

RECLAMATION

Managing Water in the West

Draft Environmental Assessment – Interim Renewal Contract Between the United States and Elk Creek Community Services District Providing for Project Water Service From the Black Butte Project

**Central Valley Project, CA
Mid-Pacific Region**



**U.S. Department of the Interior
Bureau of Reclamation**

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Introduction

This Environmental Assessment (EA) covers the proposed issuance of an initial 12-month interim renewal contract for no more than 100 acre-feet (af) of water per year to the Elk Creek Community Services District (District), Glenn County, California (Figure 1). Separate EAs would be prepared for subsequent interims if they are needed and for the expected 40-year Long Term Renewal Contract (LTRC). The terms and conditions of the interim renewal contract would be the same as those of the long-term renewal contracts renewed throughout the western Sacramento Valley in 2005; the 2004 EA for that action is included in this EA by reference.

Purpose and Need

The purpose of the proposed action is to provide continued water service to the community of Elk Creek.

The need for this contract arises from the community's lack of a secure water supply. In water deficient years, the quantity of Orland Project water can be reduced to zero, necessitating the acquisition of the supplemental supply that would be provided by a Central Valley Project (CVP) contract.

Background

The District is roughly a 0.5- by 1.5-mile tract in the foothills along the west side of the Sacramento Valley. It extends from roughly 0.25 miles south of Stony Gorge Dam to about 1.25 miles north of the dam and encompasses the village of Elk Creek and an abandoned saw mill near the dam.

The District, which serves a small rural community of approximately 163 people, formed on January 2, 1965, when the town of Elk Creek, the Elk Creek Cemetery District, and the Stony Creek Unified School District assigned to the District all of their interest in Contract Nos. I-15r-107 and 14-06-206-34.

