



650 Capitol Mall, 5th Floor
Sacramento, CA 95814
916.445.5511 FAX 916.445.7297
<http://calwater.ca.gov>

Agenda Item: 5D
Meeting Date: June 8, 2005

BAY-DELTA PUBLIC ADVISORY COMMITTEE

ENVIRONMENTAL JUSTICE SUBCOMMITTEE REPORT TO BAY-DELTA PUBLIC ADVISORY COMMITTEE

Winnemem Wintu and Shasta Lake Enlargement

(See Attached)

Date: May 5, 2005
To: California Bay-Delta Public Advisory Committee
From: Environmental Justice Subcommittee
Subject: WINNEMEM WINTU RECOMMENDATION

Summary: Nearly one year ago, two representatives of the Winnemem Wintu Tribe first attended a CALFED Environmental Justice (EJ) Subcommittee meeting. Their purpose was to share with CALFED EJ stakeholders their concerns over the fate of their tribal homeland should Shasta Lake be enlarged as a result of the current CALFED surface storage investigations. The Winnemem Wintu live on the McCloud River and claim ancestral heritage there dating back thousands of years. It is their contention that any increase in the storage capacity of Shasta Lake would inundate their remaining cultural and historic sites, tribal lands, and current homestead, an act they describe as “cultural genocide”.

The recommendation, as adopted by the EJ Subcommittee reflects the strongly held view that the plight of the Winnemem Wintu merits some consideration by CALFED. The recommendation requests an action that may be beyond the purview of CALFED to address, yet the decision by the Winnemem to raise its concerns through the EJ Subcommittee reflects favorably on the collaborative, open and transparent nature of the CALFED process.

Background

The purpose of the EJ Subcommittee is to provide information and advice to the Bay-Delta Public Advisory Committee (BDPAC) to ensure that implementation of the CALFED Bay-Delta Program provides benefits to, and does not unfairly impact, minority, low-income, tribal or other communities. The Subcommittee works to achieve the goal of integrating EJ into all CALFED Program elements. The Winnemem Wintu Tribe believes that its best and most effective opportunity to address its concerns is through the existing EJ activity at CALFED, based on the Record of Decision (ROD) commitment to integrate EJ across all program plans. As stated in the Implementation Memorandum of Understanding (Attachment 3 of the ROD), dated August 28, 2000:

“Consistent with the President’s Executive Order 12898 and California Public Resources Code section 7200, the Agencies will seek fair treatment of people of all races, cultures, and incomes. CALFED programs, policies and actions shall not cause any segment of the population to bear a disproportionately high or adverse

health, environmental, social, or economic impact. CALFED Agencies agree to be responsible for ensuring this policy is carried out across all Program Elements through the development of environmental justice goals and objectives.”

Since the first contact with the Winnemem Wintu Tribe at the EJ Subcommittee meeting, there have been numerous news articles and public events highlighting its concerns regarding the Shasta Dam. Members of the Subcommittee overwhelmingly believed that a response to the concerns was both appropriate and necessary. Similarly the leadership of the Winnemem Wintu Tribe said that a recommendation from the EJ Subcommittee would be both timely and responsive to the concerns they raised, both at the EJ meetings and BDPAC or California Bay-Delta Authority meetings. It was determined that an appropriate response might be the adoption of an EJ Subcommittee recommendation to the BDPAC that addresses the Winnemem Wintu Tribe's concerns with some appropriate guidance for the BDPAC that would assist BDPAC in better understanding the concerns of the Winnemem Wintu Tribe and provide them with some action and/or approach related to the issues.

At the April 2005 meeting of the EJ Subcommittee, Mark Franco and Gary Mulcahy of the Winnemem Wintu Tribe presented a comprehensive historical outline of the tribe's history as it relates to the initial planning and construction of Shasta Dam and to the current proposal to increase capacity of the reservoir by increasing the height of the dam. Additionally they provided the Subcommittee with their assessment of the impact of both historical and current activities that affect both the tribe's status and future impacts from decisions surrounding the Shasta Lake Water Resource Investigation. This information was included in a report about the issues that was provided to the Authority at its April meeting (Attachment 1). Also discussed at that meeting was California Assembly Concurrent Resolution No. 185 (ACR 185) (relative to Native American Tribal Rights) (Attachment 2) as a reminder of the State's role when engaging with federally and non-federally recognized tribes in California.

The Winnemem Wintu also drafted and presented a draft resolution/recommendation (Attachment 3) that, in essence, asks BDPAC to recommend that the California Bay-Delta Authority “suspend and remove any further consideration of the proposed enlargement of Shasta Dam from the CALFED project” until “such time when the Bureau of Reclamation, the Central Valley Project (CVP) implementation agent for the Department of Interior, fulfills the obligations to the Winnemem Wintu Tribe set out in the CVP – Indian Lands Acquisition Act (55 Stat 612).” This recommendation was thoroughly discussed and deliberated upon by the EJ Subcommittee. The Subcommittee, in a collaborative manner, unanimously supported the resolution as written and then requested that the EJ Coordinator take all reasonable efforts to place this recommendation on the next appropriate agenda for BDPAC consideration.

Relative to ACR 185, the Authority recognizes that as a State agency when engaging in activities or developing policies affective Native American tribal rights or trust resources, it is to do so in a knowledgeable, sensitive manner that is respectful of tribal sovereignty, and to continue to reevaluate and improve the implementation of laws affective Native American tribal rights.

List of Attachments

- Attachment 1 – Report on Tribal Issues with Shasta Dam Surface Storage Investigation
- Attachment 2 – Assembly Concurrent Resolution No.185
- Attachment 3 – Draft Recommendation presented by Winnemem Wintu to EJ Subcommittee
- Attachment 4 – Shasta Lake Water Resources Investigation Brochure

Contact

Henry Clark, PhD., *Acting interim* Co-Chair
Environmental Justice Subcommittee Phone: (510) 232-3427

Staff Assistance
Ken McGhee Phone: (916) 445-0740
Authority Environmental Justice Coordinator

Irenia Quitiquit Phone: (916) 445-7461
Authority Tribal Coordinator

Report on Tribal Issues with Shasta Dam Surface Storage Investigation

Members of the Winnemem Wintu have made presentations at recent Authority meetings and are also using other public forums and the media to voice concerns over increasing the height of Shasta Dam. Increasing the height of Shasta Dam is one of five potential surface storage projects within the CALFED Program. The Winnemem Wintu are concerned that increasing Shasta by even the minimum 6.5 feet being considered would flood the remaining portion of their ancestral home that was not flooded when the dam originally was completed in 1945.

The purpose of this report is to respond to requests from Authority and Bay-Delta Public Advisory Committee (BDPAC) members for a better understanding of the concerns raised by the Winnemem Wintu and how these concerns are being – and can be addressed – by the Authority and the implementing CALFED agencies.

Background

The Shasta Lake Water Resources Investigation (SLWRI) is a feasibility study led by the Department of the Interior (DOI), U.S. Bureau of Reclamation (USBR), Mid-Pacific Region, in coordination with the California Department of Water Resources (DWR). The current schedule calls for USBR to initiate an environmental scoping process in 2005, leading to a draft feasibility report consisting of a draft decision document and a draft Environmental Impact Study (EIS) in the winter of 2007. The final feasibility report would be completed in the fall of 2008. Public meetings and other public communications are planned throughout this process, with a major emphasis placed on continued communication with other agencies, identified stakeholder groups, tribal interests, and involved groups and individuals.

