

## **PART A. Cover Sheet**

**A1. Proposal Title:** Lake Davis Pike Eradication Project; Planning Feasibility Phase

**A2. Lead Applicant or Organization:** California Dept. Fish and Game  
Contact Name: Diana Jacobs

**A3. Project Manager or Principal Investigator**  
Contact Name: Ed Pert  
Agency/Organization Affiliation: Calif. Dept. Fish & Game, FPB

**A4. Cost of Project:** Request for ERP Prop 50 funding: \$5,600,000 (see Table 2, attached, for complete project breakdown for California Department of Fish and Game and Prop. 50 funding)

**A5. Cost Share Partners:\*** Department of Fish and Game. The Department of Fish and Game will provide funding of approximately \$961,134, which includes approximately \$623,134 for personnel services staff time over the length of the Planning Feasibility Phase and \$338,000 for contracts and Operating and Expense money. The Department of Water Resources (DWR) will provide funding for DWR staff support of approximately \$50,000 from Prop 50 funding allocated to its Fish Passage Improvement Program.

**A6. List of Subcontractors:\***  
The following contracts will be written for this project:

- Tasks 1, 2, and 4: Consultant Planning Support (CCP, CSU Sacramento): \$105,000 (\$5,000 short form and \$100,000 interagency) (Prop. 50 Funds)
- Task 3: Design of a Containment System (DWR): \$500,000: (Prop. 50 Funds)
- Task 3: Ground Water Study (DWR): \$100,000 (Prop. 50 Funds)
- Task 3: Invertebrate Study (CSU Chico): \$71,000 (General Funds)
- Task 3: Environmental Toxicologist (UC Davis); \$27,000 (Prop. 50 Funds)
- Task 3: Rotenone Specialists (entity to be identified): \$15,000 (Prop. 50 Funds)
- Task 3: Plumas County Well Testing (Plumas County): \$130,000 (Prop. 50 Funds)
- Task 3: Economists (CSU Chico and UC-Berkeley): \$75,000 (Prop. 50 Funds)
- Task 4: CEQA/NEPA Consultant (entity to be identified): \$950,000 (Prop. 50 Funds)
- Tasks 1, 2, 3 and 4: USFS Standard Agreement (USFS): \$75,000 (Prop. 50 Funds)

**A7. Other Cooperators:\*** United States Forest Service, Angela Dillingham, District Ranger, Beckwourth Ranger District.

**A8. Project Topic Area\***  
Primary: Non-native Invasive Species - The proposed project is designed to eradicate Northern Pike (*Esox lucius*) from Lake Davis and its tributaries, minimizing the chance of further expansion downstream of Lake Davis or to other watersheds. This requires an integrated

program that disrupts the pike invasion process and removes the pike population from Lake Davis itself.

Northern pike are a nonnative invasive fish species that have the potential to have irreversible negative impacts on California aquatic ecosystems within Lake Davis, the San Francisco Bay-Delta, the Sacramento/San Joaquin river systems and many other waters throughout California. One impact that nonnative northern pike have had on ecosystems where they have been introduced has been depletion of some salmonid stocks. Over the past two decades, pike have been illegally introduced on at least two occasions to waters in Plumas County in the Middle Fork Feather River watershed, tributary to the Sacramento River. After successful eradications at Frenchman Reservoir and in Sierra Valley in 1991 and 1992, pike appeared in nearby Lake Davis. After a controversial treatment of Lake Davis with rotenone in 1997, pike were caught again in the reservoir eighteen months later. After an intensive four-year program to control and contain the pike population through mechanical means such as netting and electrofishing, the population continues to increase. Both the angler catch rate and monitoring catch per unit effort for rainbow trout indicate that the pike may be negatively impacting the managed rainbow trout fishery. Although there have been several anecdotal reports of pike caught downstream of Lake Davis, there is no evidence of reproducing populations in those areas. To date the existence of a reproducing population of pike in California appears to be confined to Lake Davis. Catch data at Lake Davis indicates that the risk of pike escapement downstream or to other watersheds has increased over the last four years. Removing the northern pike in Lake Davis eliminates the source pool most likely to invade other areas of California.

