

Proposal Full View

Applicant Information

Organization Name Marin County FC&WCD *

Tax ID **946000519**

Proposal Name Phoenix Lake Integrated Regional Water Management (IRWM) Retrofit *

Proposal Objective Phoenix Lake IRWM Retrofit is a multi-purpose proposal composed of five component projects, all located at Phoenix Lake: Flood Damage Reduction; Water Supply; Water Quality; Ecosystem Restoration; and Recreation and Public Access. By seismically retrofitting the dam and constructing other improvements to the hydraulic and recreational infrastructures of the lake so it can be operated to serve multiple purposes of flood control, drinking water supply, water quality, ecosystem restoration, and public recreation, the Retrofit meets the 6 regional goals and 62 objectives of the Bay Area IRWM Plan. *

Budget

Other Contribution	\$0.00
Local Contribution	\$7,661,000.00
Federal Contribution	\$0.00
Inkind Contribution	\$0.00
Amount Requested	\$7,661,000.00 *
Total Project Cost	\$15,322,000.00 *

Geographic Information

Latitude * DD(+/-) MM SS

Longitude * DD(+/-) MM SS

Longitude/Latitude Clarification Location
 County Marin *
 Ground Water Basin Ross Valley
 Hydrologic Region San Francisco Bay

Watershed Bay Bridges

Legislative Information

Assembly District 6th Assembly District *
 Senate District 3rd Senate District *
 US Congressional District District 6 (CA) *

Project Information

Project Benefits Information

Project Name Water Quality Project

Project Benefit Type	Benefit Type	Measurement	Description
Primary	Water Storage -- Surface-Water Quality Improvement	420	The Water Quality Project involves installing two self-contained, solar-powered circulation devices to improve lake clarity and address taste and odor problems by reducing algae and iron and manganese.
Secondary	Public Access/Recreation	20	Improved lake clarity will enhance the fishery and the enjoyment of the lake by

			fishermen, hikers and other recreational visitors.
			By inducing lake circulation lake water quality will be improved which will enhance aquatic habitat conditions in the lake.
Tertiary	Ecosystem: Shallow Water/ Marsh/ Wetland Habitat	20	

Budget

Other Contribution	0
Local Contribution	191000
Federal Contribution	0
Inkind Contribution	0
Amount Requested	191000
Total Project Cost	382000

Geographic Information

Latitude DD(+/-)	37	MM 57	SS 18
Longitude DD(+/-)	-122	MM 34	SS 36
Longitude/Latitude Clarification	Location		

County	Marin
Ground Water Basin	Ross Valley
Hydrologic Region	San Francisco Bay
WaterShed	Bay Bridges

Legislative Information

Assembly District	6th Assembly District
Senate District	3rd Senate District

US Congressional District	District 6 (CA)
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Project Information

Project Benefits Information

Project Name Ecosystem Restoration Pro

Project Benefit Type	Benefit Type	Measurement	Description
Primary	Ecosystem: Riparian Habitat	36	The Ecosystem Restoration Project involves installing a small gate on the modified intake of the low-level drain to enable precise control of releases of cool water withdrawn from the lake hypolimnion to improve aquatic habitat and aid in ecosystem restoration of Ross Creek.

Budget

Other Contribution	0
Local Contribution	136000
Federal Contribution	0
Inkind Contribution	0
Amount Requested	135000
Total Project Cost	271000

Geographic Information

Latitude DD(+/-)	37	MM 57	SS 18
Longitude DD(+/-)	-122	MM 34	SS 36
Longitude/Latitude Clarification	Location		
County	Marin		
Ground Water Basin	Ross Valley		
Hydrologic Region	San Francisco Bay		
WaterShed	Bay Bridges		

Legislative Information

Assembly District	6th Assembly District
Senate District	3rd Senate District
US Congressional District	District 6 (CA)

Project Information

Project Benefits Information

Project Name Recreation and Public Access

Project Benefit Type	Benefit Type	Measurement	Description
Primary	Public Access/Recreation	100	The Recreation and Public Access Project involves improvements to lakeside roads, trails, and visitor use facilities enhance the visitor experience, add a public outreach, stewardship and

			educational component, and thereby reduce user impacts to the Phoenix Lake watershed.
Secondary	Sediment Removal-Water Quality Improvement	420	Improving trails and roads surrounding the lake will reduce erosion and delivery of sediment and NPS pollutants to the lake, thereby improving lake water quality.
Tertiary	Stormwater Flood -Water Supply Enhancement	420	Reduced erosion and sediment delivery to the lake will preserve lake storage capacity for water supply and flood attenuation.