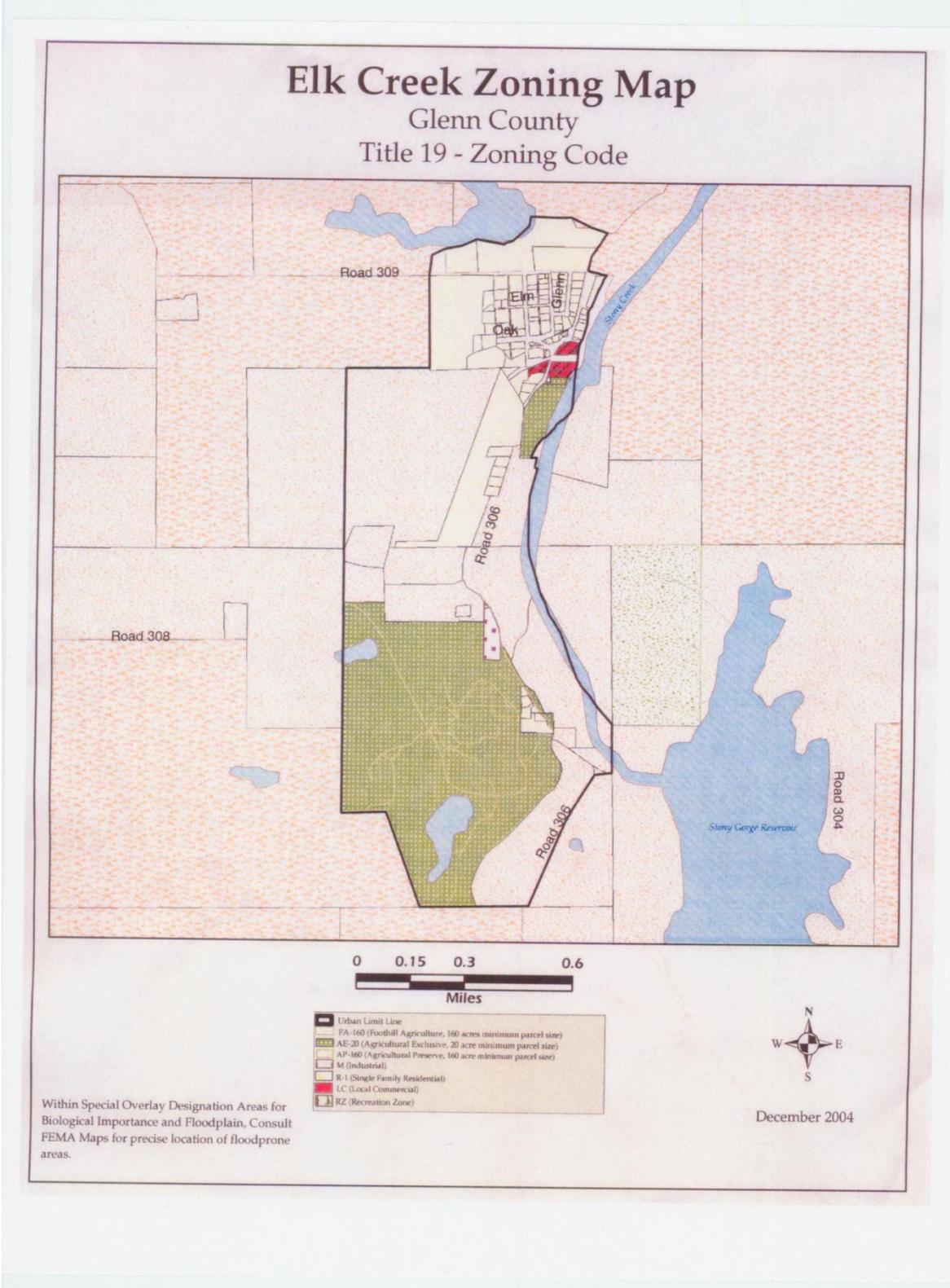


Figure 1. Elk Creek Zoning Map

Contract No. I-15r-107, dated March 25, 1936, provided for the delivery of 45 af of Orland Project water and was amended in 1953 by Contract No. 14-06-206-34 to increase the maximum available quantity of Orland Project water to 100 af, but the additional water was conditioned by a right to first use by the water-right applicants, the Orland Unit farmers. The amended contract was then assigned to the District on January 2, 1965. The District then obtained a second, supplemental contract with Reclamation in 1967 to give the District assurance that it would receive the 100 af of water it needed. This supplemental contract, Contract No. 14-06-206-3462A (Contract 3462A), provided for a quantity of CVP water equal to 100 af per year.

To facilitate the delivery of water, the District diverts all of its water directly from Stony Gorge Reservoir under Contract No. 14-06-200-1020A (Exchange Contract) between the United States and the Orland Unit Water Users' Association (OUWUA). In this exchange, CVP water is released by Reclamation from Black Butte Reservoir for delivery to the Orland Project water users to replace Orland Project water diverted from Stony Gorge under Contract 3462A.

Because the District chose not to enter into a Binding Agreement with Reclamation pursuant to §3404(c)(3) of the Central Valley Project Improvement Act (CVPIA), it did not participate in the long-term water service contract renewal process completed in 2005, and its contract expired August 20, 2007. An Interim Renewal Contract (IRC) is, therefore, necessary to provide continued delivery of a supplemental supply of CVP water to the District. The proposed IRC would be consistent with applicable federal Reclamation laws, rules, regulations, and policies and would be modeled after the form of the negotiated interim and long-term renewal contracts of 2005.

Contract 3462A's water year is from January 1 through December 31, but the effective dates of the IRC would be changed to be consistent with the CVP-wide water year of March 1 through the last day of February of the following calendar year.

The water quantity would remain unchanged as would the point of delivery, which is the bypass of the high-pressure gates in Stony Gorge Dam.

Water released to the OUWUA at Black Butte Dam would replace the water taken from Stony Gorge under Contract 3462A. Although the volume of water available in Black Butte is not reliable enough to warrant inclusion in the firm yield of the CVP, the minimum storage in Black Butte is typically at least 200 times larger than the maximum need of the District and would form a secure supply for the District.

Alternatives

Given the extensive negotiations and public processes leading the renewal of the water contracts for the other water service contractors in the western Sacramento Valley and the need for consistency among contractors, there are only two alternatives considered in this EA.