**A9. Project Type\***

Primary: Planning - The goal of the Planning Feasibility Phase is to plan and prepare for a project to eradicate northern pike from Lake Davis and its tributaries thus preventing their downstream spread and reducing the chances of northern pike being relocated to other California waters.

Objectives of the Planning Feasibility Phase are: 1) prepare a Communication Plan; 2) collect information related to the project; 3) prepare environmental documents; 4) develop and implement an enforcement program; and 5) undertake an Economic Study.

## **PART B. Executive Summary**

**B1. Proposal Title:** Lake Davis Pike Eradication Project; Planning Feasibility Phase

**B2. Project Description:** The Planning Feasibility Phase of this project will gather information and data necessary to develop and finalize an environmental document (EIR/EIS) for the eradication of northern pike from Lake Davis.

Research will be conducted to: 1) determine the invertebrate population structure of Lake Davis and its tributaries; 2) investigate possible methods to prevent pike from escaping from the lake; 3) evaluate groundwater resources in the surrounding area; 4) assess and evaluate potential pike habitat in the Delta System; and 5) test and evaluate various piscicides.

In addition, consultants will be hired to; 1) develop an EIR/EIS document for the Department of Fish and Game and the US Forest Service, 2) develop an economic study showing both cost benefits and local impacts regarding the presence of northern pike and their removal from the lake, 3) review toxicological issues, and 4) review the use of piscicides.

Data and information gathered from the research and consultants will assist in the preparation of an environmental document which will evaluate a project to eradicate the northern pike from Lake Davis.

## **PART C. Work Plan**

**C1. Project Background and Information:** Lake Davis is located in Plumas County, California, at elevation 5,775 feet above sea level in the upper reaches of the Middle Fork Feather River watershed in the Sierra Nevada Mountains. (See attached map.) A State Water Project reservoir, Lake Davis was impounded in 1966-68 by the construction of Grizzly Valley Dam on Big Grizzly Creek. It has a surface area of 4,025 acres when full, a capacity of 84,371 acre-feet and an average depth of 21 feet. The deepest point of the lake is 108', just upstream of Big Grizzly Dam. The reservoir is operated by the California Department of Water Resources, and lies within the U.S. Forest Service Plumas National Forest.

Lake Davis water is used for recreation, irrigation, and for the benefit of fish and wildlife. It supports a trout fishery managed by the California Department of Fish and Game. Lake Davis has been developed as a source of domestic water for the City of Portola and the Grizzly Lake Resort Improvement District (GLRID). Lake Davis was taken offline as a source of domestic water prior to the October 1997 chemical treatment, and continues to be offline pending improvements to the water treatment plant. Thus, neither entity currently uses Lake Davis as a water supply. Nearby residences depend on groundwater from private wells.

Northern pike are a nonnative invasive fish species illegally introduced to California. Pike can seriously impact aquatic ecosystems by heavy predation on other fish species. Experience in Alaska (<http://www.sf.adfg.state.ak.us/region2/areas/anch/html/pikepage.stm>) and elsewhere suggests that where habitat conditions are favorable, introduced pike have the potential to cause irreversible environmental impacts, and become the dominant fish species, often to the exclusion of native fish species. Portions of the Feather River, Sacramento River, and the Sacramento-San Joaquin Delta, as well as many aquatic environments in other California watersheds, match the preferred habitat of the northern pike in terms of temperature, aquatic vegetation, current speed and other features.

The geographical extent of northern pike in California is thought to be limited to one upstream site, Lake Davis and its tributary streams. Lake Davis is a reservoir of the State Water Project on Big Grizzly Creek, which is tributary to the Middle Fork Feather River, Lake Oroville and the Feather River, the Sacramento River, and the Sacramento-San Joaquin Delta.

Within the Sacramento-San Joaquin Delta system, several species of fish have life history stages and habitat preferences which make them potentially vulnerable to pike predation. These include the state- and federally-listed out migrating juveniles of winter- and spring-run Chinook salmon, steelhead, and delta smelt. In portions of other watersheds, in both riverine, lake and reservoir environments, a variety of fish species, including stocked trout, are vulnerable to pike predation. This threat is recognized by the state and federal governments and stakeholders otherwise known as CALFED Bay Delta Program in its Strategic Plan for Ecosystem Restoration.

