

RECLAMATION

Managing Water in the West

Captain Tom Dam

Safety of Dams Project

**Scoping
Information and
Opportunity to
Comment**



**U.S. Department of the Interior
Bureau of Reclamation
Phoenix Area Office
Phoenix, Arizona**

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Introduction.

The Bureau of Reclamation (Reclamation), in cooperation with the Bureau of Indian Affairs (BIA) and the Navajo Nation Department of Water Resources, is preparing an Environmental Assessment (EA) on a proposal to correct Safety of Dams (SOD) deficiencies at Captain Tom Dam on the Navajo Indian Reservation in San Juan County, New Mexico. Construction on the project is scheduled to begin in 2009.

The purpose of this scoping notice is to inform interested and affected parties of the pending action and to solicit comments on the potential environmental impacts of the proposal.

Background.

Captain Tom Dam is located in the Newcomb Chapter of the Navajo Nation approximately 55 miles north of Gallup and 2.4 miles west of Newcomb, New Mexico (Figure 1). The dam was completed in 1937 to provide irrigation storage and water for livestock. Features of the dam include an earth-fill embankment with a structural height of 28 feet and crest length of 2,020 feet at elevation 5,670, and an outlet works that discharges into a concrete-lined irrigation canal. Captain Tom Reservoir is an off-stream impoundment of Captain Tom Wash and formerly To-dil-hil Wash. Under normal operating conditions, the reservoir has a maximum storage capacity of 1,197 acre-feet (surface area of 190 acres) at the spillway crest elevation of 5,668.1 feet.

The area encompassing the Captain Tom Reservoir consists primarily of undeveloped desertscrub and open rangeland used for livestock grazing. Approximately 700 acres of fallow and active farmland occur on allotted land approximately ¼-mile southeast of the dam. Irrigation water is supplied to these fields through a concrete-lined ditch from Captain Tom Dam and by local diversions of Captain Tom and To-dil-hil washes.

Captain Tom Reservoir is currently drained of all water because of concerns regarding potential internal erosion of embankment material into a partly collapsed section of the outlet works pipe. Continued operation of the dam without corrective action could lead to catastrophic failure of the embankment, jeopardizing the safety and welfare of downstream residents. The reservoir will remain empty until safety deficiencies are corrected.

Purpose and Need.

The purpose of the proposed project is to correct safety deficiencies associated with Captain Tom Dam. The action is needed to restore operation of Captain Tom Dam for irrigation storage and livestock watering.

Verified SOD deficiencies that require corrective action include the following:

- Lack of adequate erosion protection on the upstream embankment,
- Inadequate freeboard during normal operating conditions,
- Inadequate reservoir evacuation capacity,
- Liquefaction of the dam and foundation soils,
- Seepage and internal erosion associated with a collapsed outlet works, and
- Seepage and internal erosion of the embankment.

Project Alternatives.

The BIA and Reclamation, working in conjunction with the Navajo Nation SOD Program, are considering the following actions:

- Alternative A (Preferred Action). Remove the existing dam and construct a new dam centered along an alignment approximately 600-feet downstream (Figure 2).
- Alternative B. Construct a stability berm on the downstream embankment of the existing dam and install a new outlet works pipe, intake structure, and discharge structure with stilling basin.
- Alternative C. Remove and replace the dam in its existing location.
- No Action. Take no action to repair the dam. Without suitable corrective action, existing SOD deficiencies will persist, and no water could be stored in the reservoir.

Preliminary Issues.

In accordance with the National Environmental Policy Act (NEPA) of 1969, Reclamation will prepare an EA to evaluate the significance of environmental impacts that could result from implementation of the proposed project and to assist the agencies in the planning and decision-making process.

Scoping is the formal early coordination process for determining the scope of issues to be addressed in the EA and for identifying key issues related to the effect of the proposed project on the existing environment. Public input during this initial scoping process will help us focus the environmental analysis on relevant issues.

We anticipate the following issues will be addressed in the EA:

- effects to biological resources, including threatened and endangered species;
- effects to cultural resources;
- effects to water resources, including irrigation and livestock water supply;
- effects to land use;
- effects to air quality.

Decision to be Made.