No Action

The contract would not be renewed, and the District could be without a water supply from the Orland Project in some years. While water could be trucked in, the extent and probability of such action is speculative, but hardship would be a certainty.

Proposed Action

The proposed action is execution of a 12-month interim renewal contract with the District to provide CVP water for municipal and industrial purposes. The effective date of the interim renewal contract would be March 1 to bring the contract in line with the other water service contracts. The 12-month time period will provide more time for completion of the Operating Criteria and Plan consultation and negotiation and execution of a long-term renewal contract. The quantity of water under contract would remain unchanged.

Affected Environment

The project-wide context of the proposed action was provided in the 1999 Programmatic Environmental Impact Statement for the implementation of the CVPIA (included in this analysis by reference). The implications of alternative contract provisions, as applied to the western Sacramento Valley and adjacent foothills, were examined in the 2004 EA for the long-term contract renewals for the water service contractors who chose to renew early.

Biological Resources

The vegetation within the District is primarily comprised of unirrigated grassland interspersed with tracts of chaparral and oak savannahs, but there is a band of irrigated grassland on the floodplain of the creek. Grasses found in the area consist primarily of introduced species, such as brome grass, wild oats, and fescue, while the chaparral is characterized by native shrubs, such as chaparral pea, chemise, manzanita, scrub oak, and sagebrush. The savannahs consist of scattered blue oak, interior live oak, and gray pine. The limited riparian

vegetation consists of cattails, blackberries, and willows, with scattered Valley oaks (Figure 2).

The wildlife within the District consists mainly of species compatible with human presence such as black-tailed deer, coyotes, bobcats, skunks, weasels, raccoons, foxes, squirrels, rodents, quail, dove, pheasants, waterfowl, and various non-game birds. More secretive species, such as mountain lions, are also possible.

Fish species in the adjacent waters include a number of warm water species such as largemouth bass, smallmouth bass bluegill, white crappie, black crappie, channel catfish, and white catfish.

There are many species of concern in Glenn County; however, no listed federally endangered or threatened species are known to occur near Stony Gorge Reservoir.

A nest of the recently delisted bald eagle is known to occur approximately 2 miles south (upstream) of the dam, or about 1.75 miles south of the District.

The bats roosting in the face of the dam are thought to be the Townsend's big-eared bat and the Yuma Myotis bat, which are on the U.S. Fish and Wildlife Service's (Service) species list of species of concern.

Similarly, two plant species of special concern occur near, but not in, the District: (1) the adobe-lily and (2) the Tehama County Western Flax.

The adobe-lily (*Fritillaria pluriflora*) is included in the California Native Plant Society California Rare Plant Rank 1B, and, according to the California Department of Fish and Game's Natural Diversity Database (CNDDDB), is still present at several locations outside the District, but within 5 miles of Elk Creek.

The Tehama County Western Flax (*Hesperolinon tehamense*) is found in openings in mixed chaparral on serpentine soils at elevations from 328 to 3280 feet (100 to 1000 meters) and, according to the CNDDDB, occurs in the foothills 5 miles west of Elk Creek.

Physical Resources

The District is primarily located on a gently rolling tract in the foothills of the Coast Ranges west of the Central Valley, but the eastern fringe is located on the floodplain of Stony Creek, downstream of the dam (Figure 3).

The dam, a 139-foot high Ambursen-type slab and buttress structure completed in 1928, is one of the two storage dams of the Orland Project. It was authorized for irrigation storage, with flood control considered a secondary benefit, but it also serves as the community's source of domestic water and is, therefore, operated

under a State Water Resources Control Board directive to maintain a minimum pool size adequate to protect drinking water quality.

Stony Gorge Dam and Reservoir, which accounts for most of the flood protection in the vicinity of the District, impounds a reservoir of 50,000 af. The reservoir is approximately 5 miles long and 0.5 miles wide with an area of 1275 acres and with a water surface elevation of 841 feet at full pool. There are 18 miles of shoreline, of which 7 miles are available for public visitation. Drawdown of the reservoir is usually extreme and rapid and normally occurs in mid-summer, which immediately affects visitation.