Based upon current knowledge of the physical and biological processes that influence the spread and impact of northern pike on aquatic ecosystems, the northern pike population in Lake Davis appears poised to have a serious and widespread environmental impact on California's aquatic

ecosystems. If the pike population is not eradicated, biological and physical processes are likely to eventually result in the spread of the pike population to downstream locations. The risk of such a spread has steadily increased since 1999 as the pike population in Lake Davis has grown. The presence of even a single pike population in California increases the risk of human movement of this species to other watersheds in the state. Fortunately, because California's pike population is limited to a single currently contained upstream population, a window of opportunity exists to eliminate the species from the state.

Pike were rediscovered in Lake Davis in May 1999, eighteen months following the highly controversial rotenone treatment of the reservoir. The discovery prompted a visit to Portola from then-Department of Fish and Game (DFG) Director Robert Hight, who discussed the issue with community leaders. DFG opened a local Portola field office and at Hight's request, the Lake Davis Steering Committee (composed of citizens from the local community, with participation from state and federal agencies) was formed to address the issue. Pike experts were brought in from Alaska, Colorado, Idaho, Minnesota, and Wisconsin to assess the situation. They concurred with DFG that Lake Davis provided the necessary habitat for successful pike reproduction and the pike's presence could present a threat to not only the fishery of Lake Davis, but also to other fisheries should the pike escape or be moved from the lake.

In February 2000, DFG and the Steering Committee developed an experimental plan: "Managing Northern Pike at Lake Davis, A Plan for Y2000" (<http://www.dfg.ca.gov/northernpike/mgpike.htm>) to determine the feasibility of control and possible elimination of the pike from the lake using conventional fishery sampling techniques such as netting, electrofishing and trapping, as well as an experimental method, detonation cord. Since the spring of 2000, DFG's Portola field office personnel have conducted extensive field work in an attempt to control the illegally introduced non-native northern pike in Lake Davis. In September 2003, DFG evaluated the previous three and one-half years of pike removal ([http://www.dfg.ca.gov/northernpike/summary\\_report.pdf](http://www.dfg.ca.gov/northernpike/summary_report.pdf)). Data indicated pike numbers continued to increase in spite of the concerted control efforts. Although all methods succeeded in removing pike from the lake, none have proven effective in preventing a population increase. DFG is currently continuing its pike-removal efforts, and to date about 50,000 of the fish have been removed.

In December 2003, the Lake Davis Steering Committee sent a letter to the Secretary of Resources, Mike Chrisman, requesting DFG investigate methods to rid Lake Davis of the pike. Mr. Chrisman replied he was directing the DFG to investigate methods of eliminating the pike from the lake. Mr. Chrisman also indicated that protecting public health and addressing economic issues are important considerations in any decision to effectively deal with the pike.

In May of 2004, DFG presented the community with a list of eradication options which had been suggested by various persons and/or agencies, (<http://www.dfg.ca.gov/northernpike/options.pdf>) and evaluated these options to determine which of these were feasible, effective, and safe. It was concluded that the use of formulated rotenone or a combination of formulated rotenone and rotenone powder combined with a significant drawdown of Lake Davis could be a feasible, effective and safe method for eradicating the pike, and notes that any such project if proposed by

DFG would be thoroughly evaluated pursuant to applicable environmental laws. It was determined that continuation of the current “Control and Containment” program is not a viable method for eradication. Throughout 2004, DFG personnel continued to gather information on possible options.

On February 28, 2005, DFG Director Ryan Broddrick met with the Lake Davis Steering Committee and various Portola community members. Mr. Broddrick stated he was very pleased to see all the hard work and commitment of time from members of the community in working with the Department to solve a very complex issue. He reassured the community the Department would continue to work with them and is moving towards developing a plan to rid the lake of northern pike.

**C2. Project Goals and Objectives:** The goal of the Planning Feasibility Phase is to plan and prepare for a project to eradicate northern pike from Lake Davis and its tributaries thus preventing their downstream spread and reducing the chances of northern pike being relocated to other California waters.

Objectives of the Planning Feasibility Phase are: 1) prepare a Communication Plan; 2) collect information related to the project; 3) prepare environmental documents; 4) develop and implement an enforcement program; and 5) undertake an Economic Study.

