WELCOME TO TONIGHT'S WORKSHOP

U. S. Army Corps of Engineers, Tulsa District

Optima Lake

North Canadian River

Texas County, Oklahoma

Section 216

Initial Appraisal Study

Public Workshop

Study Overview

Study Overview

- Conducted under Section 216 of the Flood Control Act of 1970, as amended.
- Funding for Initial Appraisal Study is part of Tulsa District's operation & maintenance budget for fiscal year 2010.
- Initial Appraisal Study is conducted at 100 percent Federal cost.
- The Corps has the authority to conduct Initial Appraisals on completed projects to determine if physical or economic conditions have changed significantly enough to warrant further evaluation of potential changes in structures or project operation.

Study Overview

- Initial Appraisal Study Area:
  - The entire Optima Lake project – which includes:

    - ✓ Dam
    - ✓ Outlet Works
    - ✓ Lake
    - ✓ Stilling basin
    - ✓ Uncontrolled spillway
    - ✓ Park lands

Study Overview

- Initial Appraisal will evaluate all aspects of the project's authorized uses; present and future (flood control, water supply, recreation, and fish and wildlife).
- Initial Appraisal will determine the need for conducting or not conducting further studies (reconnaissance & feasibility).
- Initial Appraisal report will include a broad array of alternatives which could be implemented at Optima.

Study Overview

- Alternatives will include changes in the way project lands are managed and deauthorization of the project.
- Initial Appraisal report will be sent to Congress.
- Timeline for Initial Appraisal study – Completion by September 2010.

Study Process Overview

INITIAL APPRAISAL: Will determine if a reconnaissance study is warranted; will evaluate economic, environmental, and engineering issues, and public involvement results. (100% Federally funded)

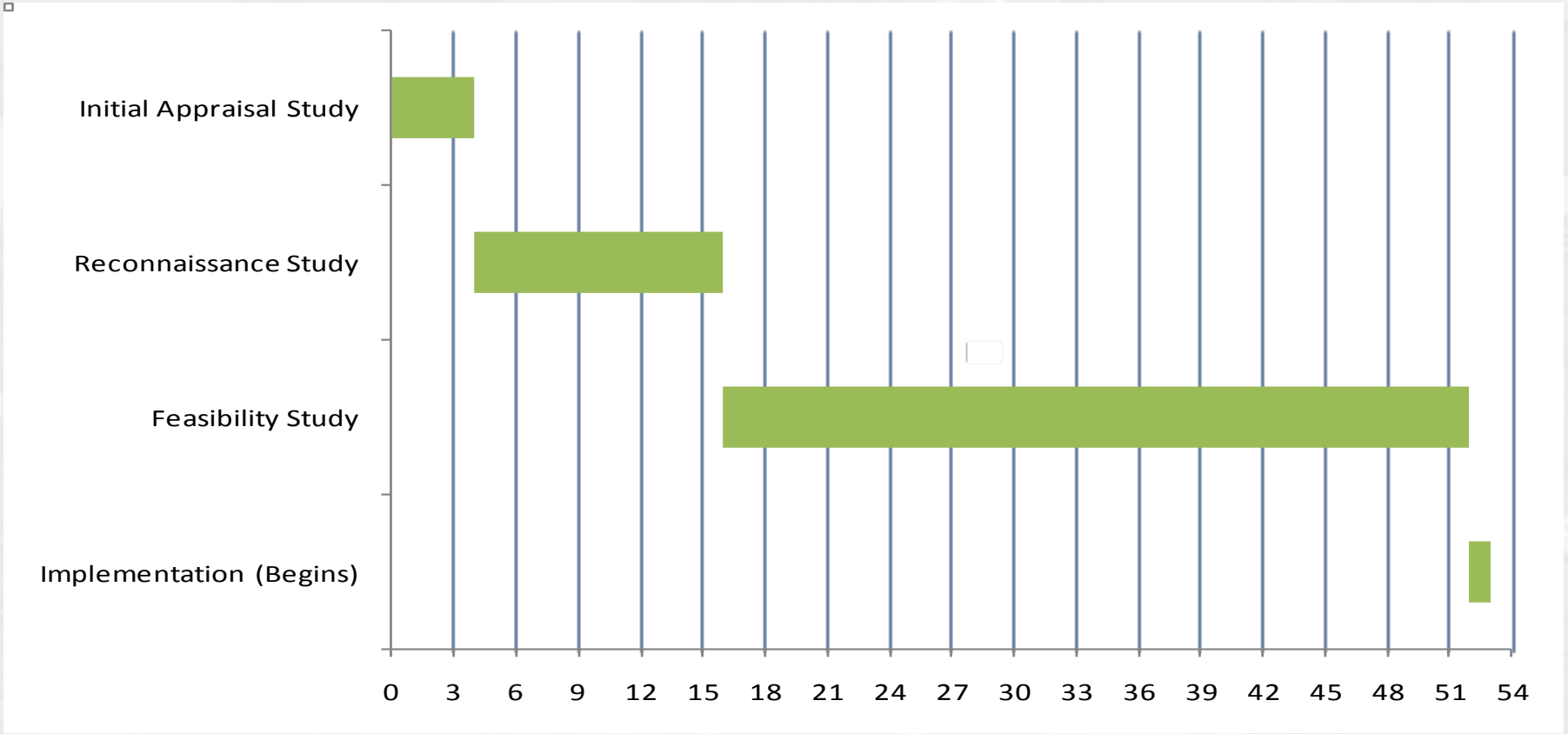
RECONNAISSANCE STUDY: If recommended and funded, will identify and evaluate potential alternatives and will identify non-Federal Feasibility study sponsor(s). (100% Federally funded)