CALFED agencies are evaluating potential surface storage projects that minimize the effects on the environment. The emphasis for planning is currently centered on five storage projects:

- Shasta Lake Water Resources Investigation
- Upper San Joaquin River Basin Surface Storage Investigation
- North-of-the-Delta Off-Stream Storage Investigation
- Los Vaqueros Reservoir Expansion
- In-Delta Storage

The reason Shasta was selected as one of the five storage projects to investigate is unique. Shasta Dam was originally designed to be 200 feet higher than the dam we see today; but due to the poor economy at the time Shasta was constructed (coming out of the Depression), the Federal Government decided to make the reservoir smaller than designed. Initial concept plans for SLWRI did include evaluating and comparing benefits of a 200-foot dam raise; however, such a raise is too expensive because it impacts Interstate-5, railroad tracks, bridges, etc. The transportation relocation costs would likely exceed the costs of raising the dam.

Right now, USBR's SLWRI Project Manager is focusing on height increases of between 6.5 and 18.5 feet, which could provide increased storage of between 290,000 and 636,000 acre-feet, respectively. The water is to be used for water supply reliability and environmental purposes, including more cold water for salmon, which improves their habitat for spawning and migration. This will contribute to meeting Central Valley Project Improvement Act goals and objectives.

Both the State and Federal Governments are aware of the concerns of the Winnemem Wintu, who could potentially be affected by raising Shasta Dam. The Winnemem Wintu also have requested to be consulted on SLWRI in the context of a government-to-government relationship with the United States. However, because they are not a federally recognized tribe, they will not be able to participate in a "government-to-government" relationship with the United States on this matter.

The State is aware of this situation, but the State cannot act as the United States' agent in conducting such "government-to-government" relations with federally recognized tribes. For SLWRI, DOI's Bureau of Reclamation has the responsibility to conduct government-to-government relations with those federally recognized tribes potentially affected by SLWRI; but again, the Winnemem Wintu do not possess Federal recognition.

However, the Winnemem Wintu are considered a stakeholder and the types of issues they raise will be considered during environmental review and permitting processes. When Shasta Dam was constructed between 1938 and 1945, the National Environmental Protection Act (NEPA) did not exist. Today, there are processes that any stakeholder can follow that require the agencies to evaluate and address impacts resulting from a new project. USBR is working – and will continue to work with – all stakeholders to make sure that they know and understand these processes.

This project has the potential to affect the McCloud River, which state law designates as a wild and scenic river. According to Section 5093.542 of the state Public Resources Code,

'Except for participation by the Department of Water Resources in studies involving the technical and economic feasibility of enlargement of Shasta Dam, no department or agency of the state shall assist or cooperate with, whether by loan, grant, license, or otherwise, any agency of the federal, state, or local government in the planning or construction of any dam, reservoir, diversion, or impoundment facility that could have an adverse effect on the free-flowing condition of the McCloud River, or on its wild trout fishery.'

This means that the State cannot prepare a California Environmental Quality Act (CEQA) document because it can not file for a Notice of Preparation in the State Office of Planning and Research. The state can only assist in technical and economic studies. Reclamation can develop an Environmental Impact Statement (EIS) under NEPA, but the state cannot be a cooperating agency. The state Department of Fish and Game

would be required to respond to the EIS because of its regulatory mandates, but can not participate in studies through contracts with USBR or DWR.

History of the Winnemem Wintu Tribe

The Winnemem Wintu Tribe ("middle river people" or "middle water people") – today numbering about 125 people – is a Native American tribe of Wintu origin located around the Shasta Dam in Redding. The Winnemem are one of nine bands of Wintu tribes that all once inhabited the area of the McCloud River. They are not a federally recognized tribe, although tribal members say that they once were and that recognition was taken away by a bureaucratic mistake.

According to Winnemem Wintu Headman Mark Franco, the Federal Government recognized the tribe in 1851, when Winnemem Wintu representatives signed the Cottonwood Treaty, an agreement that granted the tribe a 35-square-mile reservation on its traditional lands. But the treaty was never ratified by Congress. Tribal members ultimately received some land allotments in the McCloud River area, Franco said, but the holdings were condemned under later legislation that ultimately allowed for the construction of Shasta Lake. Until 1985, the Winnemem Wintu continued to be a federally recognized tribe; and they received Federal benefits such as health, housing and education.

Then, in the mid- to late-1980s, the Winnemem Wintu say they were accidentally erased from the Bureau of Indian Affairs (BIA) list of recognized tribes. They have not been able to regain this recognition. Legislation sponsored by Senator Ben Nighthorse Campbell in 2004 gave the Winnemem Wintu the opportunity to regain recognition, the attempt failed. The Winnemem Wintu are not currently pursuing Federal recognition through BIA's application process because they believe it is the Federal Government's responsibility to correct what the Winnemem Wintu believe is the 1985 omission.

Today, the Winnemem Wintu believe that their lack of Federal recognition has impeded their efforts to be included as viable partners on the proposed raising of Shasta Dam. They continue to hold religious and cultural connections to their ancestral lands north of Shasta Dam on the McCloud River and its tributaries to Bear Mountain in the south. When the dam was built, the Winnemem Wintu were forced to move. The lake covered Winnemem Wintu homesteads, ancestral villages, cemeteries and numerous sacred sites.

Designated sites, including village sites, were archaeologically documented by the U.S. Forest Service. The Winnemem Wintu use specific sites to this day for religious purposes. One such site is Puberty Rock where ceremonies are held for girls when they come of age. A second is Children's Rock where the young lay their hands on the rock to gain blessings to become good people and make best use of their talents. The proposed raising of Shasta Dam would put these rocks under water.

What the Winnemem Wintu want

- Affirm historical Federal recognition. The Winnemem Wintu are viewed as an “interested party” by USBR for the purposes of NHPA (National Historical Preservation Act), but the 36CFR800 regulations allow for organizations to become consulting parties because of “their concern with the undertaking’s effects on historic properties” (36CFR800.2(d)(3)). Consulting parties have been determined for the SLWRI. They believe federal recognition is pivotal to gaining trust land and becoming a viable partner to matters affecting a tribe’s loss and access to traditional sacred sites.
- Transfer Shasta Reservoir Indian Cemetery trust land and legal title to the land to the BIA as implied in 1958 correspondence between USBR and BIA.
- Return of (at least 4,480 acres) of historical tribal land – or other “like land” – as just compensation for land lost to build Shasta Dam. The Winnemem Wintu believe this was promised under the 1937 Central Valley Project Indian Land Acquisition Act.
- Cease to consider raising Shasta Dam because it will submerge more sacred sites and gathering grounds.
- Initiate alternative strategies to better manage the Shasta Dam’s existing water reserve, and improve upstream monitoring.
- Explore other water storage and conservation programs and act upon the findings.
- Winnemem Wintu request to be included in the planning and designing of proposed projects. This is not for the purpose of a dam raise but to include a fish ladder into the existing Shasta project to return salmon to McCloud River.

What has been done by U.S. Bureau of Reclamation

- July 14, 2004 – a meeting occurred between Winnemem Wintu; Shasta Lake Water Resources Investigation Project Manager, USBR; and the Environmental Justice-California Bay Delta Authority at Kerekmet Village to discuss SLWRI.
- July 15, 2004 – The Winnemem Wintu met with USBR’s Northern California Area Manager at Shasta Dam to discuss the potential effects of SLWRI on the Winnemem Wintu.
- USBR has entered the contact information of the Winnemem Wintu onto its SLWRI mailing list so that the Winnemem Wintu have received timely notification of any public outreach activities on SLWRI.
- December 2003 – USBR sent a letter to the Winnemem Wintu addressing how the Winnemem Wintu can participate in SLWRI, including their participation as an “interested party” under NHPA.
- August 11, 2004 – The Winnemem Wintu attended a public workshop on SLWRI, in Redding, California.
- February 18, 2003 – USBR’s SLWRI Project Manager met with the Winnemem Wintu at USBR’s Regional Office in Sacramento.