**C3. Approach/Methodology:** The proposed project will be divided into five tasks. They include:

Table 1. Tasks and Timelines to be completed during Planning and Feasibility Phase.

<b>Task</b>	<b>Timeline</b>
1) Project Management	August '05 through June '07
2) Education and Public Outreach	August '05 through June '07
3) Technical and Planning Support	August '05 through June '07
4) Environmental Documentation Preparation	August '05 through June '07
5) Enforcement and Safety	August '05 through June '07

**C4. Tasks and Deliverables:**

**Task 1. Project Management.** The Department of Fish and Game, in collaboration with the U.S. Forest Service, will manage all aspects of the Planning Feasibility Phase for the Lake Davis Pike Eradication Project. Task will include weekly Pike Team calls, coordination with Department executive staff, and overall management of the project through the Incident Command System. The Department will also contract through an inter-agency agreement for project management and planning support with the Center for Collaborative Policy, CSU Sacramento.

**Task 2. Education and Public Outreach.** The Department will develop and implement a Communications and Public Outreach Plan which will provide accurate, timely information to

the general public via media releases, informational pamphlets, and presentations to various stake holders, and volunteer management. The Department will also provide up to date information to elected public officials to keep them informed on the need for and progress of the eradication project. The Department will contract through an inter-agency agreement with CCP, CSU Sacramento to assist with refining and implementing the Public Outreach Plan.

**Task 3. Technical and Planning Support.** The Department will be responsible for the collection of information on various physical, biological, and economic aspects of an eradication project at Lake Davis using a piscicide (formulated rotenone). These will include: 1) a contract with CSU Chico to conduct a macro-invertebrate inventory of the Lake Davis and its three main tributaries; 2) an inter-agency agreement with the Department of Water Resources to conduct a study to evaluate the ground water system adjacent to and along the lower Big Grizzly Creek corridor; 3) an in-house study by the Department to assess potential pike habitat in various waters, such as the Bay-Delta Estuary, where northern pike could establish a viable population; 4) design a containment system which will prevent accidental flushing of northern pike through the Grizzly Dam outlet facility; 5) contract through an inter-agency agreement with UC Davis to have toxicologists review and provide input regarding the use of a piscicide and potential toxicological issues; 6) contract with private rotenone experts to provide additional input on the use of a piscicide; 7) in-house Department testing and evaluation of formulated rotenone (OSPR), and, 8) the Department will contract with economic experts at UC Berkeley and CSU Chico to develop and prepare an economic report as part of the cooperative effort between the Department and the local community to have a study conducted to address the issue of economic concerns.

**Task 4. Environmental Documentation Preparation.** The Department will staff public scoping meetings, record comments, document them in a scoping report, and address them in the draft EIR/EIS. The Department will contract through an inter-agency agreement with CCP, CSU Sacramento to assist with the scoping meetings and preparation of the scoping report. The Department will also contract with a private environmental consulting firm to analyze data and prepare a CEQA/NEPA document addressing an eradication program to remove northern pike from Lake Davis. The Department will contract with the USFS to gather data for use in the CEQA/NEPA document. Department and USFS staff will assist with the preparation of the EIR/EIS.

**Task 5. Enforcement and Safety.** The Department's Enforcement Branch will be responsible for developing an enforcement plan which addresses such issues as prevention of illegal movement of northern pike within the State of California and investigatory programs deemed necessary by enforcement personnel. Enforcement staff will begin implementing this plan during this phase. The OSPR will develop plans to address public and employee safety prior to, during, and following an eradication project at Lake Davis.

Refer to Exhibit A - Attachment 1 for list and schedule of deliverables.

