A Project of

The Sacramento Valley

Water Management Agreement

Tehama-Colusa Canal Conveyance of Water to Sites Reservoir

CALFED
BAY-DELTA
PROGRAM

PREPARED FOR

CALIFORNIA DEPARTMENT OF WATER RESOURCES
WATER USE EFFICIENCY PROGRAM

March 1, 2002

W022002007RDD_950

Consolidated Water Use Efficiency 2002 PSP
Proposal Part One:
A. Project Information Form

1. Applying for (select one):
   - ☐ (a) Prop 13 Urban Water Conservation Capital Outlay Grant
   - ☐ (b) Prop 13 Agricultural Water Conservation Capital Outlay Feasibility Study Grant
   - ☒ (c) DWR Water Use Efficiency Project
2. Principal applicant (Organization or affiliation): Tehama-Colusa Canal Authority
3. Project Title: Tehama-Colusa Canal Conveyance of Water to Sites Reservoir
4. Person authorized to sign and submit proposal:
   - Name, title: Arthur R. Bullock, General Manager and Chief Engineer
   - Mailing address: P.O. Box 1025, Willows, CA 95988
   - Telephone: (530) 934-2125
   - Fax.: (530) 934-2355
   - E-mail: tcwaterman@aol.com
5. Contact person (if different):
   - Name, title.
   - Mailing address.
   - Telephone
   - Fax.
   - E-mail
6. Funds requested (dollar amount): $100,000
7. Applicant funds pledged (dollar amount): $0
8. Total project costs (dollar amount): The FS is estimated at $400,000
9. Estimated total quantifiable project benefits (dollar amount): To be determined by Feasibility Study

   Percentage of benefit to be accrued by applicant: To be determined by Feasibility Study

Consolidated Water Use Efficiency 2002 PSP
Proposal Part One:
A. Project Information Form (continued)

Percentage of benefit to be accrued by CALFED or others: To be determined by Feasibility Study

10. Estimated annual amount of water to be saved (acre-feet):

Unknown pending Feasibility Study, but it is estimated that Sites Reservoir can provide annual drought period yield of 395,000 acre-feet.

Estimated total amount of water to be saved (acre-feet): See above

Over ___ years

Estimated benefits to be realized in terms of water quality, instream flow, other: The yield of Sites Reservoir will contribute to greater diversion and delivery flexibility and could provide significant supply (see response to question 10) for dry-year delivery and/or increased instream flow, with corresponding ecological and water quality benefits.

11. Duration of project (month/year to month/year): Completion of FS estimated within 36 months from receipt of funding.

12. State Assembly District where the project is to be conducted: No. 2

13. State Senate District where the project is to be conducted: No. 4

14. Congressional district(s) where the project is to be conducted: No. 3

15. County where the project is to be conducted: Tehama and Glenn Counties

16. Date most recent Urban Water Management Plan submitted to the Department of Water Resources: N/A

17. Type of applicant (select one):
Prop 13 Urban Grants and Prop 13 Agricultural Feasibility Study Grants:

- ☐ (a) city
- ☐ (b) county
- ☐ (c) city and county
- ☐ (d) joint power authority
- ☒ (e) other political subdivision of the State, including public water district
- ☐ (f) incorporated mutual water company

DWR WUE Projects: the above entities (a) through (f) or:

- ☐ (g) investor-owned utility
- ☐ (h) non-profit organization
- ☐ (i) tribe

Consolidated Water Use Efficiency 2002 PSP
Proposal Part One:
A. Project Information Form (continued)

☐ (j) university
☐ (k) state agency
☐ (l) federal agency

18. Project focus:

☒ (a) agricultural
☐ (b) urban

19. Project type (select one):
Prop 13 Urban Grant or Prop 13 Agricultural Feasibility Study Grant capital outlay project related to:

☐ (a) implementation of Urban Best Management Practices

☐ (b) implementation of Agricultural Efficient Water Management Practices

☐ (c) implementation of Quantifiable Objectives (include QO number(s))

_____

☐ (d) other (specify)

_____

DWR WUE Project related to:

☐ (e) implementation of Urban Best Management Practices
☒ (f) implementation of Agricultural Efficient Water Management Practices
☐ (g) implementation of Quantifiable Objectives (include QO number(s)) 20, 26, 28
☐ (h) innovative projects (initial investigation of new technologies, methodologies, approaches, or institutional frameworks)
☐ (i) research or pilot projects
☐ (j) education or public information programs
☐ (k) other (specify)

_____

20. Do the actions in this proposal involve physical changes in land use, or potential future changes in land use?

☐ (a) yes

☒ (b) no

If yes, the applicant must complete the CALFED If yes, the applicant must complete the CAL PSP Land Use Checklist found at http://calfed.water.ca.gov/environmental_docs.html and submit it with the proposal.

