators had to fight a battle with the water situation, only to be beat by taxpayers' objections to every dam proposition. Everybody acknowledged that Oklahoma City needed a big town water supply before it could become a metropolis or even before it could aspire to a population of 200,000 but their admissions and conversation did not express their tax receipts. On April

<sup>3</sup> "City Water Works Place of Interest to Visitors." *The Daily Oklahoman*. July 19, 1914.

<sup>4</sup> "Substantial Dam to be Erected: City Commissioners Definitely Decide on Immediate Action." *The Daily Oklahoman*. July 06, 1911, p.5.

<sup>5</sup> "Reservoir Water System Proposed: Engineers Recommend Securing City Supply From Canadian River Point near El Reno." *The Daily Oklahoman*. February 20, 1913, 5.

# National Register of Historic Places Continuation Sheet

# United States Department of the Interior National Park Service

Lake Overholser Dam  
Oklahoma County, Oklahoma

Section number 8 Page 5

18, 1916, an article in *The Daily Oklahoman* stated that Mayor of Oklahoma City, Ed Overholser, made a strong plea for a proposed \$1,500,000-bond issue at the Electric Lunch League in the Lee-Huckins Hotel. He stated, "Now we have come to the point where we must have an adequate water supply and settle for all time the water problem which has faced Oklahoma City for several years. If this proposed bond issues carries, gentlemen, 25,000 people will be added to Oklahoma City within two years. If the plans we have under consideration now are carried out, graft in connection with the erection of the waterworks will be impossible, so far as we are able to prevent it. The taxpayers of the city would receive 100 cents for every dollar they spent."<sup>6</sup> On May 20, 1916, the city passed a \$1,500,000 bond for the building of the reservoir and dam.<sup>7</sup> The city would use the dam as a water supply, for flood control, and the water could be utilized for irrigation purposes.<sup>8</sup>

The contracts were to construct two important sections of the city's new watering system. The two sections were the dam and a smaller spillway dam, known as the emergency dam. The new dam site was on the river approximately seven and half miles west of the city center. The spillway dam constructed about 10,000 feet above the main dam.<sup>9</sup> The spillway dam functions to slow the speed of the stream and to enhance the effectiveness of the settling ponds above the reservoir. The contract was let to the Ambursen Construction Company of New York.<sup>10</sup>

Unfortunately, there was a dispute over the dam and reservoir contracts. Taxpayers sued the board of commissioners. The injunction would hold back the board of commissioners from contracting with the Ambursen Construction Company for building of the main and subsidiary dams of the waterworks system. Frank Swanda, W.H. Butcher, and P.L. Stillwater brought the suit as taxpayers. They based the suit on a claim that the commissioners were trying to deceive the taxpayers by permitting the contract to the Ambursen Company for \$509,800, while a contractor of the name J.A. Holmboe bid \$476,000. H.A. Pressey, consulting engineer, Guy McClure, city engineer, and S.W. Stewart, representative of the Ambursen Company, all testified in court that the Ambursen Company reported to the city engineers several times before the conclusion of the plans for the reinforced concrete dam. The Ambursen Construction Company held the patent of that kind of construction, and it would require a royalty if another concern did the work.<sup>11</sup> The lawsuit was dismissed and construction began in 1917.

In designing and bidding on the dam project, Ambursen Construction Company considered every possible type, such as solid masonry, reinforced concrete, earth-fill, rock-fill, and wood. The solid masonry dam and the rock-fill dam were precluded because of scarcity of rock. They would have to ship all materials on trains. The expense would have been enormous. An earth-fill dam was designed for the dam, but was deemed not practical, on account of the wartime congestion of freight and scarcity of cars. Therefore, the engineers decided on reinforced concrete dam.<sup>12</sup>

<sup>6</sup> "City Need Plan, Cries Mayor." *The Daily Oklahoman*. April 18, 1916, 9.

<sup>7</sup> Bob L. Blackburn. *Heart of the Promised Land: Oklahoma County*. California: Windsor Publication, 1982, 106.

<sup>8</sup> "Water From Oklahoma City's New Municipal Reservoir May be Used by Truck Growers for Irrigation Purposes." *The Daily Oklahoman*. September 22, 1918, p.

<sup>9</sup> "Reservoir Dam Contract Let to Eastern Concern." *The Daily Oklahoman*. December 8, 1916, 1

<sup>10</sup> *Ibid*, 9.