What role for Authority members and staff?

- Foster timely and mutual communication between the Winnemem Wintu and the CALFED agencies and California Bay-Delta Authority.
- Raise issues of the Winnemem Wintu with CALFED implementing agencies and provide additional forums for discussion.
- Provide requested technical information to the Winnemem Wintu on the proposed SLWRI project.
- When the Section 106 process (National Heritage Preservation Act) for SLWRI is initiated, the Authority will follow up with USBR to determine if it intends to consult with the State Historic Preservation Office (SHPO) regarding the identification of consulting parties on the Section 106 process. USBR says it will consider all written requests to participate as consulting parties.
- The CBDA Environmental Justice Subcommittee conducted the following actions in response to the Winnemem Wintu asking for their help and assistance. The EJ Coordinator meet with the Winnemem leadership in July 2004 at their domicile (Kerekmet Village, Shasta County, CA); The Winnemem Wintu attended approximately six EJ subcommittee meetings in 2004 -2005 including making presentations at the July 2004, August 2004, September 2004, and April 2005 meetings. The EJ Coordinator, Tribal Coordinator, and Deputy Director for Communalizations attended a Winnemem sponsored presentation and reception at CSUS in January 2005

Assembly Concurrent Resolution No. 185

RESOLUTION CHAPTER 150

Assembly Concurrent Resolution No. 185—Relative to Native American tribal rights.

[Filed with Secretary of State September 18, 2000.]

LEGISLATIVE COUNSEL'S DIGEST

ACR 185, Battin. Native American tribal rights.

This measure would reaffirm state recognition of the sovereign status of federally recognized Indian tribes as separate and independent political communities within the United States, encourage all state agencies, when engaging in activities or developing policies affecting Native American tribal rights or trust resources, to do so in a knowledgeable, sensitive manner that is respectful of tribal sovereignty, and encourage all state agencies to continue to reevaluate and improve the implementation of laws affecting Native American tribal rights.

WHEREAS, The United States Constitution gives Congress the power “to regulate Commerce with foreign Nations, and among the several States, and with the Indian Tribes” (Section 8, Article I, U.S. Const.) thus recognizing Native American tribes as separate and independent political communities within the territorial boundaries of the United States; and

WHEREAS, The United States Constitution has been construed to recognize Indian sovereignty by classifying Indian treaties as part of the “supreme law of the land,” and to establish Indian affairs as a unique area of federal concern; and

WHEREAS, Congress and the President of the United States have enacted measures that promote tribal economic development, tribal self-sufficiency, and a strong tribal government, such as the federal Indian Gaming Regulatory Act (25 U.S.C. Sec. 2701 and following); and

WHEREAS, Previous presidents have consistently affirmed tribal sovereignty and, thus, the rights of Indian nations in the following ways: President Lyndon B. Johnson recognized “the right of the first Americans ... to freedom of choice and self-determination”; President Nixon strongly encouraged “self-determination” among the Indian people; President Reagan pledged “to pursue the policy of self-government” for Indian tribes and reaffirmed “the government-to-government basis” for dealing with Indian tribes; and President Bush recognized that the federal government’s “efforts to increase tribal self-governance have brought a renewed



Res. Ch. 150

— 2 —

sense of pride and empowerment to this country's native peoples"; and

WHEREAS, The Legislature of the State of California is committed to strengthening and assisting Indian tribal governments in their development and to promoting Indian self-governance; and

WHEREAS, The Legislature supports and is committed to the enforcement of the Indian Civil Rights Act of 1968 (25 U.S.C. Sec. 1301 and following), which safeguards tribal sovereignty while simultaneously ensuring that the civil rights of Indian people are protected; and

WHEREAS, Because the Legislature recognizes and respects tribal customs and traditions, it is important that the state government work to preserve tribal cultures; and

WHEREAS, The Legislature acknowledges that tribal governments now are able to provide tribal members with better health care services, education, job training, employment opportunities, and other basic essentials; and

WHEREAS, The Legislature further recognizes that tribal governments have been generous benefactors—helping their neighbors in making California communities as good as they can be; and

WHEREAS, The people of the State of California overwhelmingly indicated their support for Indian sovereignty through the passage of Proposition 5, the Tribal Government Gaming and Self-Sufficiency Act of 1998, by a vote of 63 percent at the November 3, 1998, general election and Proposition 1A, the Gambling on Tribal Lands Initiative, by a vote of 64.5 percent at the March 20, 2000, primary election; now, therefore, be it

Resolved by the Assembly of the State of California, the Senate thereof concurring, That the Legislature of the State of California reaffirms state recognition of the sovereign status of federally recognized Indian tribes as separate and independent political communities within the territorial boundaries of the United States, encourages all state agencies, when engaging in activities or developing policies affecting Native American tribal rights or trust resources, to do so in a knowledgeable, sensitive manner that is respectful of tribal sovereignty, and, in recognizing their tribal sovereignty, encourages all state agencies to continue to reevaluate and improve the implementation of laws that affect Native American tribal rights; and be it further

Resolved, That the Chief Clerk of the Assembly transmit copies of this resolution to all federally recognized tribes in California, Members of Congress, and the President of the United States.

O



DRAFT

RECOMMENDATION xx-xx-xx

AUTHORIZING REMOVAL OF THE PROPOSED SHASTA DAM ENLARGEMENT FROM FURTHER CONSIDERATION IN THE CALFED PROJECT, UNTIL SUCH TIME WHEN THE BUREAU OF RECLAMATION, THE CENTRAL VALLEY PROJECT AGENT FOR THE DEPARTMENT OF INTERIOR, FULFILLS THE OBLIGATIONS TO THE WINNEMEM WINTU TRIBE SET OUT IN 55 STAT 612, CVP-INDIAN LANDS ACQUISITION ACT.

WHEREAS, .the United States Congress passed the CVP – Indian Lands Acquisition Act (55 Stat 612) in 1937, signed into law in 1941.that authorized the Secretary of the Department of Interior to: 1) Provide just compensation for the lands that would be flooded (*Ibid sec 2*); 2) Acquire lands and improvements for the lands taken (*Ibid sec 3*); and 3) Provide a cemetery held in trust in the name of the appropriate tribe (*Ibid sec 4*), to make way for the construction of Shasta and other dams in the original implementation of the Central Valley Project; and

WHEREAS, the Winnemem Wintu Tribe, an historic Native California Tribe listed as a recognized California Native Tribe by the California Native American Heritage Commission (NAHC), a California Agency, and also known as: Northern Wintoon, Baird Indians, McCloud River Indians, McCloud Wintu, Okwanuchu (a Shasta Indian word for the people of the north), Oylaca (un-ratified Cotton Wood treaty of 1851), Wailacca (various spellings meaning northern people), Northern Wintun, Baird Auxiliary and many others; whose historic territory included the east side of the upper Sacramento River Water Shed; the McCloud River Water Shed from origin to termination, the Squaw Creek Water Shed from origin to termination, and approximately 20 miles of the Pit River from the confluence of the McCloud River, Squaw Creek and Pit River up to Big Bend, were directly impacted by the construction of Shasta Dam; and