Consolidated Water Use Efficiency 2002 PSP
Proposal Part One:
B. Signature Page

By signing below, the official declares the following:

The truthfulness of all representations in the proposal;

The individual signing the form is authorized to submit the proposal on behalf of the applicant; and

The individual signing the form read and understood the conflict of interest and confidentiality section and waives any and all rights to privacy and confidentiality of the proposal on behalf of the applicant.

_____	Arthur R. Bullock, General Mgr.	_____
Signature	Name and title	Date

Proposal Part Two

Project Summary

The project will evaluate the feasibility of using the Tehama-Colusa Canal (TC Canal) to convey water to a future Sites Reservoir approximately 10 miles west of Maxwell in northern Colusa County (Figure 1). The Sites Reservoir concept is to store "surplus" winter flows during wet years for export to in-basin users and the Delta during dry years. This would make available a net new seasonal water supply and potentially enable reduced seasonal diversions from the Sacramento River. Since the 1960s, several studies have evaluated alternative project configurations with various reservoir capacities and water supply sources, including the 1996 Department of Water Resources (DWR) report, *Reconnaissance Survey—Sites Offstream Storage Project*. The CALFED programmatic Record of Decision (ROD) specifies further study of the Sites Reservoir project, as directed by a Joint Planning Program developed in cooperation with local stakeholders.

Three alternatives being considered for conveying Sacramento River water to the reservoir are the TC Canal, the Glenn-Colusa Irrigation District (GCID) Canal, and a new diversion and conveyance facility. The objective of this feasibility study (FS) is to evaluate the feasibility of using the TC Canal to convey water to Sites Reservoir. Results of this FS may be compared with evaluations of the GCID Canal and a new diversion and conveyance facility to determine the optimal combination of supply and conveyance facilities for Sites Reservoir. The objectives of the Sites Reservoir project are to provide more reliable water supplies to the Tehama-Colusa Canal Authority (TCCA) water users, including 17 water districts supplied by TCCA and three national wildlife refuges supplied via Glenn-Colusa Irrigation District; provide increased dry-year supplies and overall regional operating flexibility to benefit other Sacramento Valley water users; reduce diversions from the river and increase diversion flexibility; and thereby increase Sacramento River flows and improve Delta water quality.

FS methods and procedures include collecting and reviewing existing TC Canal facilities and operations data, developing design and operations criteria, constructing a refined hydraulic model of the canal with unsteady flow analysis capability, developing alternatives for a range of conveyance capacities, and ranking and evaluating project alternatives. The expected outcome is an engineering feasibility report that includes estimated costs of alternatives.

The Sites Reservoir(s) will store up to approximately 1.9 million acre-feet. The "Small" and "Large" Sites reservoirs would be formed by two main dams on Stone Corral Creek (Sites Dam) and Funks Creek (Golden Gate Dam). Stored water would be released back into the TC Canal, GCID Canal, or both for distribution to Sacramento Valley water users or into the Colusa Basin Drain for conveyance to the Sacramento River. The average annual drought-period yield from the small and large Sites projects would be 155,000 acre-feet/year and 240,000 acre-feet/year, respectively. Estimated capital costs, in 1995 dollars, are $230 million and $450 million, respectively. The approximate unit cost for dry-period yield is