<sup>11</sup> "Suit Enjoins Contract on Dam." *The Daily Oklahoman*. December 12, 1916, 5.

<sup>12</sup> "Gigantic Problems Met and Solved in Construction of City's Reservoir by Corps of Highly Skilled

# National Register of Historic Places Continuation Sheet

United States Department of the Interior  
National Park Service

Lake Overholser Dam  
Oklahoma County, Oklahoma

Section number 8 Page 6

The first order of business for the Ambursen Construction Company was to construct cofferdams, which would divert the flow of the river during the period of construction. Excavation to bedrock was begun in the bed of the river; the stream was diverted through a temporary opening left in the construction. The contractor used local materials whenever possible. At a quarry east of town, the rocks for the concrete were crushed and the gravel was transported to the site on a spur constructed by the Rock Island railroad. A battery of concrete mixers converted the sand, stone, and cement into plastic concrete. In addition, wire rope cableways were extended across the river at the site from bank to bank and would be used to carry materials to different parts of the construction. The cableways were supplemented by derricks and hoisting engines.<sup>13</sup>

The dam's dimensions were 1,100 feet long and fifty-four feet high (it was raised early in the 1920s by four feet). The weight of the dam and pressure of the water are carried on a series of reinforced concrete supports, spaced at eighteen-foot centers and about fifty feet high. The sloping, up-stream end of these supports are built to reinforce the deck, or face of the dam, which extends from support to support and from a point well within the shale of the foundation to the top of the dam. The deck prevents the water passing through or under the dam. At the dam site, the valley was filled with silt and sand deposited in former times by the river. In order to provide a firm foundation and prevent percolation under the dam, the contractor excavated through material to a firm foundation into the shale. The concrete support walls were carried into the shale so that there could be no chance of settlement or slipping of the dam and the toe wall was carried into the shale to prevent any seepage under the dam.<sup>14</sup>

The dam is really two dams – one that impounds the reservoir and one that regulates the flow of the bypass channel. The bypass channel is located on the east edge of the reservoir; water flow into the channel and the reservoir is regulated first well upstream where the initial divide takes place between the river and the bypass, and then at the head of the reservoir, just north of 39th Street, where the diverting dam is located. The main dam structure (the nominated property) regulates the flow of water out of both the bypass and the reservoir. The water from the river would be diverted from its natural channel and from the reservoir. By diverting dam two miles above the main dam and the crossing of the El Reno interurban railway into the bypass, which had been built of such capacity and slope that it will carry the flow of the river at proper velocity both at the time of minimum flow and of the greatest flood. The bypass conducts the water two mile south, by the main lower dam and back into the old river channel below reservoir. No water from the river would reach the reservoir except through the gates, there were electrically operated and controlled by the city authorities. The reservoir two miles long and two miles wide at its widest point, and has a capacity of 7,000,000,000 gallons and is formed by the main dam, constructed at the narrowest point of the river valley and storing the water to be used as required by the city.<sup>15</sup>

Near the western end of the dam, a spillway was provided to carry excessive floodwater that might reach the dam via the reservoir. At the foot of the dam are gates used to empty the reservoir. Gates and

Engineers." *The Daily Oklahoman*. April 21, 1918, 2.

<sup>13</sup> "Process of Going at the Building of Reservoir Dam Is Outlined by Contractors." *The Daily Oklahoman*. December 8, 1916, 11.

<sup>14</sup> "Gigantic Problems met and Solved in Construction of City's Reservoir by Corps of Highly Skilled Engineers." *The Daily Oklahoman*, April 21, 1918, 2.

<sup>15</sup> "Fish Ladder for City Dam." *The Daily Oklahoman*. April 21, 1918, 4.

# National Register of Historic Places Continuation Sheet

# United States Department of the Interior National Park Service

Lake Overholser Dam  
Oklahoma County, Oklahoma

Section number 8 Page 7

spillways are provided at the lower end of the bypass directly through the dam. The diverting dam forms a sedimentation basin of a capacity of 3,500,000 gallons, which serves for preliminary sedimentation of the river water, preventing precipitation in the bypass. Manipulation of the gates at the lower end of the bypass controls stream flow, keeping the bypass free from sediment.<sup>16</sup>