WHEREAS, .the Secretary of the Department of Interior through their agent the Bureau of Reclamation failed to meet the responsibilities set out in the CVP – Indian Lands Acquisition Act (55 Stat 612) prior to the construction of Shasta Dam and filling of the reservoir by failing to provide just compensation to the Winnemem Wintu for the lands taken; and by failing to acquire lands and improvements for the Winnemem Wintu for the lands taken; and by failing to establish a cemetery held in trust for the appropriate tribe, the Winnemem Wintu Tribe; and

DRAFT

WHEREAS, the original construction of Shasta Dam and subsequent filling of the reservoir resulted in a devastating loss of cultural, historic, and religious sites to the Winnemem Wintu Tribe, as well as their main dietary food source, salmon; and

WHEREAS, the proposed enlargement of Shasta Dam, if implemented, would cause the further destruction and loss of the remaining cultural, historic, and religious sites on the lower McCloud River that the Winnemem Wintu Tribe still access and use today, and

WHEREAS, the CALFED ROD made a specific commitment to Environmental Justice in that “no segment of the population bears a disproportionately high or adverse health, environmental, social or economic impact resulting from CALFED’s programs, policies, or actions.” (*Ibid. ROD Implementation Commitments, p. 32*), and

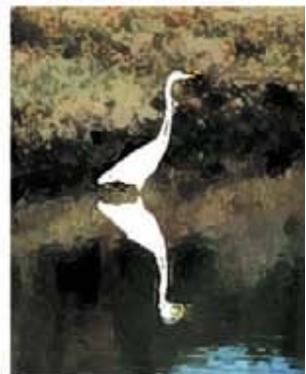
WHEREAS, it is clear by the historical account that the Winnemem Wintu Tribe has already borne a disproportionately high burden resulting from the original implementation of the Central Valley Project, and therefore, under the CALFED ROD and its commitment to environmental justice, that the Winnemem Wintu Tribe should bear no more.

NOW, THEREFORE, BE IT RESOLVED that the California Bay-Delta Authority, in the interest of Justice and Equity hereby suspends and removes any further consideration of the proposed enlargement of Shasta Dam from within the CALFED project until such time when the Bureau of Reclamation, the CVP implementation agent for the Department of Interior, fulfills the obligations to the Winnemem Wintu Tribe set out in the CVP – Indian Lands Acquisition Act (55 Stat 612).



Getting to Solutions:

An Overview of Initial Alternatives



August 2004

Purpose

The Shasta Lake Water Resources Investigation (SLWRI) is a feasibility study led by the U.S. Department of the Interior, Bureau of Reclamation (Reclamation), Mid-Pacific Region, in coordination with the California Department of Water Resources (DWR). The purpose of this overview is to highlight the SLWRI progress to date, with an emphasis on development of initial alternatives. This overview summarizes the study's background, planning process, objectives, accomplishments, and future actions. Additional information on study activities, including related documents, can be accessed on-line at www.usbr.gov/mp/slwri.

SHASTA FACTS

Shasta Dam

- ◆ Concrete gravity type
- ◆ 602 feet high
- ◆ 3,460 feet long
- ◆ 487-foot-long spillway, with 3 drum gates
- ◆ 18 river outlets
- ◆ 1 powerplant, with 5 main units

Shasta Reservoir

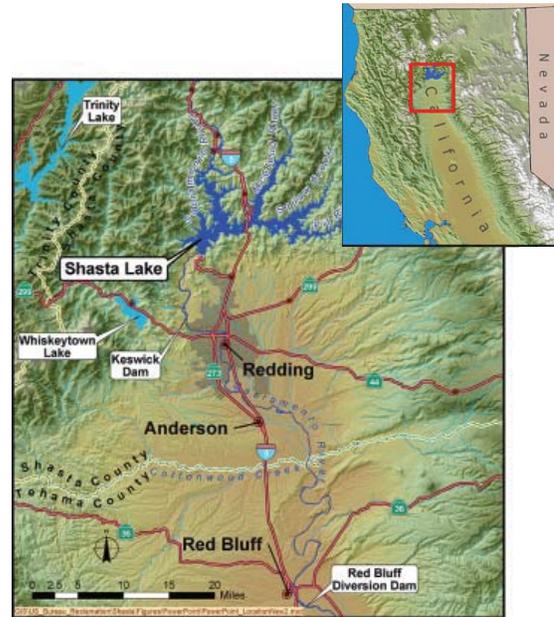
- ◆ 4,550,000 acre-feet of storage capacity
- ◆ 1,300,000 acre-feet of flood control space
- ◆ 29,500 acres of surface area
- ◆ 400 miles of shoreline
- ◆ 5,700,000 acre-feet of mean annual runoff
- ◆ 40% of total CVP storage



Background

Constructed between 1938 and 1945, Shasta Dam serves multiple purposes, including navigation, flood control, irrigation and municipal and industrial water supplies, hydropower generation, and fish and wildlife conservation. These purposes significantly contribute to California's economy. In addition, through its extensive recreational resources, Shasta Lake is a critical component of the regional economy of Northern California.

The SLWRI primary study area encompasses Shasta Dam and Reservoir; inflowing rivers and streams, including the Sacramento River, McCloud River, Pit River, and Squaw Creek; and the Sacramento River downstream to about the Red Bluff Diversion Dam. Because of the potential influence of a Shasta Dam modification on natural resources along the Sacramento River, and on programs and projects in the Central Valley, an extended study area includes the American River basin, Sacramento-San Joaquin Delta, San Joaquin River basin, and service areas of the Central Valley Project (CVP) and State Water Project (SWP).



SLWRI Primary Study Area

Authorization for the study is contained in 1980 Public Law (PL) 96-375, which directed Reclamation to conduct a feasibility study related to enlarging Shasta Dam and Reservoir. A 1988 Wrap-Up Report showed that enlarging Shasta Dam and Reservoir could significantly increase water supply reliability at lower unit costs than other projects considered, if and when water demands warranted the required financing. The 1992 Central Valley Project Improvement Act (CVPIA) and CALFED Bay-Delta Program led to reinitiation of studies to enlarge Shasta Dam. Raising Shasta Dam is one of five surface water storage projects identified in the August 2000 CALFED Record of Decision (ROD). The other four projects are North-of-Delta Off-Stream Storage, In-Delta Storage, Los Vaqueros Enlargement, and Upper San Joaquin River Basin Storage. Each surface water storage project is being developed further in separate feasibility studies.

In addition to PL 96-375, the CVPIA, and CALFED ROD, numerous Federal, State, and local laws, policies, and guidance have significant influence on the SLWRI. One important State issue is contained in 1989 California Public Resources Code (PRC) 5093, which limits the participation of State agencies in efforts that could have an adverse effect on the free-flowing condition of the McCloud River.