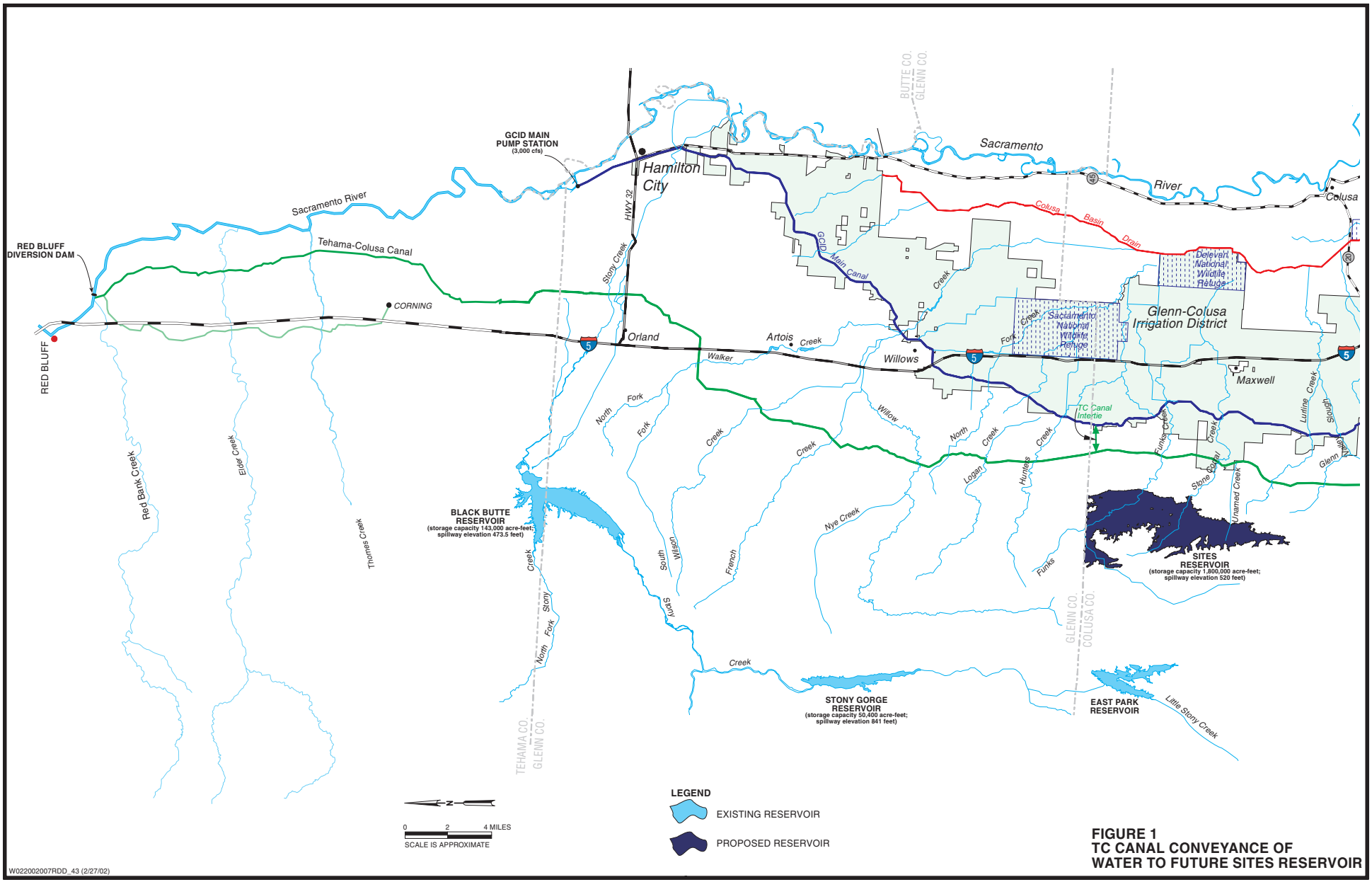

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FIGURE 1
TC CANAL CONVEYANCE OF WATER TO FUTURE SITES RESERVOIR

$1,484 per acre-foot for the Small Sites project and $1,875 per acre-foot for the Large Sites project.

A. Scope of Work: Relevance and Importance

1. Nature, Scope, and Objectives

The proposed project was identified in the Short-term Workplan developed as part of the Sacramento Valley Water Management Agreement (Agreement). This unprecedented agreement was developed by Sacramento Valley water users, export interests, the California Department of Water Resources (DWR), and U.S. Bureau of Reclamation (USBR) as an alternative to a potentially contentious process within Phase 8 of the State Water Resources Control Board (SWRCB) Bay-Delta Water Rights Hearings. The intent of the Agreement is to establish a framework to meet water supply, water quality, and environmental needs through a cooperative project development process. Each of the water system improvement projects evaluated under the Agreement, including the project described herein, would provide benefits toward achieving at least one of four quantifiable objectives:

- Provide flow to improve aquatic ecosystem conditions
- Decrease nonproductive evapotranspiration (ET)
- Provide long-term diversion flexibility to increase the water supply for beneficial uses
- Reduce salinity to enhance and maintain beneficial uses of water

The project will evaluate the feasibility of using the Tehama-Colusa Canal (TC Canal) to convey water to a future Sites Reservoir. The Sites Reservoir concept is to store "surplus" winter flows during wet years for export to in-basin users and the Delta during dry years. This would significantly increase dry-year regional water supplies and improve overall regional operating flexibility. The project would potentially enable reduced seasonal diversions from the Sacramento River, particularly during seasons of highest water needs when diversions from the Sacramento River at the Red Bluff Diversion Dam (RBDD) are restricted because of fish passage issues.