The water that is conducted to the city is drawn into intake wells through any of three gates located at different elevations, giving access to the best quality of water, depending on conditions. The quality of water varies at different times of the year, depending upon the atmospheric temperature and the gates that would allow the city to take advantage of the varying conditions. From the intake well, the water would flow by gravity to the city through a forty-two-inch reinforced concrete conduit having a capacity of 20,900,000 gallons per day. Upon the arrival at the city, the water would be processed and purified at the city's waterworks plant.<sup>17</sup>

On April 23, 1918, the celebration marking the official opening of the dam was held. The Grand Lodge of Oklahoma performed the ceremonial laying the cornerstone. Speeches by dignitaries marked the day, in particular Mayor Edward Overholser remarked: "I am proud to be in any way connected with the celebration of the dedication of this gigantic project, which represents the solving of the water problem of this city for all time."<sup>18</sup> The day's events culminated in a marriage between Harry C. Hilton and Lois Noffsinger.<sup>19</sup>

The next day, the *Daily Oklahoman* expressed their tribute to Mayor Overholser. The editorial discussed the various suggestions for the new lake's name. One suggestion thought it fitting to use a name of Indian derivation; Mayor Overholser suggested that the city should honor the first Oklahoma City boy who fell in France by giving his name to the lake. In discussing the events of the dedication ceremony, the editors stated: "(It was) ... we believe, a deserved tribute to Mayor Overholser's work in connection with the waterworks dam. The services to the city of Mayor Overholser's father, Henry Overholser, were gratefully remembered, and suggestions were made that it would be an act of fine appearance on the city's part to name the waterworks lake 'Lake Overholser'."<sup>20</sup> And so, the new lake was named to honor the two men, father and son, who as citizens and mayors of the city, shepherded it into unprecedented growth.

Recreation was a by-product of the actual purpose of the construction of the lake. In 1917, Lakeside Country Club presented a petition requesting the city commissioners allow their members to fish, boat, hunt, and have bathing privilege in the lake. Mayor Overholser and many members of the commission called it scandalous. They decreed that the water, which was their drinking water, should be kept clean. Therefore, the commission denied the request.<sup>21</sup> It would not be until the 1930s that the city would allow people to fish, boat and swim in the lake. In May of 1930, Lake Overholser hosted the first

<sup>16</sup> *The Daily Oklahoman*, April 21, 1918.

<sup>17</sup> Ibid.

<sup>18</sup> "About Ten Thousand See Dedication of City's Great Dam," *The Daily Oklahoman*. April 23, 1918,

1.

<sup>19</sup> "Features of Day." *The Daily Oklahoman*. April 23, 1918, 1.

<sup>20</sup> "The Name of the Lake." *The Daily Oklahoman*. April 24, 1918, 6.

<sup>21</sup> "Club Asks For Bathing in Reservoir." *The Daily Oklahoman*. April 27, 1917, 9.

**National Register of Historic Places  
Continuation Sheet****United States Department of the Interior  
National Park Service**Lake Overholser Dam  
Oklahoma County, OklahomaSection number 8 Page 8

Outboard races.<sup>22</sup> In addition, in 1930, an article in the *Daily Oklahoman* promoted picnicking at the lake. Throughout the 1930s and 1950s, Lake Overholser was host to many boat races, both motor and sail. Birdwatchers flock to the lake for its wide variety of avian occupants.

Lake Overholser was a boon to growth in the city, but it was not the 'the solving of the water problem of this city for all time.' True, it provided a ready source of water, but the 1920s saw the discovery of the Oklahoma City Oil Field and explosive growth. The new reservoir, thought sufficient for all future growth proved inadequate on many levels. First, the construction of the dam left a few flaws – the east bank washed out during a heavy rain and flood stage within four years of its construction. In 1922 the east bank was repaired using concrete to better anchor the dam and to prevent the bank from washing away. In the fall of 1923, another large flood caused damage to the bank on the west side to erode. An engineering study demonstrated that an increase in the number of floodgates would have alleviated pressure on the earthen banks. A contract was let to the Callahan Construction Company to rework the west end of the dam, adding more flood control gates, effectively doubling the original number.<sup>23</sup>

Even with improvements to the rollover dam at the north end, the lake was prone to silting; the silting basins upstream could not handle the heavy flow during the rainy season. As such, the lake itself lost capacity each year. The dam also worsened flooding upstream; farmers in the Yukon and El Reno areas continually complained about the loss of their valuable bottomland. By the late 1930s, the problem was acute. City engineers recommended maintenance of the silting basin as part of a \$2,750,000 program of water and sewage plant improvements. The desilting process would prevent the silting of the reservoir.<sup>24</sup>