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**C5. Subcontractors:**

- Tasks 1, 2, and 4: Planning Support (CCP, CSU Sacramento): \$105,000 (Prop. 50 Funds)
- Task 3: Design of a Containment System (DWR): \$500,000
- Task 3: Ground Water Study (DWR): \$100,000
- Task 3: Invertebrate Study (CSU Chico): \$71,000
- Task 3: Environmental Toxicologist (UC Davis); \$27,000
- Task 3: Rotenone Specialists (entity to be determined): \$15,000
- Task 3: Plumas County Well Testing (Plumas County): \$130,000
- Task 3: Economists (CSU Chico and UC-Berkeley): \$75,000
- Task 4: CEQA/NEPA Consultant (entity to be determined): \$950,000
- Tasks 1,2, 3 and 4: USFS Standard Agreement (USFS): \$75,000

**C6. Work Schedule**

<b>Contract</b>	<b>Work Schedule</b>
Design/Construct Containment System	1) Conceptual Design – Aug. '05 to June '06 2) Design Containment System – July '06 to Dec. '06 3) Construct Containment System – after approval of EIR/EIS.
Ground Water Study	1) Conceptual Design – Aug. '05 to Dec. '05 2) Implement Study – Jan. '06 to June '07
Invertebrate Study	1) Field Data Collection – Aug. '05 to June '07
UC Davis Toxicologist	1) Literature Review – Aug. '05 to Dec. '06 2) Provide information for environmental documents – Aug. '05 to June '06 3) Attend meetings – Sep. '05 to Dec. '06
Rotenone Specialists	1) Provide Information for environmental documents/review – Aug. '05 to June '07
Lab Testing	1) Chemical analysis – Aug. '05 to June '07
Plumas County Well Testing	1) Monitor wells for pre- and post-treatment for possible chemical intrusion – Aug. '05 to June '07
CEQA/NEPA Consultant	1) Prepare Draft EIR/EIS document – Dec. '05 to June '06 2) Prepare Final EIR/EIS document – July '06 to Oct. '06
USFS Standard Agreement	1) USFS will work on providing data they have and review environmental documents – Aug. '05 to June '07
Economists	1) Prepare Draft Economic Reports – Aug. '05 to June '06 2) Prepare Final Economic reports – July '06 to Oct. '06

CCP, CSU Sacramento Planning Support	1) Microsoft Project and Gantt Chart management – Aug. '05 to June '07 2) Prepare Final Scoping Report – Aug. '05 to Dec. '05 3) Administrative Record management – Aug. '05 to June '07 4) Mailing List management – Aug. '05 to June '07 5) Outreach and project planning support – Aug. '05 to June '07
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**C7. Special Equipment and Supplies Required:** See Exhibit A; Equipment Template

**C8. Project Impacts (beneficial or adverse):** Eradication of northern pike from Lake Davis will be extremely beneficial to not only the Bay-Delta System, but all waters of California. Northern pike have demonstrated their ability to severely impact fishery resources in other states where they have been illegally introduced.

**C9. Stakeholders and Interested Parties:** USFWS, DWR, commercial and sport anglers of California.

**C10. Consistency with CALFED ERP Goals:\***

1). Identify Project Applicability to Eco-Elements  
 Primary: Invasive Aquatic Organisms

2). Identify Project Applicability to ERP Goals and Objectives:  
 Prevent the establishment of additional non-native invasive species and reduce the negative ecological and economic impacts of established non-native species in the Bay-Delta estuary and its watershed. Lake Davis waters flow into the Bay-Delta via the Feather River System. The presence of non-native northern pike within Lake Davis presents a potential threat to the ecology and economics of the Bay-Delta System.

3). Identify Project Applicability to Environmental Water Quality Constituents:  
 Primary: N/A

**C11. Related Projects\***

1). If this project is related to another restoration project, identify other projects by number and program (e.g. CALFED, CVPIA), and if CALFED, identify that relationship by category:

Related Projects include other Non-native Invasive Species Control and Containment projects funded by the ERP.