STUDY AUTHORITY

- ◆ **1980 PL 96-375** — Authorized feasibility study

PERTINENT RELATED AUTHORITY

- ◆ **1992 PL 102-575 (CVPIA)** — Added environmental purpose to CVP

GUIDANCE

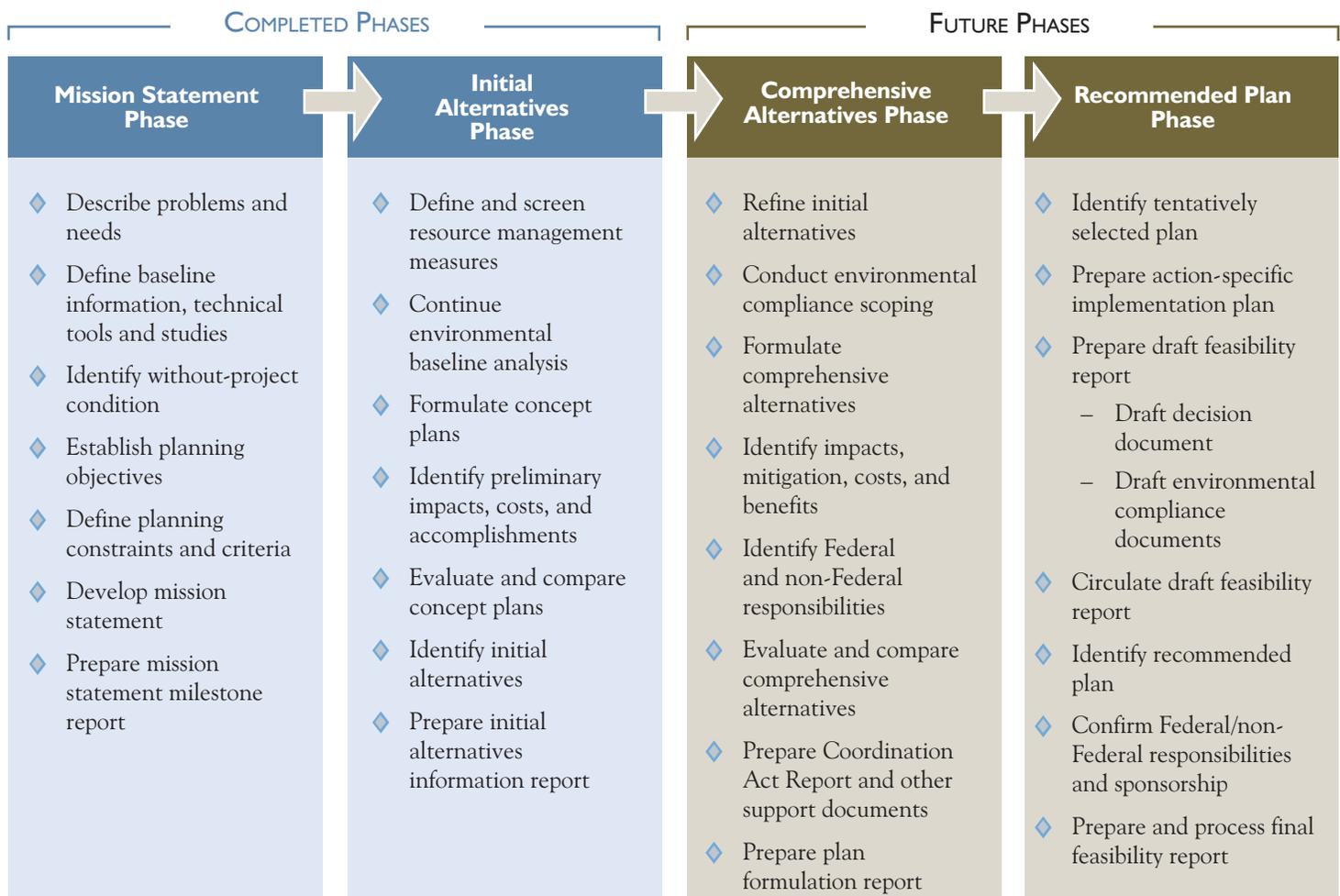
- ◆ **1988 WRAP-UP REPORT**— Defined scope & feasibility of enlarging Shasta Dam
- ◆ **1989 CALIFORNIA PRC 5093.542(c)**— Limits State participation in projects affecting the McCloud River
- ◆ **1999 APPRAISAL ASSESSMENT** — Recommended continuation of feasibility study
- ◆ **2000 CALFED ROD** — Identified enlarging Shasta Dam

SLWRI Planning Process

Implementation of a Federal project is accomplished in four basic steps: (1) establishing a Federal interest through a feasibility study, (2) obtaining Congressional authorization, (3) producing detailed designs, and (4) constructing the project. Federal feasibility studies follow procedures outlined in *Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies – 1983*. These procedures are commonly referred to as principles and guidelines, or P&G. The P&G describes six iterative planning steps in which public participation is a vital component.

For the SLWRI, the six planning steps were grouped into four phases: Mission Statement Phase, Initial Alternatives Phase, Comprehensive Alternatives Phase, and Recommended Plan Phase. These phases are highlighted in the following process chart. The Mission Statement Phase was completed in spring 2003 and the Initial Alternatives Phase was completed in summer 2004. During these phases, problems and needs were identified, planning objectives were established, a Mission Statement was developed, and initial alternatives that identify a range of potential actions to address the planning objectives were formulated.

SLWRI FEASIBILITY STUDY PROCESS



P&G PLANNING STEPS

- ◆ Specify problems and needs
- ◆ Identify, inventory, and forecast conditions and constraints
- ◆ Formulate alternative plans
- ◆ Evaluate effects of alternative plans
- ◆ Compare alternative plans
- ◆ Select recommended plan



Mission Statement Phase

This phase included identification of problems and needs, and development of a set of primary and secondary planning objectives and a Mission Statement.

Problems and Needs

Major water and related resource problems and needs identified in the primary study area include the following:

- **Anadromous Fish Survival** – The population of Chinook salmon has declined in the Central Valley. To address this salmon decline in the Sacramento River, various actions have been taken, ranging from establishing minimum flow requirements in the river to making structural changes at Shasta Dam. However, a need still exists for additional actions to benefit anadromous fish, especially in dry and critically dry water years.
- **Water Supply Reliability** – Demand for water in California exceeds available supplies. As the population of the Central Valley grows, the need to maintain a healthy and vibrant industrial and agricultural economy will increase while the demand for an adequate water supply becomes more acute.
- **Other Resource Needs** – Other identified problems and needs include the need for environmental restoration in the Shasta Lake area and downstream along the Sacramento River; the need for additional flood control along the upper Sacramento River; and growing demands for new energy sources in California.

Planning Objectives

The problems and needs in the study area were translated into primary and secondary planning objectives.

- **Primary Planning Objectives** – Formulate alternatives specifically to address the following:
 - Increase survival of anadromous fish populations in the Sacramento River primarily upstream from the Red Bluff Diversion Dam.
 - Increase water supplies and water supply reliability for agricultural, municipal and industrial, and environmental purposes to help meet future water demands, with a focus on enlarging Shasta Dam and Reservoir.

Shasta Lake Water Resources Investigation



- **Secondary Planning Objectives** – To the extent possible, through pursuit of the primary planning objectives, include opportunities to accomplish the following:
 - Preserve and restore ecosystem resources in the Shasta Lake area and along the upper Sacramento River.
 - Reduce flood damages along the Sacramento River.
 - Develop additional hydropower capabilities at Shasta Dam.

Mission Statement

A set of planning constraints and criteria was developed from the problems and needs baseline information and support studies; existing Federal, State, and local laws and policies; and planning objectives. These constraints and criteria helped define physical and institutional boundaries for the SLWRI. Through this iterative process, a Mission Statement was developed to help direct the study.

SLWRI MISSION STATEMENT

To develop an implementable plan primarily involving the enlargement of Shasta Dam and Reservoir to promote increased survival of anadromous fish populations in the upper Sacramento River and increased water supply reliability, and to the extent possible through meeting these objectives, include features to benefit other identified ecosystem, flood control, and related water resources needs.

Initial Alternatives Phase

As shown below, the plan formulation process leading to a recommended plan started with identifying a set of resource management measures that addressed the study objectives. From these measures, a set of concept plans was developed. From the concept plans, several initial alternatives were identified for further development into comprehensive alternatives. These comprehensive alternatives will be developed further in the feasibility study and ultimately lead to identification of a recommended plan. Resource management measures, concept plans, and initial alternatives for the SLWRI were described in detail in a June 2004 Initial Alternatives Information Report.