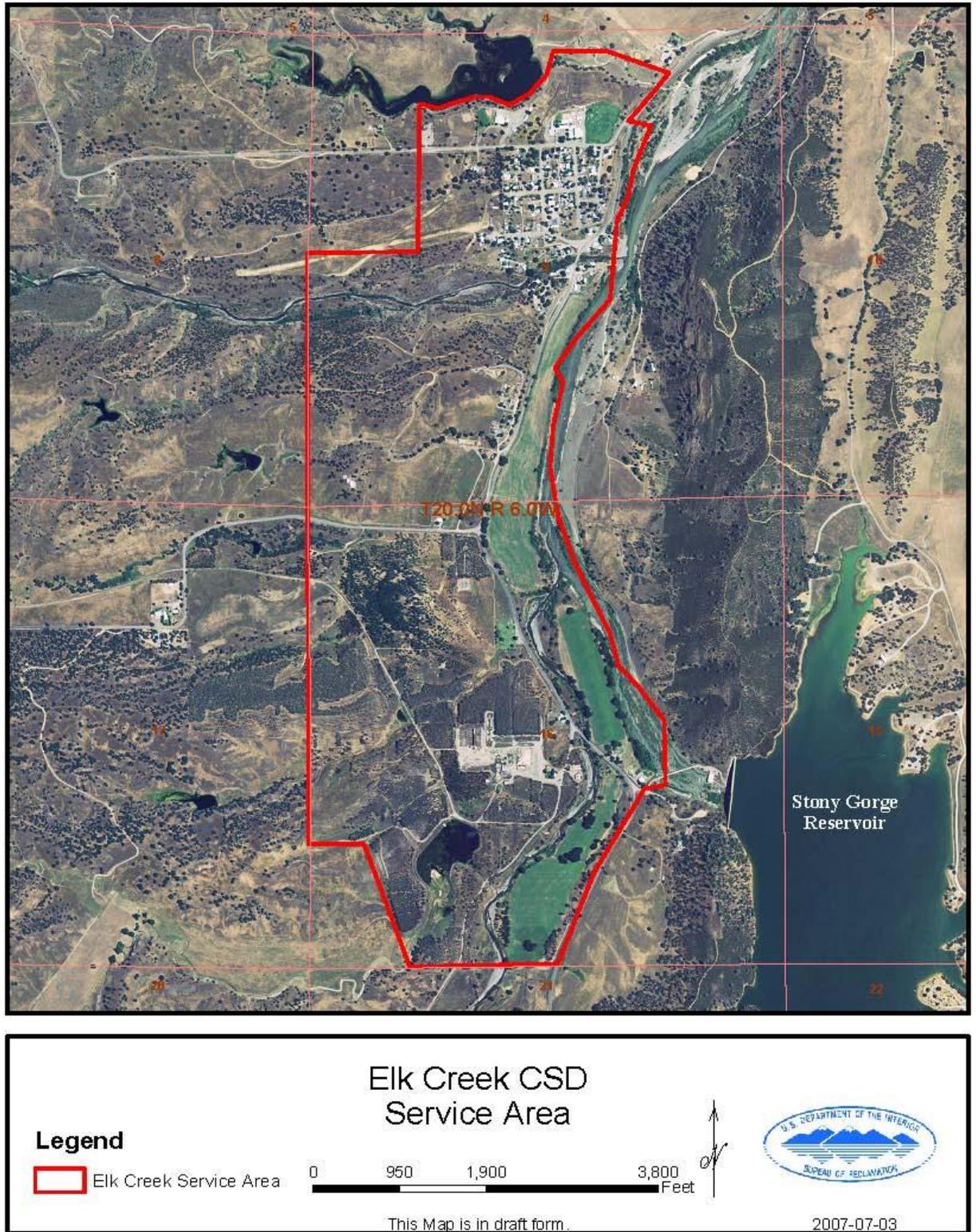


Figure 2. Elk Creek Community Services District Service Area

Soils within the area consist of clay loams, derived from shale and sandstone with severe shrink/swell behavior, creating large fissures of up to 8 inches. Shale rock is present under the surface in most areas, varying to depths of 8 to 10 feet.