**PART D. Budget Summary**

**D1. Budget**

	<b>FY 05/06 AMOUNT</b>	<b>FY 06/07 AMOUNT</b>
<b>Personnel Service</b>		
Task 1: Project Management	\$163,262	\$219,400
Task 2: Education and Public Outreach	\$106,238	\$163,355
Task 3: Technical and Planning Support	\$255,884	\$375,998
Task 4: Environmental Documentation	\$105,506	\$231,823
Task 5: Enforcement and Safety	\$152,600	\$468,182
<b>Sub-Total Personnel Services</b>	<b>\$783,490</b>	<b>\$1,458,758</b>
<b>Benefits (0.3202)</b>	<b>\$250,873</b>	<b>\$467,094</b>
<b>Total Personnel Services</b>	<b>\$1,034,363</b>	<b>\$1,925,852</b>
<b>Operating Expenses</b>		
General Expenses	\$34,385	\$94,300
Software	\$8,000	\$7,500
Office Supplies	\$10,000	\$14,000
Training	\$6,000	\$9,000
Travel and Per Diem	\$30,000	\$90,000
Printing/Misc	\$45,000	\$83,000
Equipment	\$103,600	\$96,000
Rent/Lease	\$8,000	\$24,000
Sub-Contracts	\$1,477,000	\$500,000
<b>Total Operating Expenses</b>	<b>\$1,721,985</b>	<b>\$917,800</b>
<b>Directed Action Total by FY</b>	<b>\$2,756,348</b>	<b>\$2,843,652</b>
<b>Directed Action Total</b>	<b>\$5,600,000</b>	

## **PART E. Project Location Information**

**E1. Project Location:** Lake Davis, California

**E2. County or Counties Project is Located In:** Plumas

**E3. ERP Eco-Region, Eco-Zone, and Eco-Unit Project is Located In:\*** Sacramento Region

**E4. Project Centroid:**

Latitude/Longitude Coordinates: Long. -120.05357; Lat. – 40.69336

**E5. Project Map:** See Figure 1.

**E6. Digital Geographic File:\***

**E7. Congressional District:** Congressional District 4

## **PART F. Environmental Information**

### **F1. CEQA/NEPA Compliance**

- 1). Will this project require compliance with CEQA, NEPA, both, or neither:\* Both
- 2). Is your project covered by either a Statutory or Categorical Exemption under CEQA or a Categorical Exclusion under NEPA:\* No
- 3). If your project requires additional CEQA/NEPA analysis, please indicate which type of documents will be prepared:
  - EIR/CEQA Findings of Fact
  - EIS/ Record of Decision
- 4). If the project will require CEQA and/or NEPA compliance, identify the lead agency(ies).
  - CEQA Lead Agency: California Dept. Fish and Game
  - NEPA Lead Agency (Must be a Federal Agency): USFS
- 5). If your project is not covered under items 2 or 3, and you checked no to question 1, please explain why compliance is not required for the actions in this proposal: N/A
- 6). If the CEQA/NEPA process is not complete, please describe the estimated timelines for the process and the expected date of completion: Scoping Process – August/September 2005; Draft EIR/EIS available July 2006; Final EIR/Notice of Decision – November 2006.
- 7). If the CEQA/NEPA document has been completed, what is the name of the document:

### **F2. Environmental Permitting and Approvals**

Please indicate what permits or other approvals may be required for the activities contained in your proposal and which have already been obtained. Please indicate all that 1) are needed, and 2) if needed, have been obtained:

- 1). Local Permits and Approvals
  - Co-ordination with County Environmental Health Department, County Sheriff's office, Plumas County Agricultural Commissioner, Plumas County Board of Supervisor's, Portola City Council and the Lake Davis Steering Committee.
- 2) State Permits and Approvals:
  - CESA compliance: 2081 (?)
  - 1601/03
  - CWA 401 certification (NPDES permit through Central Valley Regional Water Quality Control Board)
  - Department of Health Services (certification of use of pesticide in drinking water supply)

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- Department of Water Resources (co-ordination and possible clearances)
- Northern Sierra Air Quality Management District (screening and review)
- Office of Emergency Health Hazard Assessment

3) Federal Permits and Approvals:

- USFWS ESA compliance Section 7 consultation
- CWA 404 (possible)
- U.S. Forest Service (Special Use Permit, Pesticide Use Permit and/or Forest Closure Order)

## **PART G. Land Use Questionnaire**

### **G1. Land Use Changes**

- 1). Do the actions in the proposal involve physical changes in the land use, or potential future changes in land use (Yes/No): No.
  - If yes, describe what actions will occur on the land involved in the proposal.
  - If no, explain what type of actions are involved in the proposal (i.e., research only, planning only).
- 2). How many acres of land will be subject to a land use change under the proposal: N/A
- 3). Is the land subject to a land use change in the proposal currently under a Williamson Act contract (Yes/No): No.
- 4). For all lands subject to a land use change under the proposal, describe what entity or organization will manage the property and provide operations and maintenance services.  
N/A
- 5). Does the applicant propose any modifications to the water right or change in the delivery of the water (Yes/No): Yes.
  - If yes, please describe the modifications or changes: Water releases through Grizzly Dam may be reduced or terminated for a short period of time (estimate 7 to 14 days) to facilitate neutralization of treated lake waters.