Budget

Other Contribution	0
Local Contribution	905000
Federal Contribution	0
Inkind Contribution	0
Amount Requested	905000
Total Project Cost	1810000

Geographic Information

Latitude DD(+/-) 37 MM 57 SS 18

Longitude DD(+/-)	-122	MM 34	SS 36
Longitude/Latitude Clarification	Location		Marin County
County	Marin		
Ground Water Basin	Ross Valley		
Hydrologic Region	San Francisco Bay		
WaterShed	Bay Bridges		

Legislative Information

Assembly District	6th Assembly District
Senate District	3rd Senate District
US Congressional District	District 6 (CA)

Project Information

Project Benefits Information

Project Name

Water Supply Project

Project Benefit Type	Benefit Type	Measurement	Description
Primary	Water Storage -- Surface-Water Supply Enhancement	107	The Water Supply Project involves installing a pneumatic spillway gate to enable raising the lake level, thereby increasing lake storage capacity and water supply yield. The Project also includes piping modifications that will eliminate some potential cross connection issues between the potable water and untreated Phoenix Lake water and facilitate use of Phoenix Lake water on a more regular basis.

Secondary	Stormwater Flood-Water Supply Enhancement	460	Installing a pneumatic spillway gate to enable raising the lake level will increase lake storage and flood attenuation capacity.
Tertiary	Threatened or Endangered Species Recovery	36	Installing a pneumatic spillway gate enables raising the lake level which will increase lake depth and thickness of the hypolimnion thereby increasing the volume of cool water available for release to Ross Creek for ecosystem/habitat improvement and to aid in the recovery of threatened/endangered steelhead and coho salmon.

Budget

Other Contribution	0
Local Contribution	341000
Federal Contribution	0
Inkind Contribution	0
Amount Requested	341000
Total Project Cost	682000

Geographic Information

Latitude DD(+/-)	37	MM 57	SS 18
Longitude DD(+/-)	-122	MM 34	SS 36
Longitude/Latitude Clarification	Location		

County	Marin
Ground Water Basin	Ross Valley
Hydrologic Region	San Francisco Bay
WaterShed	Bay Bridges

Legislative Information

Assembly District	6th Assembly District
Senate District	3rd Senate District
US Congressional District	District 6 (CA)

Project Information

Project Benefits Information

Project Name Flood Damage Reduction F

Project Benefit Type	Benefit Type	Measurement	Description
Primary	Flood Protection	0	By seismically retrofitting the dam and constructing other improvements to the lake's water management infrastructure, the lake can be operated for flood detention. The Flood Damage Reduction Project involves stabilizing the dam and modifying the low-level drain to enable safe and effective flood detention operations.
Secondary	Ecosystem: Riparian Habitat	36	The modified low-level intake also enables withdrawal of cool water from the lake hypolimnion during the dry season for release to Ross Creek for coldwater habitat/ecosystem restoration.
Tertiary	Threatened or Endangered Species Recovery	36	Modifying the low-level intake will enable release to Ross Creek for coldwater

			habitat/ecosystem restoration which will also aid in the recovery of threatend/endangered steelhead and coho salmon.
Quaternary	Dam Modification	0	Seismic retrofit of the dam will enhance public safety and improve the reliability of Phoenix Lake for its multiple purposes.

Budget

Other Contribution	0
Local Contribution	6089000
Federal Contribution	0
Inkind Contribution	0
Amount Requested	6088000
Total Project Cost	12177000

Geographic Information

Latitude DD(+/-)	37	MM 57	SS 18
Longitude DD(+/-)	-122	MM 34	SS 36
Longitude/Latitude Clarification		Location	Marin County

County	Marin
Ground Water Basin	Ross Valley
Hydrologic Region	San Francisco Bay
WaterShed	Bay Bridges

Legislative Information

Assembly District	6th Assembly District
Senate District	3rd Senate District
US Congressional District	District 6 (CA)

Section : Applicant Information Question Tab

APPLICANT INFORMATION QUESTIONS

Q1. PROPOSAL DESCRIPTION

Provide a brief abstract of the Proposal, including a listing of individual project titles or types.