Three alternatives being considered for conveying Sacramento River water to the reservoir are the TC Canal, the Glenn-Colusa Irrigation District (GCID) Canal, and a new diversion and conveyance facility. The objective of this FS is to evaluate the feasibility of using the TC Canal to convey water to Sites Reservoir. Results of this FS may be compared with evaluations of the GCID Canal and a new diversion and conveyance facility to determine the optimal combination of supply and conveyance facilities for Sites Reservoir. The objectives of the Sites Reservoir project are to: provide more reliable water supplies to the Tehama-Colusa Canal Authority (TCCA) water users, including 17 water districts supplied by TCCA and three national wildlife refuges supplied via Glenn-Colusa Irrigation District; provide increased dry-year supplies and overall regional operating and water delivery flexibility to benefit other Sacramento Valley water users; reduce diversions from the river and increase diversion flexibility; and thereby increase Sacramento River flows and improve Delta water quality.

The FS scope includes collecting and reviewing facilities and operations data, developing design and operations criteria, constructing a refined hydraulic model of the TC Canal with

unsteady flow analysis capability, developing alternatives for a range of conveyance capacities, estimating costs of the alternatives, and ranking and evaluating alternatives.

2. Critical Local, Regional, Bay-Delta, State, or Federal Water Issues

The project is an outgrowth of the Sacramento Valley Water Management Agreement reached in April 2001 among more than 100 organizations. The Agreement was reached as part of Phase 8 of the State Water Resources Control Board Bay-Delta Water Rights Hearings by the Sacramento Valley water interests, the California Department of Water Resources, the U.S. Bureau of Reclamation, and export water users. The Agreement is consistent with other water management activities and provides for managing water in a way that meets water supply, water quality, and environmental needs throughout the Sacramento Valley and the State of California.

CALFED Quantifiable Objectives

The project is consistent with the following CALFED Quantifiable Objectives for Sub-region 3, the Colusa Basin:

- QO No. 20—Provide flow in the Sacramento River below Keswick to improve aquatic ecosystem conditions
- QO No. 26—Provide long-term diversion flexibility to increase water supply for beneficial uses for all suitable lands
- QO No. 28—Provide long-term diversion flexibility to increase water supply for beneficial uses for the Sacramento and Delevan National Wildlife Refuges

Relation to Other Local, Regional, Bay-Delta, State, and Federal Objectives

This project will convey "surplus" winter flows to the Sites Reservoir via lined canal and/or a closed-pipe conveyance system to prevent or eliminate conveyance losses within the project area. This would create a significant increase in dry-year regional water supplies and improve overall regional operating flexibility. The water would be released, as needed, to the TCCA distribution system during high-demand periods to improve water supply reliability. The project, as a component of the Sites Reservoir project, will enable more flexible scheduling of water deliveries, particularly during periods of high demand when diversions from the river at the RBDD are restricted. Consequently, river diversions will potentially be reduced and the timing of diversions can be more flexible. The stored water also can be released directly to the Sacramento River during dry years to increase instream flows and improve Delta ecosystem conditions. Therefore, the project will provide water conservation benefits consistent with the following primary CALFED objectives:

- Reduce the mismatch between Bay-Delta water supplies and current and projected beneficial uses dependent on the Bay-Delta system
- Improve and increase aquatic and terrestrial habitats and improve ecological functions in the Bay-Delta to support sustainable populations of diverse and valuable plant and animal species

Additionally, the proposed project will be consistent with the following specific objectives of the CALFED Water Use Efficiency Program[1]:

- Achieve multiple benefits
- Preserve local flexibility
- Use incentive-based actions over regulatory actions
- Build on existing water conservation and management programs

The project also is consistent with CALFED Ecological Restoration Objectives, because it potentially makes additional water available for other beneficial uses, including increased instream flows in the Sacramento River.

Quite often at RBDD, peak agricultural water demand occurs during periods that the dam cannot be operated because of fish passage restrictions. The potential of the project to reduce or provide additional flexibility in Sacramento River diversions will reduce the conflict at RBDD between agricultural water diversions and fish passage requirements. Thus, the project is consistent with the fundamental goals of the CALFED program's fisheries restoration component and the Anadromous Fisheries Restoration Program.