FEASIBILITY STUDY: If recommended and funded, will evaluate alternatives in detail and, if findings warrant it, make recommendations to Congress regarding operational changes to the project.
(Cost Shared: 50% Federal – 50% Non-Federal)

IMPLEMENTATION: If recommended and authorized and funded by Congress, will be done in partnership with a non-Federal sponsor.
(Cost shared by project purpose)

Section 216 Initial Appraisal Study

Study Schedule Overview



Authorized Project Overview

Authorized Project Overview

- Authorized by Flood Control Act of 1936 which was amended by Flood Control Act of 1950.
- Project Purposes: Flood Control, Water Supply, Recreation, and Fish and Wildlife.
- Construction began March 1966 and completed in October 1978.
- Optima project lands total 13,734 acres of which 1,270 acres are for project operations, 68 acres are for recreation (park areas) and 12,396 acres are for wildlife management.
- Dam is a rolled earth-filled embankment with a total crest length of 16,900 feet and a maximum height of 120 feet.

Authorized Project Overview

- Has a 1500 foot uncontrolled saddle spillway.
- Flood control storage is 229,500 acre-feet (equivalent to having 500 square miles with water 1 foot deep).
- Conservation storage is 117,650 acre-feet of which 76,200 acre-feet are for water supply.
- Water supply estimated to deliver 10 million gallons per day.
- 5 recreational areas (Parks) – Hardesty Park (545 acres), Hooker Point (862 acres), Overlook Park (77 acres), Prairie Dog Point (235 acres) and Angler Point (175 acres). All parks except Angler Point have been converted to wildlife management.

Authorized Project Overview

- Recreation facilities (Parks) contain boat ramps, picnic facilities, camp sites and bathrooms.
- Fish and wildlife – 2 areas set aside for wildlife:

  - Optima National Wildlife Refuge – 4,334 acres managed by the U.S. Fish & Wildlife Service.

  - State Wildlife Management Area – 8,062 acres managed by Oklahoma Department of Wildlife Conservation for public hunting.