### **G2. Current Land Use and Zoning**

- 1). What is the current land use of the area subject to a land use change under the proposal: N/A
- 2). What is the current zoning and general plan designation(s) for the property: N/A
- 3). How is the land categorized on the Important Farmland Series (IFL) maps (published by the California Department of Conservation):
  - Current land use: N/A
  - Current zoning: N/A
  - Current general plan designation: N/A
  - Mapping Category on the IFL Series Map: N/A

### **G3. Land Acquisition**

- 1). Will the applicant acquire any land under the proposal, either in fee or through a conservation easement (Yes/No): No.

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- If yes, describe the number of acres that will be acquired and whether the acquisition will be of fee title or a conservation easement:
- Total number of acres to be acquired under proposal:
- Number of acres to be acquired in fee:
- Number of acres to be subject to conservation easement:

2). For land acquisitions (fee title or easements), will existing water rights be acquired (Yes/No):

**G4. Land Access**

1). Will the applicant require access across public or private property that the applicant does not own to accomplish the activities in the proposal (Yes/No): Yes.

- If yes, attach written permission for access from the relevant property owner(s).  
Permits will be issued by the USFS.

## **PART H. Qualifications**

### **H1. Qualifications**

(List professional qualifications of all participating researchers).

Pat Coulston  
Department of Fish and Game

Julie Cunningham  
Department of Fish and Game

Brian Finlayson  
Department of Fish and Game

George Heise  
Department of Fish and Game

Kathy Hill  
Department of Fish and Game

Randy Kelly  
Department of Fish and Game

Carol Oz  
Department of Fish and Game

Ivan Paulsen  
Department of Fish and Game

Nick Villa  
California Department of Fish and Game

David P. Spath, Ph.D., Chief  
California Department of Health Services

Ron Dykstra, P.E.  
Regional Water Quality Control Board, Region 5

Doug Rischbieter  
California Department of Water Resources

Theodore C. Foin, PhD  
University of California, Davis

Peter Moyle

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University of California, Davis

Dr. David E. Gallo  
CSU, Chico

Dr. David Sunding  
UC Berkley

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**Appendix**

Table 2. Cost Share for Department of Fish and Game from General Fund and Prop 50 Funding.

<b>Personnel</b>	<b>FY 05/06</b>		<b>FY 06/07</b>	
	<b>DFG</b>	<b>Prop. 50</b>	<b>DFG</b>	<b>Prop. 50</b>
Task 1: Project Management	\$60,000	\$163,262	\$60,000	\$219,400
Task 2: Education and Public Outreach	20,000	106,238	20,000	163,355
Task 3: Technical and Planning Support	87,000	255,884	87,000	375,998
Task 4: Environmental Documentation	60,000	105,506	60,000	231,823
Task 5: Enforcement and Safety	9,000	152,600	9,000	468,182
<b>Sub-Total</b>	236,000	783,490	236,000	1,458,758
Benefits (0.3202)	75,567	250,873	75,567	467,094
<b>Total</b>	311,567	1,034,363	311,567	1,925,852

**Operating & Equipment**

General Expenses	72,000	34,385	82,000	94,300
Software	0	8,000	0	7,500
Office Supplies	0	10,000	0	14,000
Training	0	6,000	4,500	9,000
Travel and Per Diem	15,000	30,000	9,000	90,000
Printing/Misc	0	45,000	0	83,000
Major Equipment	0	103,600	0	96,000
Minor Equipment	13,000	0	23,500	0
Rent (office/storage)	24,000	8,000	24,000	24,000
Sub-contracts	45,000	1,477,000	26,000	500,000
<b>Total</b>	169,000	1,721,985	169,000	917,800

<b>Grand Total</b>	<b>\$480,567</b>	<b>2,756,348</b>	<b>\$480,567</b>	<b>2,843,652</b>
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**Total DFG General Fund = \$ 961,134.00**  
**Total Prop. 50 = \$ 5,600,000.00**