B. Scope of Work: Technical/Scientific Merit, Feasibility, Monitoring, and Assessment

1. Methods, Procedures, and Facilities

This proposal is for a feasibility study associated with a capital outlay project that will convey "surplus" winter flows to the proposed Sites Reservoir via an improved TC Canal, provide increased flexibility in agricultural water delivery, reduce and provide additional flexibility for diversions, and potentially create additional stored water supply that can be released for beneficial uses within the TCCA service area, at other Sacramento Valley locations, or for increased instream flows in the Sacramento River and Delta.

The Sites Reservoir(s) would be located about 10 miles west of Maxwell in Antelope Valley, northern Colusa County. Three principal projects of differing size have been proposed for this location: "Small Sites" with a 1.2-million acre-feet (maf) reservoir, "Large Sites" with a 1.8-maf reservoir, and the Colusa Project with a 3.0-maf reservoir. The Colusa Project has been eliminated from further study by CALFED; future study efforts will focus on storage up to approximately 1.9 maf. The small and large Sites reservoirs would be formed by two main dams on Stone Corral Creek (Sites Dam) and Funks Creek (Golden Gate Dam), with several smaller saddle dams. The reservoirs would be filled using excess winter-season flows from the Sacramento River. This water would be diverted and conveyed to the project area using the TC Canal, GCID Canal, or both together with a new series of pump stations, pipelines, and regulating reservoirs. The stored water would be released back into either canal for distribution or into the Colusa Basin Drain for conveyance to the Sacramento River.

[1] CALFED Bay-Delta Program. 1999. *Water Use Efficiency Program*. Revised Draft, February 1999.

The average annual drought-period yield from the Small and Large Sites reservoirs would be 155,000 acre-feet/year and 240,000 acre-feet/year, respectively. The estimated capital costs, in 1995 dollars, are $230 million and $450 million, respectively. According to these figures, the approximate unit cost for dry-period yield is $1,484 per acre-foot for the Small Sites Reservoir and $1,875 per acre-foot for the Large Sites Reservoir.

The TC Canal originates at the RBDD in the Sacramento River in Red Bluff, California. The canal extends 111 miles from north to south through Tehama, Glenn, Colusa, and Yolo counties. The canal terminates about 2 miles south of Dunnigan, California. It delivers Central Valley Project (CVP) supplies from the Sacramento River to more than a dozen water districts in the four counties. The capacity of the canal varies from approximately 2,530 cubic feet per second (cfs) at the upstream end to 1,700 cfs at its terminus. The TC canal was constructed under a long-term plan that provided for supplying water to a future service area significantly larger than the current service area. The canal and its related major structures (i.e., siphons and check structures) have capacities varying from 2,530 cfs at the Red Bluff Diversion Dam to 2,100 cfs at Funks Reservoir, located about 5 miles northwest of Maxwell.

As part of a future Sites Reservoir supply, earlier studies have assumed that enlargement of the canal capacity to 2,530 cfs from Red Bluff to Funks Reservoir would be beneficial. A summary of the existing capacities (Q in cfs) and the proposed capacities by reach to the TC/GCID Intertie are summarized as follows:

- Red Bluff Diversion Dam to Mile Post (MP) 3.7 (Check #2): Q = 2,530 cfs, no increase
- MP 3.7 to MP 12.99 (Check #5, Thomas Creek): Q = 2,300 cfs, increase of 230 cfs
- MP 12.99 to MP 29.77 (Check #9, Stony Creek): Q = 2,200 cfs, increase of 330 cfs
- MP 29.77 to MP 64 +/- (TC/GCID Intertie): Q = 2,100 cfs, increase of 430 cfs
- MP 64 to MP 66.87 (Funks Reservoir): Q = 2,100 cfs, increase 430 cfs

The above summary indicates that approximately 54 miles of the TC Canal may need to operate at future capacity increases of between 230 cfs and 430 cfs to accommodate deliveries to Sites Reservoir. The proposed FS would evaluate alternatives for increasing the capacity of the canal and related structures in each of these major reaches.

2. Task List and Schedule

The scope of the proposed FS would include the following primary tasks:

- Collect and review existing facility and operations data
- Develop design and operations criteria
- Develop a refined hydraulics model of the canal, with unsteady flow analysis capability
- Develop facility improvement alternatives for a range of capacities
- Develop estimates of project alternative costs
- Evaluate and rank project alternatives

- Prepare an engineering feasibility report

3. Monitoring and Assessment

This project is a feasibility study only. The FS will explore the feasibility of using TC Canal to convey water to Sites Reservoir, which itself is at a very conceptual stage of planning. The current FS is one of many potential efforts to evaluate the feasibility of building Sites Reservoir by demonstrating the feasibility or non-feasibility of conveying water to the reservoir. However, if the Sites Reservoir project does not move forward, the TC Canal improvements will not be constructed. This FS is not, therefore, considered at this point to be a capital outlay project per se.