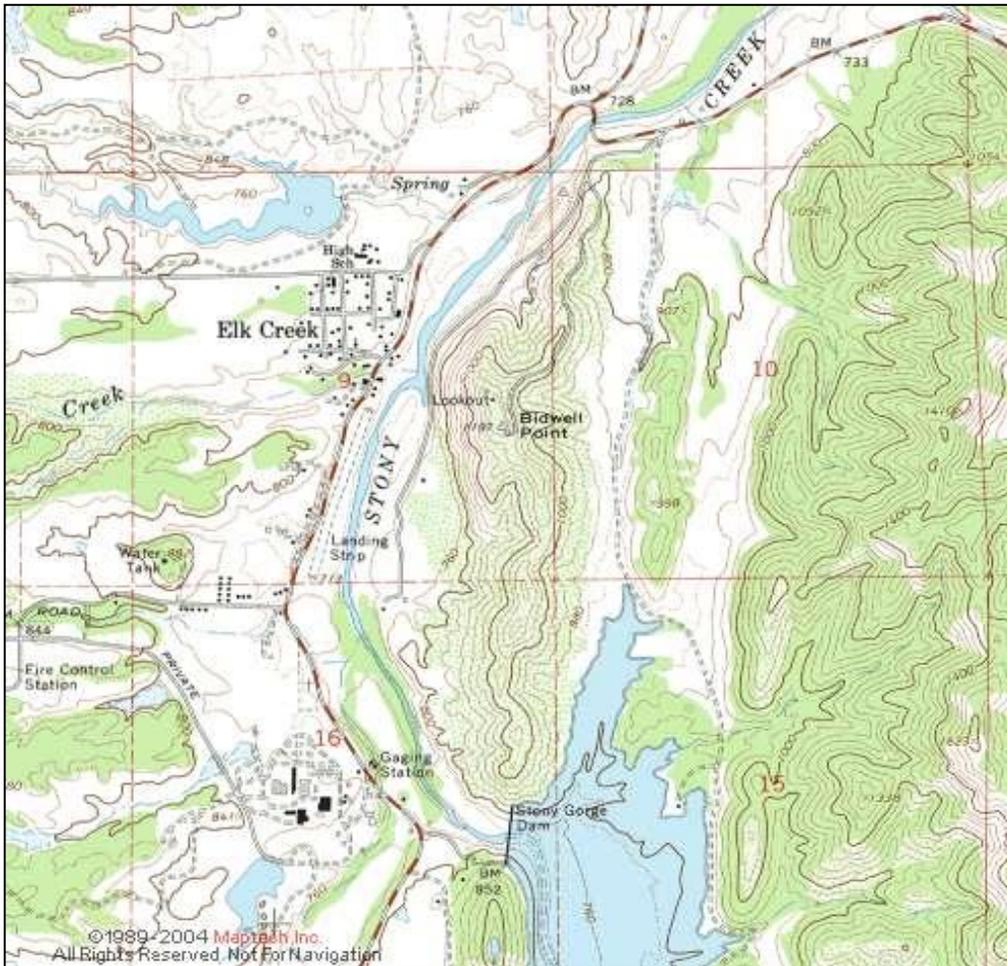


Figure 3. Topography of the Elk Creek Community Services District

Seismic risks are high enough to have prompted remedial action at the dam, but most of the moderate magnitude earthquakes (magnitudes 3 to 6) that have occurred approximately in the past 50 years have been located on strike-slip faults located west of the dam. No magnitude 6 or larger earthquakes have occurred within 50 km of the dam in the past 50 years. However, the blind thrust faults along the western margin of and immediately below the dam have produced several magnitude 6.5 earthquakes (approximate) in the past 112 years, including the 1983 magnitude 6.5 Coalinga earthquake and the 1992 magnitude 6.5 Winters-Vacaville earthquake.