The Phoenix Lake IRWM Retrofit brings together two agencies, Marin County FC&WCD and Marin Municipal Water District, for the greater benefit of the public utilization of an important local resource, MMWD's Phoenix Lake, for the greater benefit of the public dam and constructing other improvements to the lake's water management and recreational infrastructure control, drinking water supply, ecosystem restoration, and public recreation. In this way the Retrofit is a multi-purpose proposal composed of five component projects, all located at Phoenix Lake. The Reduction Project involves stabilizing the dam and modifying the low-level drain to enable safe and installing a pneumatic spillway gate to enable raising the lake level, thereby increasing lake storage, water involves installing two self-contained, solar-powered circulation devices to improve lake clarity and aesthetics. The Ecosystem Restoration Project involves installing a small gate on the modified intake of the low-level drain from the lake hypolimnion to improve habitat for steelhead and other coldwater aquatic species in Ross Valley. The project also includes installing lakeside roads, trails, and visitor use facilities to reduce erosion and delivery of sediment and NPS project stewardship and educational component, and thereby reduce user impacts.

Q2. PROJECT DIRECTOR

Provide the name and details (including email) of the person responsible for executing the grant agreement for the project. If the person cannot be listed as the Project Director.

Farhad Mansourian, Director Department of Public Works County of Marin 3501 Civic Center Drive
3799 TTY: (415) 473-3232 Send Email to: FMansourian@marin.gov

Q3. PROJECT MANAGEMENT

Provide the name and contact information (including email) of the Project Manager from the applicant agency.

Jack Curley, Capital Projects Program Manager Department of Public Works County of Marin 3501 Civic Center Drive
3051 Fax: (415) 499-3799 TTY: (415) 473-3232 Send Email to: jcurley@marin.gov

Q4. APPLICANT INFORMATION

Provide the agency name, address, city, state, and zip code of the applicant submitting the application. Also provide the name and contact information of the person submitting the application.

Marin County Flood Control and Water Conservation District Attention: Farhad Mansourian, Director
PE Stetson Engineers Inc. 2171 E. Francisco Blvd., Suite K San Rafael, CA 94901 Phone: (415) 457-1111

Q5. ADDITIONAL INFORMATION

Provide the funding area(s) in which projects are located.

http://www.water.ca.gov/irwm/integregio_fundingarea.cfm

San Francisco Bay Area

Q6. RESPONSIBLE REGIONAL WATER QUALITY CONTROL BOARD

(S)

List the name of the Regional Water Quality Control Board (RWQCB) in which your proposal is located. For name of each Board.

http://www.waterboards.ca.gov/waterboards_map.shtml

San Francisco Bay Area Regional Water Qual

Q7.
ELIGIBILITY

Is the application from an IRWM planning region approved in the RAP (See Section II B, Table 1)? If yes, inc

Yes. San Francisco Bay Area IRW

Q8.
ELIGIBILITY

Is the applicant a local agency or non-profit organization as defined in Appendix B of the Grant Guidelines?

Yes, MCFC&WCD is a local age

Q9.
ELIGIBILITY

List the urban water suppliers that will receive funding from the proposed grant. Those listed must submit self are none, so indicate and you do not have to answer Q10 and Q11.

None.

Q10.
ELIGIBILITY

Have all of the urban water suppliers, listed in Q9 above, submitted complete 2005 Urban Water Management DWR? If not, explain and provide the anticipated date for having a complete UWMP. Will all of the urban water suppliers that meet the urban water supplier definition threshold for the first time, submit updated 2010 UWMPs, consistent with the requirements of the grant agreement before the execution of a grant agreement? If not, explain.

Not applicable.