PLAN FORMULATION PROCESS



RETAINED RESOURCE MANAGEMENT MEASURES

Primary Planning Objectives

Anadromous Fish Survival

- ◆ Enlarge Shasta Lake cold water pool
- ◆ Modify temperature control device
- ◆ Increase minimum flows
- ◆ Restore upper Sacramento River spawning habitat

Water Supply Reliability

- ◆ Increase Shasta Lake conservation storage
- ◆ Reoperate Shasta Dam
- ◆ Perform conjunctive water management

Secondary Planning Objectives

Ecosystem Restoration

- ◆ Restore aquatic habitat around Shasta Lake
- ◆ Restore aquatic habitat on streams near Shasta Lake
- ◆ Restore Sacramento River riparian/floodplain habitat

Flood Damage Reduction

- ◆ Modify Shasta Dam flood control operations

Hydropower

- ◆ Modify Shasta hydropower facilities

Resource Management Measures

A resource management measure is a specific feature or activity that addresses either a primary or secondary planning objective. About 35 measures were identified to address the primary objectives and nearly 30 measures were identified to address the secondary objectives. Of these measures, seven focusing on the primary objectives and five focusing on the secondary objectives were retained for potential inclusion in concept plans.

Concept Plans

Twelve concept plans were formulated from the retained measures. In addition, a No-Action plan was developed. The concept plans represent the likely range of potential actions to address the planning objectives. The first three concept plans focused on a single primary objective, anadromous fish survival (AFS), and the next four concept plans focused on water supply reliability (WSR). The remaining five concept plans included a combination of measures that address both primary and secondary objectives, termed combined objective (CO) concept plans. Each concept plan included raising Shasta Dam by either 6.5, 18.5, or 200 feet, and each included some degree of modification to the temperature control device. Preliminary estimates of impacts, implementation costs, and resulting accomplishments were developed for each concept plan.

AFS Concept Plans – The main focus of the three AFS concept plans was on anadromous fish survival in the upper Sacramento River, with each plan contributing somewhat to water supply reliability. In developing these concept plans, it was important to determine (1) how

**Comprehensive
Alternatives**



*Evaluate and compare
comprehensive alternatives and
select recommended plan*



**RECOMMENDED
PLAN**

Shasta Lake Water Resources Investigation

each measure addressing anadromous fish survival could be combined, and (2) how their potential benefits compared. Consequently, dam raises were not a significant factor because progressively higher raises would be expected to produce proportionally greater benefits to anadromous fish. Accordingly, each concept plan included raising Shasta Dam 6.5 feet, which would enlarge the reservoir by 290,000 acre-feet. The AFS concept plans differed only in how additional storage would be used to benefit anadromous fish survival.

WSR Concept Plans – Four concept plans focused on the primary objective of water supply reliability while also benefiting anadromous fish. Unlike the

formulation strategy for the three AFS concept plans, the most important factor for the WSR concept plans was the magnitude of a potential enlargement of Shasta Dam and Reservoir. Accordingly, the WSR concept plans were formulated based on different dam raise options: 6.5 feet, 18.5 feet, and 200 feet. One WSR concept plan included conjunctive water management with an 18.5-foot raise.

CO Concept Plans – Five concept plans were formulated to represent a reasonable balance between the two primary objectives while also including components to address the secondary objectives, as appropriate. Dam raise options of 6.5 feet and 18.5 feet were considered for the five CO concept plans.

SUMMARY OF CONCEPT PLAN FEATURES*

Features	Anadromous Fish Survival Focus			Water Supply Reliability Focus				Combined Objective Focus				
	AFS-1	AFS-2	AFS-3	WSR-1	WSR-2	WSR-3	WSR-4	CO-1	CO-2	CO-3	CO-4	CO-5
Raise Shasta Dam (feet)	6.5	6.5	6.5	6.5	18.5	200	18.5	6.5	18.5	18.5	6.5	18.5
Enlarge Cold Water Pool	X	●	●	●	●	●	●	X	X	X	X	X
Increase Water Conservation Storage	●	●	●	X	X	X	X	X	X	X	X	X
Increase Minimum Flows		X	X							X		
Increase Spawning Habitat			X					X	X	X	X	X
Perform Conjunctive Water Management							X				X	X
Restore Aquatic/Riparian Habitat											X	X
Increase Flood Control and Hydropower	●	●	●	●	●	●	●	●	●	●	●	●

* All plans considered modifications to temperature control device.

X = Primary Focus ● = Incidental Benefit

COMPARISON CRITERIA

- ◆ **COMPLETENESS** – Inclusion of all necessary elements in an alternative to realize planned effects.
- ◆ **EFFECTIVENESS** – Extent of achieving planning objectives.
- ◆ **EFFICIENCY** – Greatest cost-effectiveness in addressing objectives.
- ◆ **ACCEPTABILITY** – Workability and viability of the alternative plan.

Initial Alternatives

The concept plans were evaluated using four criteria: completeness, effectiveness, efficiency, and acceptability. On the basis of that comparison, five concept plans were recommended as initial alternatives for further development. Specific measures and combinations of measures in the initial alternatives will likely change in future studies and some may be combined with others or dropped from further development. In addition, other measures and combinations of measures may emerge and warrant development into alternatives. For example, alternatives with other dam raises up to 18.5 feet could be developed. Efforts will continue on further defining the No-Action Plan. The five initial alternatives are as follows:

- **WSR-1—Increase Water Supply Reliability with Shasta Enlargement (6.5 feet).** The primary purpose of this initial alternative is to be consistent with the goals of the CALFED ROD, which focus on increasing CVP and SWP water supply reliability while contributing to increased anadromous fish survival. WSR-1 includes raising Shasta Dam by about 6.5 feet, which would increase storage space in Shasta Reservoir by 290,000 acre-feet. The increased pool depth and volume also could contribute to incidental benefits for flood control and hydropower.
- **WSR-2—Increase Water Supply Reliability with Shasta Enlargement (18.5 feet).** The primary purpose of this initial alternative is similar to WSR-1; however, WSR-2 includes raising Shasta Dam by about 18.5 feet, which would increase storage space by 636,000 acre-feet.
- **WSR-4—Increase Water Supply Reliability with Shasta Enlargement (18.5 feet) and Conjunctive Water Management.** The primary purpose of this initial alternative is to increase CVP and SWP water supply reliability through a combination of enlargement of Shasta Dam and Reservoir and conjunctive water management, consistent with the goals of the CALFED ROD. This plan is similar to WSR-2 and includes raising Shasta Dam by about 18.5 feet. It also includes implementing a conjunctive water management component consisting primarily of contract agreements between Reclamation and Sacramento River basin water users.