Reclamation is the lead Federal agency responsible for preparing the EA, and the Navajo Nation Department of Water Resources (SOD Program) and BIA are cooperating agencies. If Reclamation determines that the effects of the proposed action are not significant, it will prepare a Finding of No Significant Impact (FONSI). The FONSI would allow the agencies to proceed with the project without preparation of an Environmental Impact Statement.

Public Input Needed.

Reclamation and the cooperating agencies would like to give the interested public an opportunity to comment on the proposed project. The agencies will then identify key issues and mitigation related to the action that should be addressed in the EA.

For more information, or to receive a copy of the EA when it becomes available, please contact Mr. John McGlothlen at the address below, or by calling 623-773-6256 (email: jwmcglothlen@lc.usbr.gov).

Written comments may be submitted electronically, faxed to 623-773-6486, or mailed to the following address no later than June 15, 2007.

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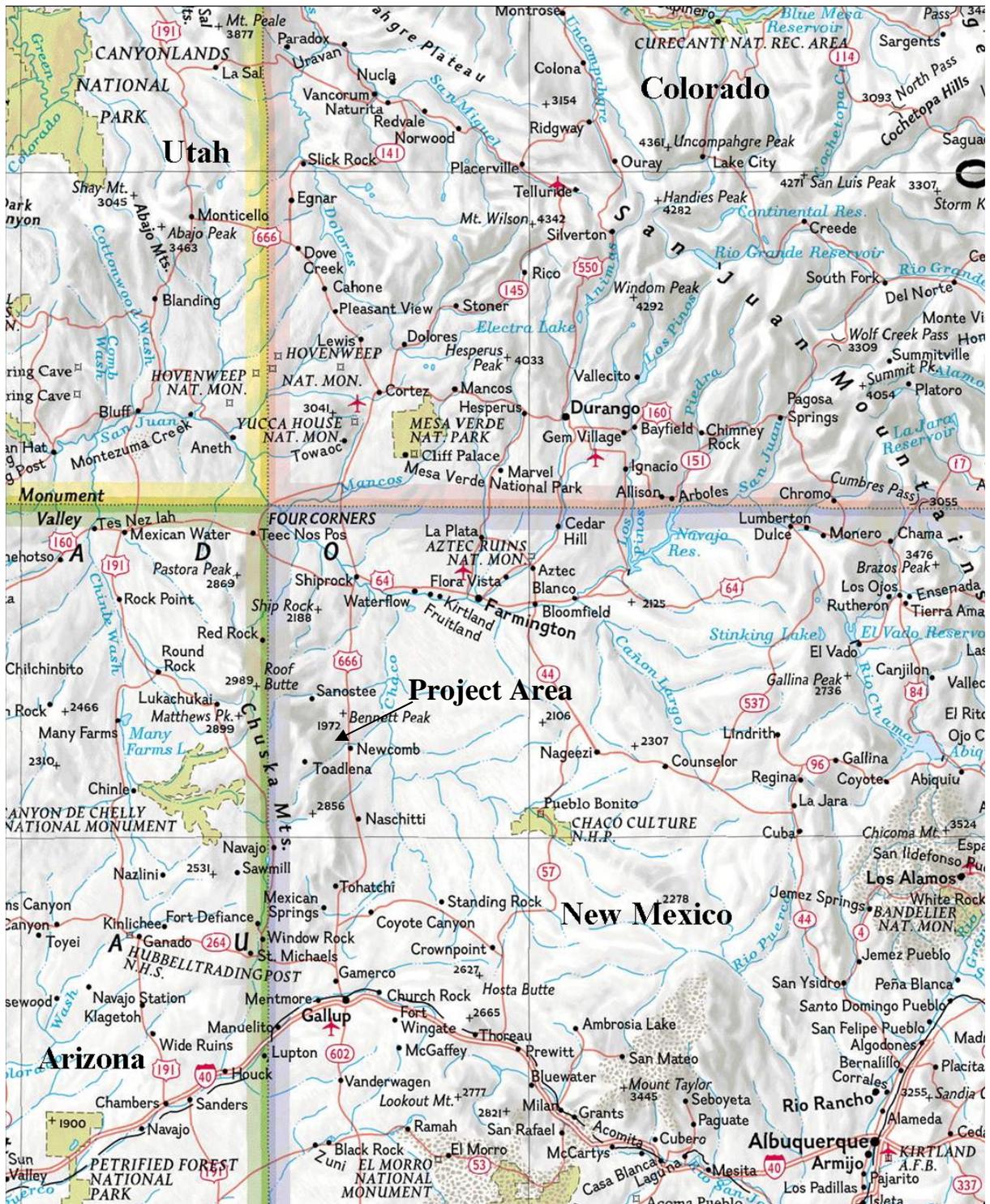


Figure 1. Project location map.