Q11.
ELIGIBILITY

Have any urban water suppliers listed in Q9 recently submitted AB 1420 compliance tables and supporting documents? If so, please list the urban water supplier and the grant program. An urban water supplier must submit documentation if the urban water supplier has not submitted AB 1420 documentation, or that documentation was determined to be incomplete by the BMS for grant funding. Refer to Section IIIB of the Guidelines for additional information.

Not applicable.

Q12:
ELIGIBILITY

Does the Proposal include any groundwater management or groundwater recharge projects or projects with potential impacts on groundwater and list the agency(ies) that will implement the project(s).

No.

Q13:
ELIGIBILITY

For the agency(ies) listed in Q12, how has the agency complied with CWC §10753 regarding GWMPs, as described in the Guidelines?

Not applicable.

Q14:
ELIGIBILITY

Does the applicant have a Stormwater Resources Plan developed pursuant to Part 2.3 (commencing with Section 1056) of the Water Code and an IRWM Plan that includes the Stormwater Resources Plan requirements specified in Section 1056.1 of the Water Code, or answer Question 15 or 16, as applicable.

- a) Yes
- b) No

Q15:
ELIGIBILITY

For applicants with a Stormwater Resources Plan, does that Plan meet the standards set forth in Attachment 13.

- a) Yes
- b) No

Q16:
ELIGIBILITY

For applicants with an IRWM Plan, does that Plan include the Stormwater Resources Plan requirements specified in Attachment 13.

- a) Yes
- b) No

NOTES TO BMS
ADMINISTRATOR

Provide notes about any potential problems you may have had with BMS that are particular to you.

When I clicked the link to the website for help in Q5, BMS exited

Section : Application Attachments Tab

APPLICATION ATTACHMENTS TAB

ATTACHMENT 1: AUTHORIZATION AND ELIGIBILITY REQUIREMENTS

Upload Authorization and Eligibility documentation here. Ensure file name is consistent with section V of the Stormwater Flood Management Plan (pin).

Last Uploaded Attachments: Att1_SWF_Eligible

Upload additional Authorization and Eligibility documentation here.

Upload additional Authorization and Eligibility documentation here.

Upload additional Au

Upload additional Authorization and Eligibility documentation here.

ATTACHMENT 2: ADOPTED PLAN AND PROOF OF FORMAL ADOPTION

Upload Proof of Formal Adoption documentation here. Ensure file name is consistent with section V of the Stormwater Flood Management Plan.

Last Uploaded Attachments: Att2_SWF_Adopt

Upload additional Proof of Formal Adoption documentation here.

Upload additional Pro

Upload additional Proof of Formal Adoption documentation here.

Upload additional Pro

ATTACHMENT 3: WORK PLAN

Upload the Work Plan here. Ensure file name is consistent with section V of the Stormwater Flood Management Plan.

Last Uploaded Attachments: Att3_SWF_WorkPlan

Upload additional work plan components here.

Upload additional work plan components here.

Upload additional wo

Upload additional work plan components here.

ATTACHMENT 4:
BUDGET

Upload the Budget here. Ensure file name is consistent with section V of the Stormwater Flood Management Plan (disregard the 5 digit pin).
Last Uploaded Attachments: Att4_SWF_Budget_

Upload additional budget components here. Upload additional budget components here.

Upload additional budget components here. Upload additional budget components here.

ATTACHMENT 5:
SCHEDULE

Upload the Schedule here. Ensure file name is consistent with section V of the Stormwater Flood Management Plan (disregard the 5 digit pin).
Last Uploaded Attachments: Att5_SWF_Schedule_

Upload additional schedule components here.

Upload additional schedule components here. Upload additional schedule components here.

Upload additional schedule components here.

ATTACHMENT 6: MONITORING, ASSESSMENT, AND PERFORMANCE MEASURES

Upload Monitoring, Assessment, and Performance Measures here. Ensure file name is consistent with section V of the Stormwater Flood Management Plan (disregard the 5 digit pin).
Last Uploaded Attachments: Att6_SWF_Measures_

Upload additional Monitoring, Assessment, and Performance Measures here. Upload additional Monitoring, Assessment, and Performance Measures here.

Upload additional Monitoring, Assessment, and Performance Measures here. Upload additional Monitoring, Assessment, and Performance Measures here.