Section 216 Initial Appraisal Study
Authorized Project Overview

OPTIMA LAKE
PERTINENT DATA

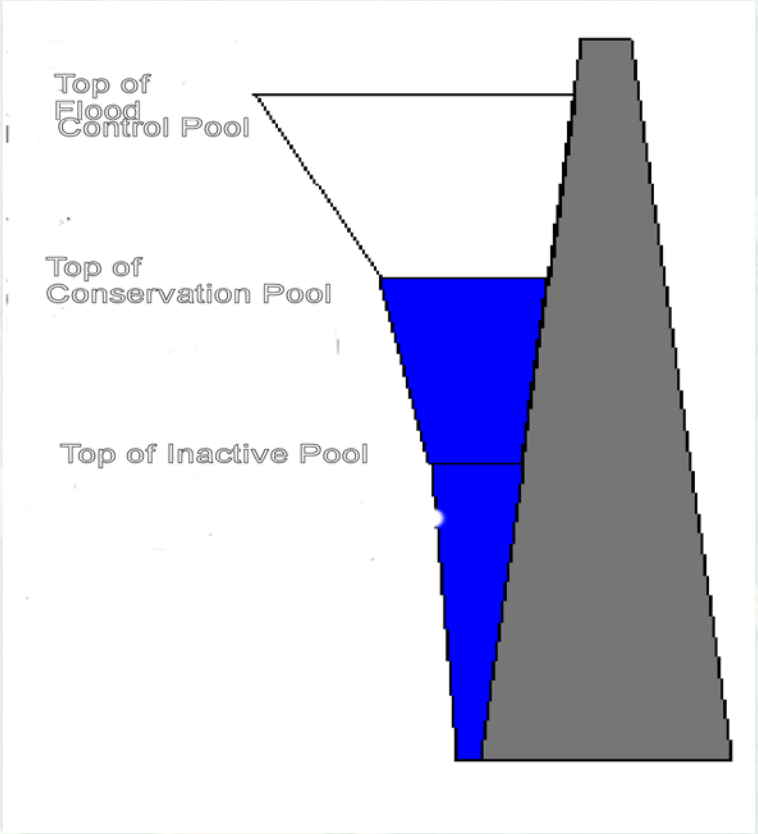
Feature	Elevation (feet)	Area (acres)	Capacity (acre-feet)	Equivalent Runoff(1) (inches)
Top of Dam	2821.0	-	-	-
Maximum Pool	2814.2	14,800	618,500	4.95
Top of Flood Pool	2779.0	7,640	229,500	1.84
Flood Control Storage	2763.5-2779.0	-	100,500	0.80
Top of Conservation Pool	2763.5 (2)	5,340	129,000	1.03
Conservation Storage	2726.0-2763.5	-	117,650	0.94
Top of Inactive Pool	2726.0	1,340	11,350	0.09

(1) From the 2,341 square miles of contributing drainage area above the dam site. The total drainage area is 5,029 square miles.
(2) Includes 76,200 acre-feet for water supply.
(3) Conservation pool was never filled. Maximum lake level was 2722.90 on May 31, 1980.

Existing Conditions

Existing Conditions at Optima Lake

- Flood Control Pool - currently empty. This pool has never filled during the life of this project. Benefits from flood control are minimal.
- Conservation Pool - currently empty. This pool also has never filled during the life of this project. The lake and water supply feature have not been used to date.
- Inactive Pool - contains some water, but is not full. This pool has never been totally filled.



Existing Conditions at Optima Lake

- Park Areas - While the project has provided recreation opportunities for the region, the recreation areas have not been fully utilized due to the lack of water in the lake. Limited funding for maintenance has resulted in deteriorating facilities and fire damage has further worsened the condition of recreation facilities at the project. Damaged features in the recreation areas are now being demolished and removed under contract.

Existing Conditions at Optima Lake

- Project Facilities (dam, outlet works and uncontrolled spillway) - are in good working order. These facilities are inspected annually; every 5th year the project receives a more detailed periodic inspection. Personnel from Canton Lake oversee the project throughout the year.
- Road (across dam) - Currently, the road and guardrail are in need of repair. The road has low traffic usage of an estimated 50 to 75 vehicles per day and is currently under contract to be closed.