If and when Sites Reservoir is approved for design and construction, one of the alternative methods to convey water to the reservoir must also be selected and implemented. Should the TC Canal alternative be selected to proceed to design and construction, a comprehensive monitoring and assessment plan will be developed in cooperation with the participating agencies and other stakeholders during preliminary design. The monitoring plan would presumably include elements, such as input and output flow measurement capabilities, to enable the evaluation of the efficiency of the conveyance system in delivering water to Sites with minimal conveyance losses. The conveyance system itself would be designed to convey water with minimal losses. With the capability to measure the inflow and outflow of the conveyance system that carries water to Sites Reservoir, along with the capability to gage the volume of releases from the proposed reservoir, it will be possible to quantify the extent to which Sites Reservoir contributes to operational and water delivery flexibility, increased instream flows in the Sacramento River, and greater flexibility in the timing and volume of river diversions to minimize conflicts with fish passage.

C. Qualifications

1. Project Manager

Mr. Arthur R. Bullock, TCCA General Manager, will administer the project with assistance from TCCA staff. Mr. Bullock will administer the contract, oversee the work, and provide all required documentation to DWR. He has more than 31 years of experience in the California public water supply industry. He held management positions in four separate southern California water districts before joining the TCCA. He served as General Manager and Chief Engineer of two of these districts prior to becoming TCCA General Manager and Chief Engineering in January 1996. Mr. Bullock has extensive experience in report preparation and administering large research and construction projects. He is currently managing and administering the Fish Passage Improvement Project at Red Bluff Diversion Dam under a series of CALFED grants.

2. External Cooperators

It is not anticipated that the project will require additional assistance from any other entity or agency. TCCA will coordinate with landowners who may be affected by project construction.

D. Benefits and Costs

1. Budget Breakdown and Justification

The estimated Feasibility Study cost is $400,000, and the allocation of costs by task is shown on Figure 2. The budget cost justification and a breakdown of the project cost as requested by the PSP are shown in the attached Budget Summary at the end of this proposal (Table 1).

2. Cost Sharing

TCCA's participation in this study is mostly the administration and contract management cost, which has not been estimated at this point. The District may be responsible for part or full O&M costs for the TC canal facilities used to convey water to Sites Reservoir. The costs incurred by the District are expected to be a part of the local cost-share contribution. An estimated budgetary synopsis by task of TCCA's labor costs is shown on Figure 2.

3. Potential Benefits to be Realized and Information to be Gained

This project is a feasibility study only and is considered to be "research." The FS will explore means to convey water to Sites Reservoir, which itself is at a very conceptual stage of planning. The current FS is one of many potential efforts to evaluate the feasibility of building Sites Reservoir by demonstrating the feasibility or non-feasibility of conveying water to the reservoir. However, if the Sites Reservoir project does not move forward, the TC Canal improvements will not be constructed. This FS is not, therefore, considered at this point to be a capital outlay project per se.

TCCA water users, other Sacramento Valley water users, and Delta water quality could potentially benefit from this proposed project in the following ways:

- **TCCA Water Users—**In terms of supporting the Sites Reservoir project, the proposed project (FS) benefits would be realized only if a future Sites Reservoir were eventually constructed. Water users in the service area would benefit from more reliable water supplies and improved delivery flexibility under most hydrologic conditions as a result of the increased regional yield from Sites Reservoir. The use of the TC Canal for conveyance of Sites Reservoir supply may also allow a portion of the canal operating and maintenance costs to be applied to these new uses, thereby reducing the annual canal operating costs that must be funded by TCCA member districts.
- **Other Sacramento Valley Water Users—**The significant increase in dry-year supplies and overall regional operating flexibility provided by Sites Reservoir would benefit many other users in the Sacramento Valley.
- **Instream Flows and Delta Water Quality—**Preliminary modeling and gaming exercises done as part of the Sacramento Basinwide Water Management Plan indicate that Sites Reservoir and the related conveyance systems could be used to improve the quantity of instream Sacramento River flows and Delta outflow under certain hydrologic conditions because of the availability of net new seasonal water supply and reduced seasonal diversions from the Sacramento River. The fundamental operating concept for Sites Reservoir is that "surplus water" would be diverted and stored in the reservoir during wet years and exported to in-basin users and the Delta during dry years.