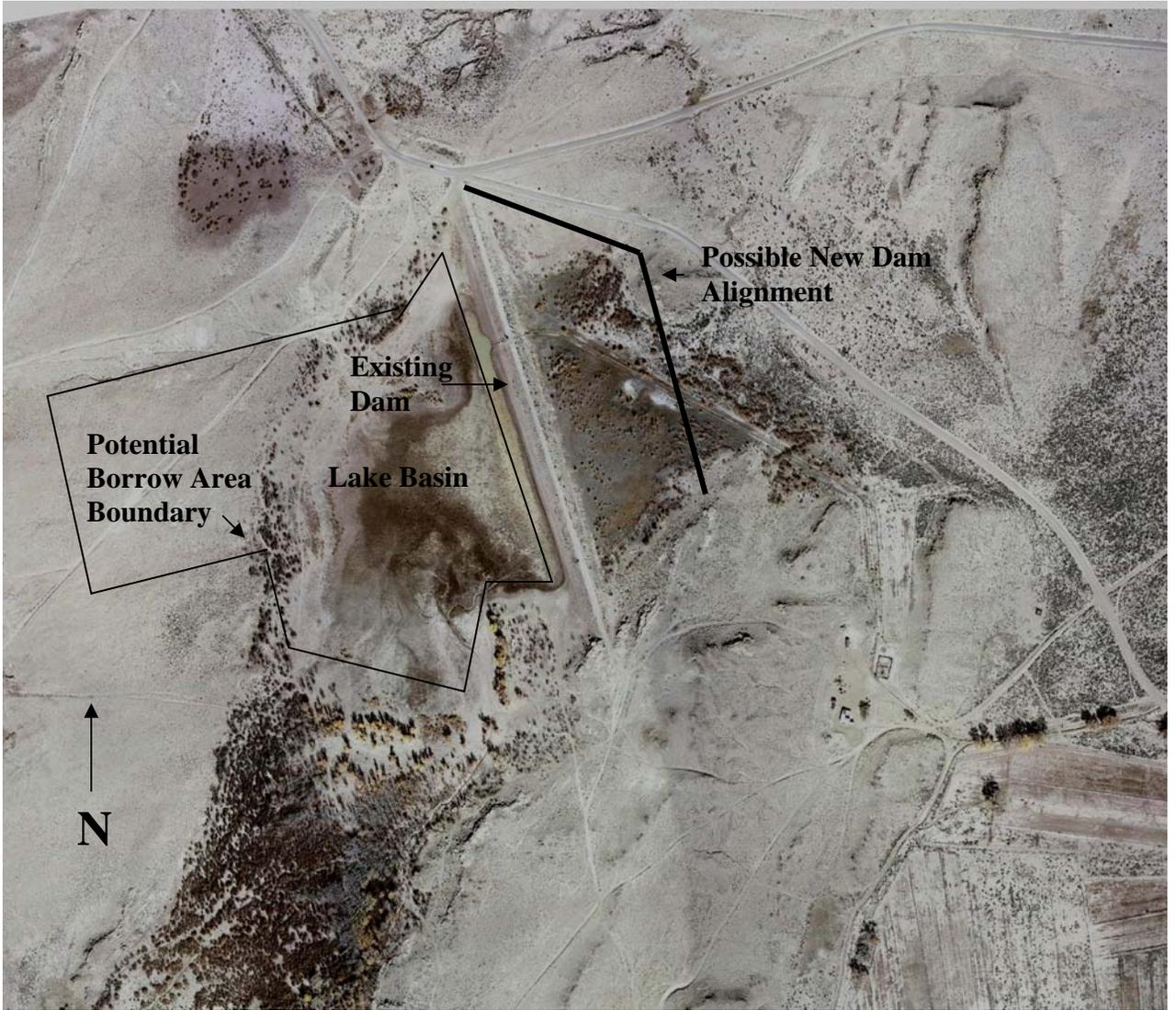


Figure 2. Project area.