Shasta Lake Water Resources Investigation

- **CO-2—Increase Anadromous Fish Habitat and Water Supply Reliability with Shasta Enlargement (18.5 feet).** The primary purpose of this initial alternative is to address both primary objectives with a focus on increasing anadromous fish habitat and enlarging Shasta Reservoir by about 18.5 feet, similar to WSR-2. In addition to increasing the cold water pool in Shasta Lake, this alternative includes restoring inactive gravel mines along the Sacramento River to help benefit anadromous fish.
- **CO-5—Multipurpose with Shasta Enlargement (18.5 feet).** This initial alternative consists of raising Shasta Dam by about 18.5 feet, similar to WSR-2. To address the primary objectives, it also includes conjunctive water management and restoring inactive gravel mines and floodplain habi-

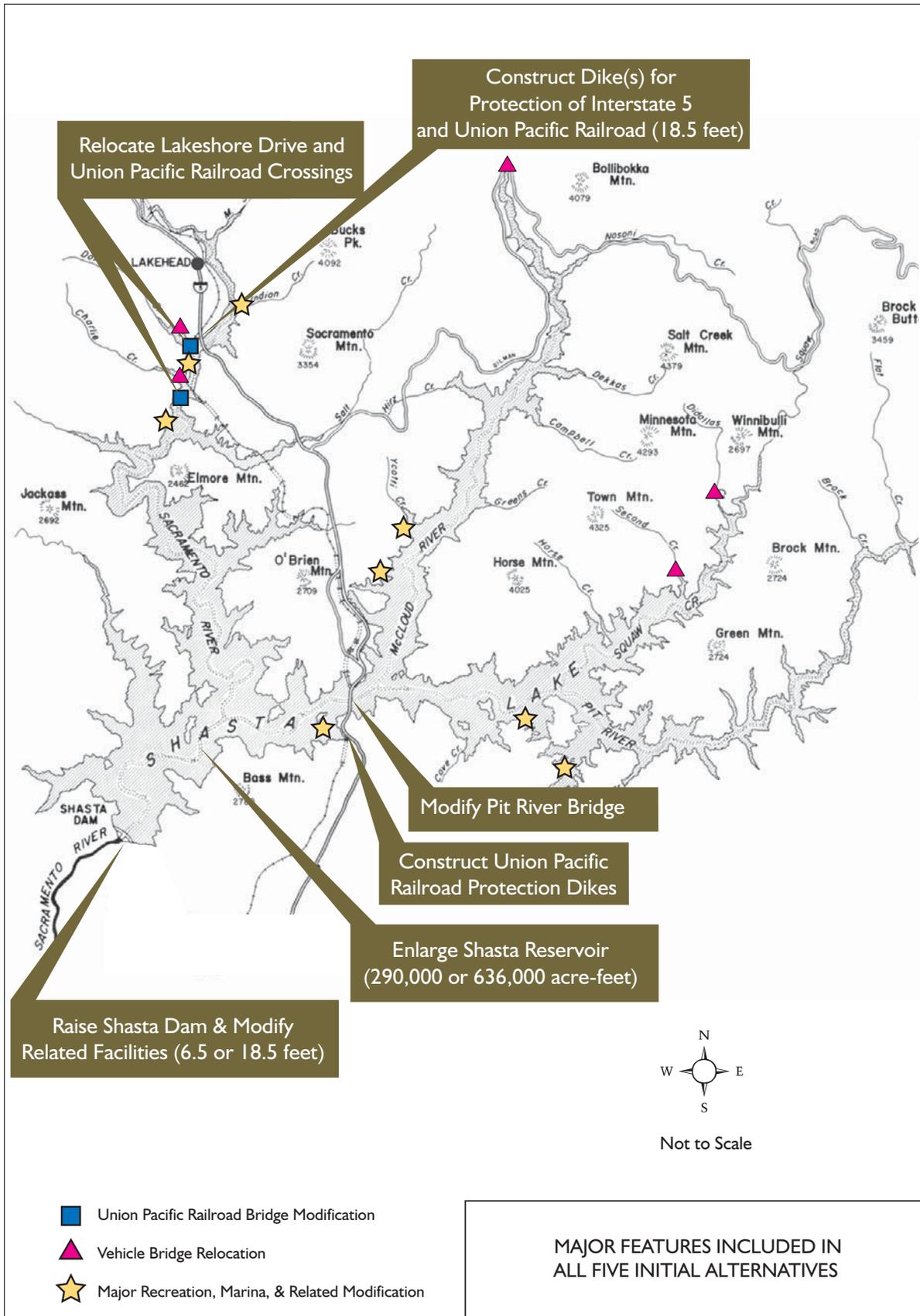
tat along the upper Sacramento River. In addition, features that address the secondary objectives include constructing warm water fish habitat in the Shasta Lake area, restoring one or more riparian habitat areas between Redding and Red Bluff on the Sacramento River, and reoperating Shasta Dam for increased flood control.

Following is a summary of potential accomplishments and costs of the five initial alternatives. This preliminary information will help identify which initial alternatives, or elements of initial alternatives, should be considered in future studies. Also, it can be used to assist in defining the relationships of the CALFED surface water storage projects to help meet future California water supply needs.