Future Conditions

Future Conditions at Optima Lake

- Future rainfall and runoff conditions upstream of the dam are not projected to change significantly in the near future, therefore, inflow into the project is not projected to change significantly. The budget to operate the project for the flood control and conservation pools will remain the same as it currently is with only slight increases for inflation.
- Flood Control Pool - will likely continue to be empty. Benefits from flood control will only be minimal.
- Conservation Pool - will likely remain empty. There will not be any beneficial use of the lake or water supply feature of the project.
- Inactive Pool - will continue to contain some water, but will likely not be full.

Future Conditions at Optima Lake

- Park Areas - These areas will continue to be less than fully utilized. Based on current budget and future budget forecast, funds will not be available for up keep or improvement of the facilities. Picnic areas and boat ramps conditions will continue to decline. Visitation at the park areas will be well below the expected totals.

Future Conditions at Optima Lake

- Project Facilities (dam, outlet works and uncontrolled spillway) - should remain in good working condition. Uncertainty of future budget for the project could change the conditions of the facilities. These facilities will continue to have annual and periodic inspections. The periodic inspection is a more detailed inspection.
- Road (across dam) - The road and guardrail will continue to need repair. The condition of the road and guardrail will deteriorate. The safety of motor vehicles crossing the dam will become a greater concern.

Problems and Opportunities

Problems and Opportunities

- Flood control benefits from this project have never been fully realized.
- Water supply has not been available to the surrounding communities as intended.
- Visitors to the lake are less than expected.
- Boating on the lake is unusable.
- Road across dam is unsafe.
- Land use of the surrounding area has changed.
- Budget does not allow maintenance of the park areas.
- Land offers the public recreational opportunities such as hunting and camping.

Potential Alternatives

Potential Alternatives

- "No Action" – Do nothing. This alternative will allow everything to continue into the future as it is today with only natural changes to the project, but no structural or land use changes. This alternative will be used as a baseline to measure the other alternatives against.
- Pipe effluent from new Guymon wastewater treatment plant to supply water to Optima.
- Lease Corps lands to city, county, state or other Federal agency.
- Corps continue to maintain dam, outlet works, emergency spillway, and park areas.

Potential Alternatives

- Sell Corps properties to the public (individuals, non-government organizations, local or state governments).

- Congress deauthorizes project and decommissions all structures.

Public Involvement

Public Involvement - Workshop Purpose

- Allow participation of Federal, State, local agencies, Native American tribes and interested parties.
- Helps determine the issues.
- Allows all attendees to express their views and concerns.
- Solicits comments and questions on study area problems, alternatives and issues.

Public Involvement – Workshop Purpose

- Encourage Public Involvement: Two-Way Communication.
- Overall Purpose:

  Listening and Informing.

Public Involvement – Public Notices

- Federal, state, local agencies and public notified of workshop by mail.
- Additional notices of workshop made by:
  - Newspaper Ads.
  - Press releases to local and area radio stations and newspapers.
  - Corps of Engineers website.

Public Involvement – Questions and Comments

- Your views are important.
- Comment/Question forms available here.
- Take a comment sheet home and complete at your convenience.
- Postage-paid envelopes available at this table.

Public Involvement – Mailing List

- List to keep the public informed; **It will not** be used for any other purpose.
- Sign-in sheet at Welcome Table will be used to add interested individuals to the mailing list.

Public Involvement – More Information?

- Call or Write Anytime! (See any representative).
- See Web Site: www.swt.usace.army.mil
- Study Manager:

  ATTN: Rick Thomas (CESWT-PE-P)

  Tulsa District, U.S. Army Corps of Engineers

  1645 South 101st East Avenue

  Tulsa, OK 74128

  Phone: (918) 669-7022

  Email: Richard.H.Thomas@usace.army.mil

Thank You!!!

Your participation is essential.