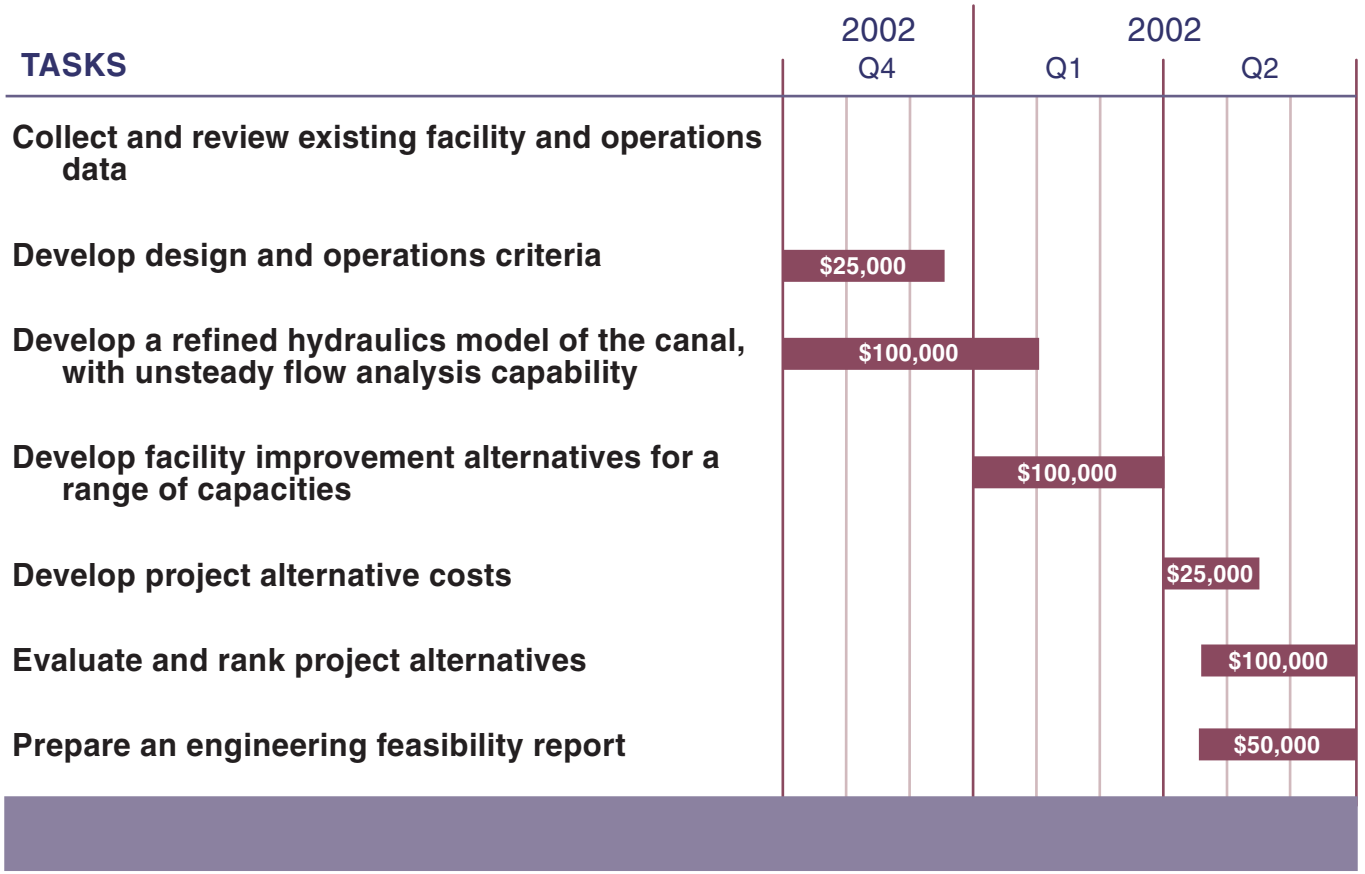

FIGURE 2
PRELIMINARY IMPLEMENTATION SCHEDULE
TCCA TC CANAL CONVEYANCE OF WATER TO SITES RESERVOIR

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TABLE 1

Budget Summary

	Item	Present Value ($)	Requested Funds ($)	Description and Justification
(a)	Direct Labor Hours	$0	$0	Not applicable—Work for this feasibility shall be contracted out to consultants; TCCA participation to administer the contract and manage the project is part of the District's cost share
(b)	Salaries	$0	$0	Not applicable—Work for this feasibility shall be contracted out to consultants; TCCA participation to administer the contract and manage the project is part of the District's cost share
(c)	Benefits	$0	$0	Not applicable—Work for this feasibility shall be contracted out to consultants; TCCA participation to administer the contract and manage the project is part of the District's cost share
(d)	Travel	$0	$0	Not applicable—Work for this feasibility shall be contracted out to consultants; TCCA participation to administer the contract and manage the project is part of the District's cost share
(e)	Supplies and Expendables	$0	$0	Not applicable—Work for this feasibility shall be contracted out to consultants; TCCA participation to administer the contract and manage the project is part of the District's cost share
(f)	Services or Consultants	$385,000	$385,000	Engineering services shall be provided by consultants. Initial stages of the study are underway, but require additional funding to proceed.
(g)	Equipment	$0	$0	
	Subtotal (a-g)	**$385,000**	**$385,000**	
(h)	Other Direct Costs			
	Right-of-Way/Legal	$15,000	$15,000	Legal and Right-of-Way consultations shall be provided by TCCA's attorney
	Subtotal (h)	**$15,000**	**$15,000**	
(i)	Total Direct Cost	$400,000	$400,000	
(j)	Indirect Costs	$0	$0	Not applicable—Work for this feasibility shall be contracted out to consultants; TCCA participation to administer the contract and manage the project is part of the District's cost share contribution
(k)	***Total Costs***	$400,000	$400,000	

4. Benefit Realized and Information Gained versus Costs

The information to be gained from the FS is how to optimally deliver water to the proposed Sites Reservoirs to achieve the water savings and other benefits (flexibility in water deliveries and in timing and amounts of diversions) most efficiently and cost effectively. The "Small" and "Large" Sites reservoirs would be formed by two main dams on Stone Corral Creek (Sites Dam) and Funks Creek (Golden Gate Dam). Stored water would be released back into the TC Canal, GCID Canal, or both for distribution to Sacramento Valley water users or into the Colusa Basin Drain for conveyance to the Sacramento River. The Sites Reservoirs will store up to approximately 1.9 million acre-feet. The average annual drought-period yield from the small and large Sites reservoirs would be 155,000 acre-feet/year and 240,000 acre-feet/year, respectively. Estimated capital costs, in 1995 dollars, are $230 million and $450 million, respectively. The approximate unit cost for dry-period yield is $1,484 per acre-foot for the Small Sites project and $1,875 per acre-foot for the Large Sites project.