Stony Gorge Dam is located about 18 miles downstream from East Park Dam on Stony Creek and about 25 miles west of the town of Willows. Studies ongoing since 2001 indicate that a large earthquake could cause the vertical concrete

buttresses that support the dam to buckle, possibly leading to subsequent dam leakage or collapse.



Figure 4. Stony Gorge Dam Spillway

Construction of the structural modifications began in January 2007 and was completed in January 2009. The dam modifications consisted of building a concrete wall and additional supports between the vertical buttresses to provide increased stability during a possible earthquake. A total of about 7000 cubic yards of concrete were placed since construction began in January 2007.

The dam is part of the Orland Project, one of the oldest projects in Reclamation. Construction was completed in 1928. Principal crops made possible by irrigation water from the reservoir are alfalfa, hay, sorghum, olives, almonds, walnuts, and citrus fruit.

Annual precipitation is approximately 20 inches, which occurs mostly in the winter and spring months. The primary wind direction is from the northwest, although most storms come from the south. Occasional strong winds from both the south and the north funnel down the valley onto the lake creating hazardous boating conditions.

Socioeconomics

Elk Creek is an isolated, rural village with an economy based on agriculture (ranching), government service, and minor retail trade. Stony Gorge Reservoir, a

water-oriented recreation area, provides some seasonal recreationally based revenue. Fishing, boating, and camping are its primary uses.

Cultural Resources

Stony Gorge Dam, which was completed in 1928 as a component of the Orland Project, the first Reclamation project in California, is the principal cultural resource in the area.

Construction of Stony Gorge Dam followed a drought when settlers of the Orland Project demanded additional storage. The only other storage dam of the Orland Project, East Park Dam, is located 18 miles upstream on Little Stony Creek. The Reclamation Service (now the Bureau of Reclamation) investigated the Sacramento Valley and other parts of California for irrigation potential in 1902. The Orland Project was then founded, in part, because citizens in the area petitioned the Secretary of the Interior to help develop land along Stony Creek. The project was authorized in 1907, and East Park Dam was completed in 1910. A second dam, the Rainbow Diversion Dam, was then built on Stony Creek to divert water into East Park Reservoir after it was found that flows on Little Stony Creek were insufficient to fill the reservoir. Today, approximately 20,000 acres are cultivated by water from the Orland Project.

Stony Gorge Dam is one of the first Ambursen-type dams constructed for a Reclamation project but has undergone some additions since it was constructed, including the recent Safety of Dams renovation. Despite these modifications, Reclamation believes that Stony Gorge Dam is eligible for inclusion in the National Register of Historic Places because of its association with an early Reclamation project in California and because of the dam's unique design.

Indian Trust Assets

The nearest Indian Trust Assets to this proposed action are located on 120 acres held in trust by the United States for Grindstone Indian Rancheria, approximately 6.4 air miles north of Stony Gorge Dam at the point at which Stony Creek turns and flows east toward the Sacramento River.

Environmental Consequences

Biological Resources

Because no listed species occur within the District, there would be no affect on listed species under the jurisdiction of the Service. Given the very small volume of water involved in this contract renewal, there would be no affect on listed fish, such as non-natal rearing winter-run Chinook salmon that seasonally occur in lowermost Stony Creek and the Sacramento River. Because the proposed action would not affect land use in the District, there would be no noticeable biological impacts on unlisted species within the District's service area.

Physical Resources

Land uses are expected to be unaltered by the proposed action. Therefore, no affects on physical resources are expected. No new withdrawals of water would occur from this fully adjudicated stream.

Socioeconomics

The proposed action would maintain, not change, existing socioeconomic patterns and, therefore, would have no adverse impact on the community.

Cultural Resources

The proposed action will maintain, not change, land use or life style within the District and have no affect on the dam. Therefore, the undertaking has no potential to affect historic properties pursuant to 36 CFR 800.3(a)(1).

Indian Trust Assets

The proposed action would simply continue the present patterns of land use and, like the planned upgrades of the dam, would not adversely affect the Grindstone Rancheria 5 miles to the north of the District.

Environmental Justice

There would be no impact on environmental justice because the proposed action would benefit all residents of the District and would not preferentially favor any one group.

Bibliography

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