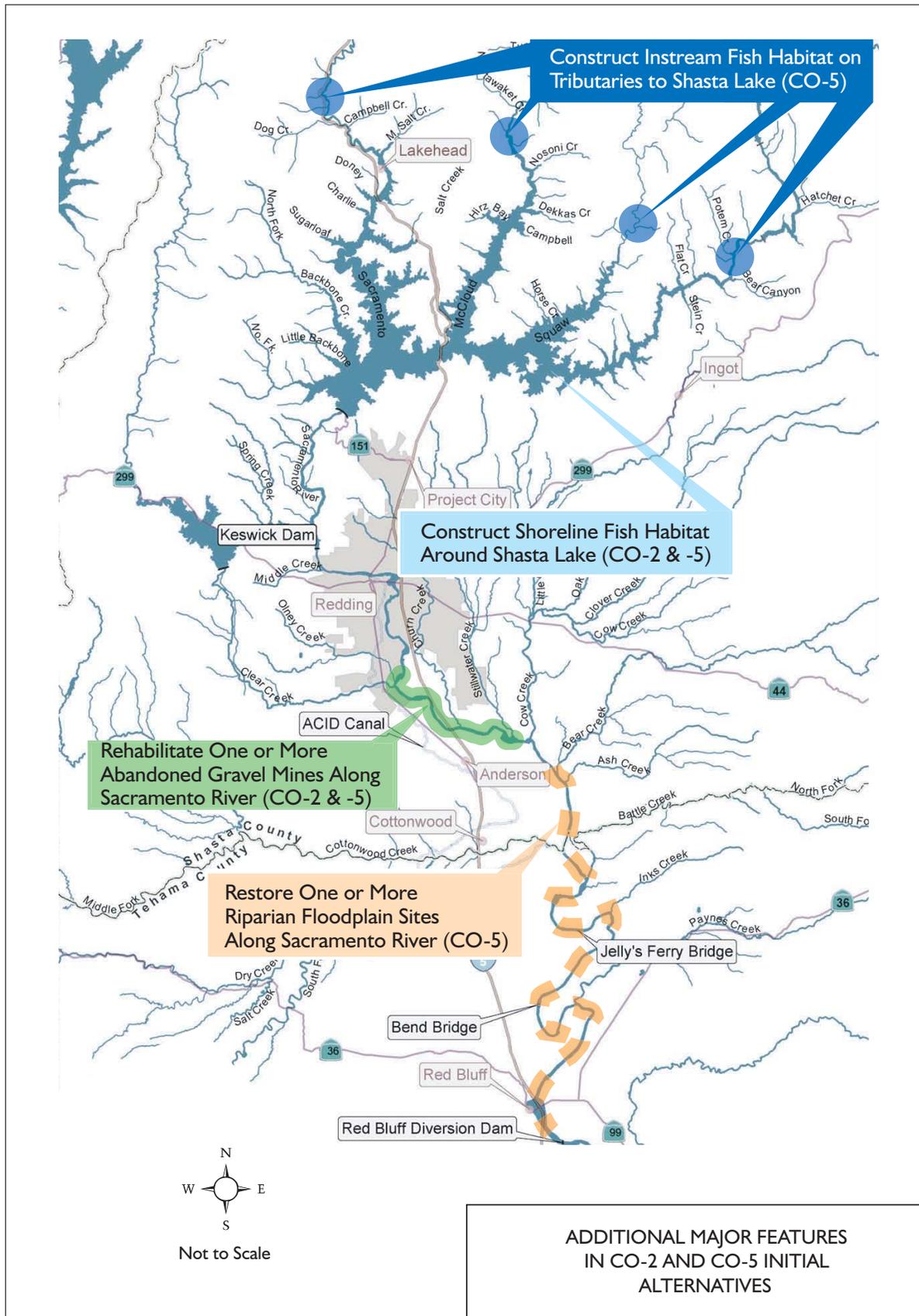
SUMMARY OF ACCOMPLISHMENTS AND COSTS FOR INITIAL ALTERNATIVES¹

Initial Alternative	Primary Objectives			Secondary Objectives			Cost ³
	Increase Water Supply Reliability (1,000 acre-feet/yr) ²	Increase Average Annual Salmon	Increase Spawning Habitat (acres)	Ecosystem Restoration	Flood Control	Hydropower (gigawatt hours/year)	First Cost (\$ millions)
WSR-1	72	410	-	-	Incidental	15	280
WSR-2	125	1,110	-	-	Incidental	44	410
WSR-4	146	1,110	-	-	Incidental	44	460
CO-2	125	1,110	150	-	Increase	44	420
CO-5	146	1,110	150	500+ acres	Increase	44	480

1. Initial estimates for comparison purposes only.
2. Drought year conditions, and Banks Pumping Plant capacity at 6,680 cubic feet per second. Yield increases by about 20 percent with pumping capacity at 8,500 cubic feet per second.
3. October 2003 price levels, 5-5/8 percent interest, and 100-year period of analysis.



Shasta Lake Water Resources Investigation



MAJOR FINDINGS TO DATE

To date, major SLWRI findings include the following:

- Need continues for actions to help increase the survival of anadromous fish populations in the upper Sacramento River and increase water supply reliability to the CVP and SWP.
- A significant need exists to help restore ecosystem resources and reduce flood damages along the upper Sacramento River and to increase renewable energy supplies in the State.
- Of numerous water resource management measures identified, and various concept plans formulated to address the identified problems and needs, five initial alternatives are recommended for further development in the SLWRI feasibility study.
- The five initial alternatives recommended for further development include raising Shasta Dam from 6.5 feet to about 18.5 feet; higher raises would require major increases in relocations and costs.
- All five initial alternatives would benefit the anadromous fishery in the upper Sacramento River and water supply reliability, and to an incidental extent, flood control and hydropower.
- Two of the five initial alternatives include additional features to further benefit the anadromous fishery and other ecosystem resources in the primary study area.
- All five initial alternatives would contribute to the four main CALFED objectives.
- Increasing CVP, and possibly SWP, water supply reliability through raising Shasta Dam by about 18.5 feet is highly cost-efficient compared to developing other new water sources.
- It is estimated that none of the initial alternatives would result in major impacts to existing flow conditions or other resources of the McCloud River.

CONTRIBUTION OF SLWRI INITIAL ALTERNATIVES TO CALFED OBJECTIVES

Water Quality

Direct contribution by reducing water temperatures for anadromous fish

Water Supply Reliability

Direct contribution by increasing drought period reliability from 75,000 to 150,000 acre-feet/year

Ecosystem Restoration

Direct contribution by helping restore habitat along upper Sacramento River

Levee System Integrity

Indirect contribution by reducing flood flows in Sacramento River

FUTURE ACTIONS

While substantial progress has been made in the SLWRI, much remains to be done. In the next phase, emphasis will be on hydraulic and hydrologic system modeling, designs and cost estimates, and environmental impact evaluations and documentation. These efforts will focus on refining the initial alternatives and formulating comprehensive alternatives. The comprehensive alternatives will be evaluated and compared with the planning criteria, and Federal and non-Federal responsibilities will be defined. Also, major emphasis will be placed on continued communication with other agencies, identified stakeholder groups, Tribal interests, and involved groups and individuals.

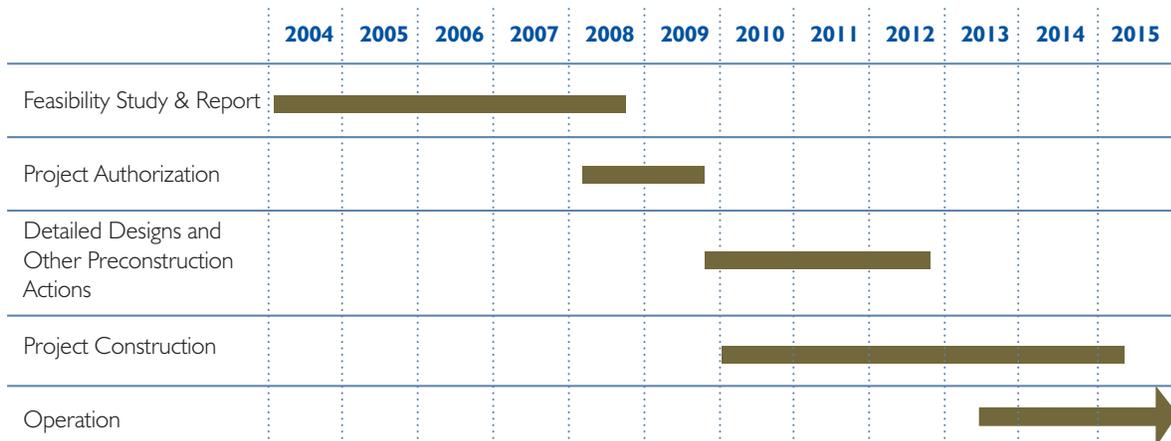
As mentioned, following completion of the Comprehensive Alternatives Phase, which includes preparation of a Plan Formulation Report, the Recommended Plan Phase of the SLWRI will begin. This final planning phase of the SLWRI will focus on identifying a tentatively selected plan for the draft feasibility report and then fully developing the plan to be included in the final feasibility report to support a recommendation to Congress. The feasibility report will be an integrated report, which will include a Federal decision document and a joint Federal Environmental Impact Statement (EIS) and State Environmental Impact Report (EIR). Formal environmental analysis begins with publication of a Notice of Intent and Notice of Preparation.

Timing for completing of the feasibility report and implementing a project will depend on Congressional and State authorization, and adequate funding from Federal and non-Federal sources. Construction could begin several years after project authorization and take about 4 years to complete, as shown in the project schedule below.

SLWRI FEASIBILITY STUDY AND REPORT SCHEDULE

- ◆ **Early 2005** – Initiate environmental scoping process
- ◆ **Spring 2006** – Plan formulation report
- ◆ **Winter 2007** – Draft feasibility report consisting of a draft decision document and draft EIS/EIR
- ◆ **Fall 2008** – Final feasibility report consisting of a final decision document and final EIS/EIR

PROJECT SCHEDULE



SLWRI Mission Statement

To develop an implementable plan primarily involving the enlargement of Shasta Dam and Reservoir to promote increased survival of anadromous fish populations in the upper Sacramento River and increased water supply reliability, and to the extent possible through meeting these objectives, include features to benefit other identified ecosystem, flood control, and related water resources needs.



For additional information, contact:

Donna Garcia	Sam Cervantes
Project Manager	Public Involvement Specialist
Bureau of Reclamation	Bureau of Reclamation
2800 Cottage Way	2800 Cottage Way
Sacramento CA 95821	Sacramento CA 95821
916-978-5009 or Fax 916-978-5094	916-978-5104 or Fax 916-978-5114
dgarcia@mp.usbr.gov	scervantes@mp.usbr.gov

www.usbr.gov/mp/slwri