ATTACHMENT 7: ECONOMIC ANALYSIS - FLOOD DAMAGE REDUCTION COSTS AND BENEFITS

Upload Economic Analysis - Flood Damage Reduction Costs and Benefits here. Ensure file name is consistent with section V of the Stormwater Flood Management Plan (disregard the 5 digit pin).
Last Uploaded Attachments: Att7_SWF_DReduc_

Upload additional Economic Analysis - Flood Damage Reduction Costs and Benefits documentation here.

Upload additional Economic Analysis - Flood Damage Reduction Costs and Benefits documentation here.

Upload additional Economic Analysis - Flood Damage Reduction Costs and Benefits documentation here.

Upload additional Economic Analysis - Flood Damage Reduction Costs and Benefits documentation here.

ATTACHMENT 8: ECONOMIC ANALYSIS - WATER SUPPLY COSTS AND BENEFITS

Upload Economic Analysis - Water Supply Costs and Benefits here. Ensure file name is consistent with section V of the Stormwater Flood Damage Reduction Costs and Benefits (disregard the 5 digit pin).

Last Uploaded Attachments: Att8_SWF_WSBen_1of1.jpg

Upload additional - Water Supply Costs and Benefits documentation here.

Upload additional - Water Supply Costs and Benefits documentation here.

Upload additional - Water Supply Costs and Benefits documentation here.

Upload additional - Water Supply Costs and Benefits documentation here.

Section : Application Attachments Tab (cont)

APPLICATION ATTACHMENTS TAB (CONT)

ATTACHMENT 9: WATER QUALITY AND OTHER EXPECTED BENEFITS

Upload Water Quality and Other Expected Benefits here. Ensure file name is consistent with section V of the Stormwater Flood Damage Reduction Costs and Benefits (disregard the 5 digit pin).

Last Uploaded Attachments: Att9_SWF_WQOtherBen_1of1.jpg

Upload additional Water Quality and Other Expected Benefits documentation here.

Upload additional Water Quality and Other Expected Benefits documentation here.

Upload additional Water Quality and Other Expected Benefits documentation here.

Upload additional Water Quality and Other Expected Benefits documentation here.

ATTACHMENT 10: COSTS AND BENEFITS SUMMARY

Upload Costs and Benefits Summary here. Ensure file name is consistent with section V of the Stormwater Flood Damage Reduction Costs and Benefits (disregard the 5 digit pin).

Last Uploaded Attachments: Att10_SWF_CBSummary_1of1.jpg

Upload additional Costs and Benefits Summary documentation here.

Upload additional Costs and Be

Upload additional Costs and Benefits Summary documentation here.

Upload additional Costs and Be

ATTACHMENT 11: PROGRAM PREFERENCES

Upload Program Preference documentation here. Ensure file name is consistent with section V of the Stormwa the 5 digit pin).

Last Uploaded Attachments: Att11_SWF_Preference_1of1.p

Upload additional Program Preference documentation here.

Upload additional Program Preference documentation here.

Upload additional Program Pre

Upload additional Program Preference documentation here.

ATTACHMENT 12: AB1420 AND WATER METER COMPLIANCE INFORMATION

Upload AB1420 and Water Meter Compliance Information here. Ensure file name is consistent with section V PSP (disregard the 5 digit pin).

Upload additional AB1420 and Water Meter Compliance documentation here.

Upload additional AB1420 and here.

Upload additional AB1420 and Water Meter Compliance documentation here.

Upload additional AB1420 and here.

ATTACHMENT 13: STORMWATER RESOURCES PLAN

This attachment is only necessary if the applicant has an existing Stormwater Resources Plan, pursuant (comm of the Water Code and answered "yes" to Q15 or Q16.

The summary text must be no more than 5 pages in length using a minimum of 10-point type font. Excerpts fro

Attachment 13 must provide the following:

Identify and include portions of the applicable Plan that demonstrate all of the standards of Part 2.3 (commenc the CWC.

Last Uploaded Attachments: Att13_SWF_Strmrespln_1of1.p

Upload additional Stormwater Resources Plan documentation here.

Upload additional Stormwater Resources Plan documentation here.

Upload additional Stormwater

Upload additional Stormwater Resources Plan documentation here.