Lake Overholser served as the primary water supply for the City of Oklahoma City for nearly twenty-nine years, until a new reservoir, Lake Hefner, was opened. Planned in the 1930s as a project that would relieve the stress on Lake Overholser, Lake Hefner is a 2580-acre impoundment completed in 1947. The water for Lake Hefner was bought from the North Canadian River and from the Canton Reservoir in Blaine County. It was originally known as the Bluff Creek Water Supply Project.<sup>25</sup> After Lake Hefner, the city also began to draw water from other sources – Lake Stanley Draper, Lake Arcadia, and Lake Atoka. Lake Overholser receded in importance.

**Conclusion**

The Lake Overholser Dam is eligible for the National Register of Historic Places under Criterion A for its role in community development and planning for the City of Oklahoma City. The explosive growth of the city after its founding in 1889 necessitated a reliable and safe source of potable water. Relying for years on the North Canadian River, city leaders sought a more dependable source of water, one that would carry it through the drier summer months. In addition, city leaders sought to alleviate the damage inflicted by the oft-flooding, shallow river.

<sup>22</sup> "First Outboard Races at Lake Overholser Today." *The Daily Oklahoman*. May 11, 1930, 50.

<sup>23</sup> "City Dam Contract Goes For \$793,675," *The Daily Oklahoman*. March 21, 1924. 10.

<sup>24</sup> "Funds Needed For Dredging to Save the Lake." *The Daily Oklahoman*. November 14, 1937. 32.

<sup>25</sup> Jimmie Pigg, Mark S. Coleman, and Judy Duncan. "An Ecological Investigation of the Ichthyofauna of the North Canadian River in Oklahoma: 1976-1989. *Chronicles of Oklahoma*. June 1992, 21.

**National Register of Historic Places  
Continuation Sheet****United States Department of the Interior  
National Park Service**

Lake Overholser Dam  
Oklahoma County, Oklahoma

Section number 8 Page 9

---

In 1918, the city of Oklahoma City, led by Mayor Edward Overholser, completed a reinforced concrete gravity dam across the North Canadian River. The purpose of dam and the lake behind it was to serve as a supply of water for the growing city as well as flood control for the city and surrounding areas. It was one of the city's largest public works projects. Soon after the dam's completion, the lake created was named Lake Overholser in honor of the mayor who championed it. The lake served as the primary water supply for the city until 1947.

As a concrete buttress type dam, the Lake Overholser dam remains the largest, oldest, and most intact buttress type dam in the state. Completed in 1918, it is younger than a buttress dam that impounded Lake Lawtonka in 1911, but that dam was later reconstructed in the 1930s as a masonry gravity dam of considerably different size. The Lake Ardmore dam, constructed in 1924, is the only other buttress type dam listed in the Register of Dams in the United States published in 1958. This dam, based on field survey, does not exist.

**National Register of Historic Places  
Continuation Sheet****United States Department of the Interior  
National Park Service**Lake Overholser Dam  
Oklahoma County, OklahomaSection number 9 Page 10

---

**BIBLIOGRAPHY**

*Daily Oklahoman*. Oklahoma City. 1910-1937.

Hanna, Frank W., Kennedy, Robert C. The Design of Dams. New York: McGraw Hill Book Company. 1931

Mermel, T. W., ed. Register of Dams in the United States. New York: McGraw-Hill book Company. 1958.

Pigg, J., M. S. Coleman, J. Duncan. "An Ecological Investigation of the Ichthyofauna of the North Canadian River in Oklahoma: 1976- 1989." Proceedings of the Oklahoma Academy of Science, 1992. accessed at: [digital.library.okstate.edu](http://digital.library.okstate.edu)

**National Register of Historic Places  
Continuation Sheet****United States Department of the Interior  
National Park Service**Lake Overholser Dam  
Oklahoma County, OklahomaSection number 10 Page 11

---

**GEOGRAPHICAL DATA****VERBAL BOUNDARY DESCRIPTION**

The nominated property includes the dam and spillway. It is located nearly directly on the west half-section line of Section 30, T12N, R4W of the Indian Meridian. The dam and spillway, from bank to bank and extending 50' north and 50' south of the dam is included.

**BOUNDARY JUSTIFICATION**

This would include the entirety of the dam, its approaches, and the spillways.



Lake Overholser Dam