E. Outreach, Community Involvement, and Acceptance

The project is an outgrowth of the Sacramento Valley Water Management Agreement among the Sacramento Valley water interests, the California Department of Water Resources, the U.S. Bureau of Reclamation, and export water users. The ongoing process that resulted in the Agreement has a strong public outreach component to inform agencies, environmental and other interests, and the public on the Agreement. Numerous presentations have been made to the CALFED Management Team and associated staff, county supervisors in all affected counties, water districts and their customers, and other organizations and agencies, including the State Water Resources Control Board, Trust for Public Lands, The Bay Institute, U.S. Fish and Wildlife Service, Natural Heritage Institute, The Nature Conservancy, and the public. Additional meetings will occur as the planning and implementation process proceeds. No individual or organization has expressed formal opposition to the Agreement or the projects to be undertaken under the Agreement. The projects, including the one described herein, have been summarized in a published "Short-term Workplan" prepared in conjunction with the Agreement.

Additionally, if they prove to be feasible and are selected for implementation, this and all other capital outlay projects associated with the Agreement will be subject to CEQA and NEPA documentation. The CEQA and NEPA statutes and implementing guidelines ensure that the public and all affected agencies will be fully informed of the project and its effects and receive meaningful opportunities to provide input and review and comment on the project through the CEQA and NEPA public review process.

The project does not directly involve training, employment, or capacity building, but through more efficient and flexible agricultural water supply management, it potentially makes more water available for beneficial uses. A better managed water supply will help sustain the gains being made in the northern California economy by accommodating growth in industry and agriculture, providing growth in employment opportunities in all economic sectors.

The planning effort associated with the Agreement provides a formal framework for disseminating project information. Feedback on benefits achieved through the management

and conservation measures recommended in the Agreement will be made available to all Sacramento Valley water contractors, Reclamation, and DWR through the planning partnership. The participants are aware of the need to share this information to ensure successful water supply management throughout the Sacramento Valley.