**CALFED BAY-DELTA PROGRAM**  
**Ecosystem Restoration Program**  
**Directed Action Proposal**

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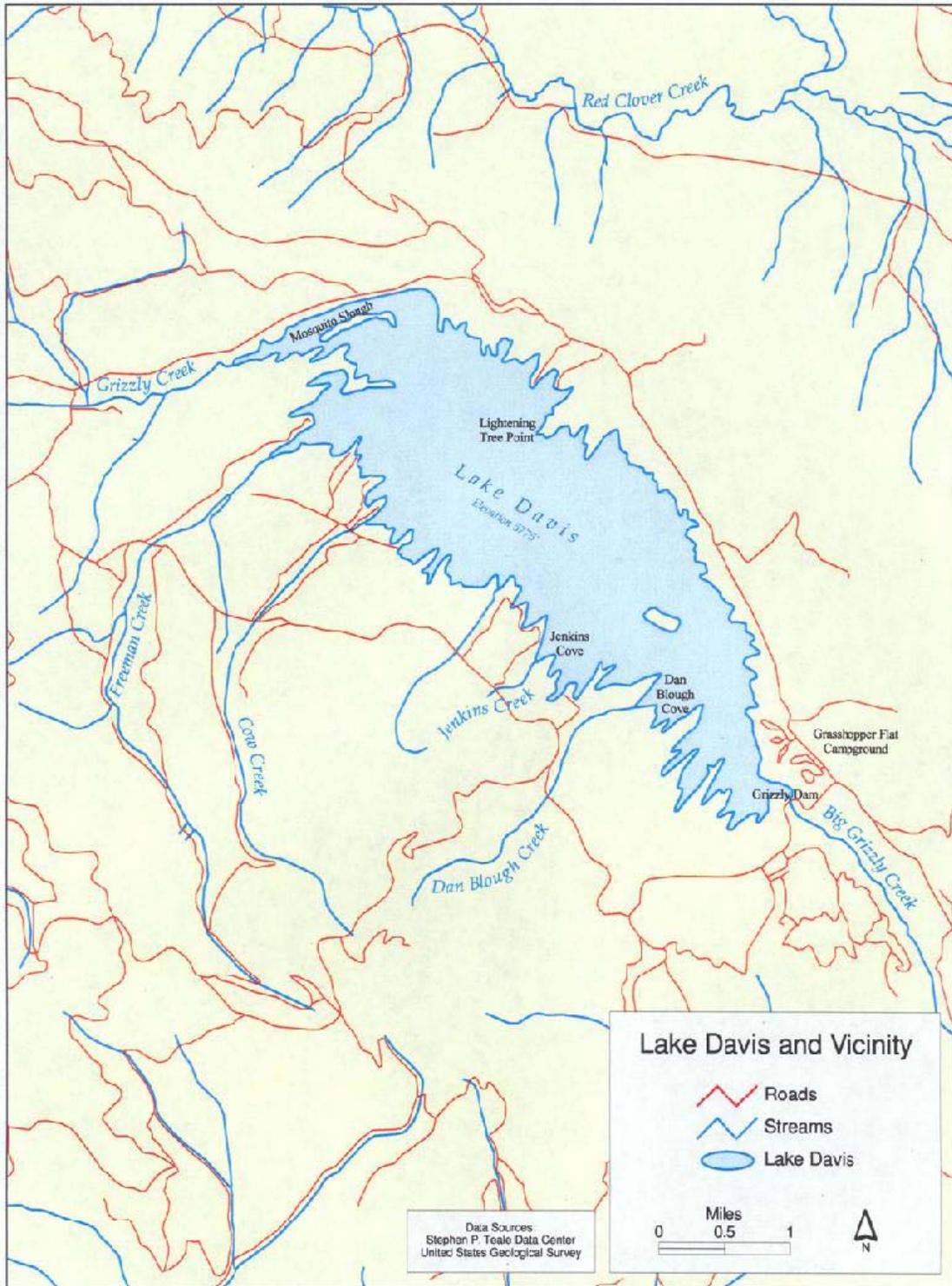


Figure 1. Map of Lake Davis, Plumas County, California