

APPENDIX E

**Mirabel Fish Ladder and Fish Screen Replacement Project
Draft Mitigation Monitoring Plan**

MIRABEL FISH LADDER AND FISH SCREEN REPLACEMENT PROJECT Draft Mitigation Monitoring Plan

In compliance with Section 21081.6 of the California Environmental Quality Act, the Sonoma County Water Agency (Water Agency) had prepared this Mitigation Monitoring Plan (MMP) for the Mirabel Fish Ladder and Fish Screen Replacement Project. All mitigation measures proposed in the Mirabel Fish Ladder and Fish Screen Replacement Project Initial Study and Mitigated Negative Declaration (IS/Mitigated Negative Declaration) have been included in the MMP. Each mitigation measure and the method of monitoring or verifying the completion of the measure are described in the MMP. Upon approval of the MMP by the Water Agency's Board of Directors, each mitigation measure will be entered onto one the Water Agency's Mitigation Monitoring Report forms (MMR) and the mitigation measure will be entered into the Water Agency's Mitigation Monitoring Inventory Database. A sample MMR is provided in Exhibit A (which was prepared for another project). Before monitoring of a specific mitigation measure is required, the MMR will be forwarded by the Water Agency's Environmental Resources Section to the Water Agency department and/or staff responsible for monitoring.

Various Water Agency departments/staff members responsible for monitoring or verification of project mitigation measures and their general areas of responsibility are as follows:

The **Project Engineer** is responsible for project design.

The **Technical Writing Section** is responsible for preparation of project specifications.

The **Construction Inspection Section** is responsible for enforcement of the provisions of the project specifications during the construction period.

The **Environmental Resources Section** is responsible for preparation of the MMP, for informing the various departments of their mitigation responsibilities, for distribution of the appropriate reporting forms, for maintenance of the Database that tracks the status of mitigation measures, and for logging and evaluating the effectiveness of the mitigation measures. The Environmental Resources Section is also responsible for implementing and monitoring of some of the mitigation measures.

The **Right-of-Way Section** is responsible for coordinating with private property owners for acquisition of property or temporary and/or permanent easements; and for coordinating any issues concerning property rights with property owners.

The **Operations and Maintenance Division** is responsible for implementation of mitigation measures during the operation and maintenance phase of the project.

The Water Agency's **Board of Directors** approves and adopts the MMP and approves the project specifications.

The following is a description of the project's mitigation measures and the required monitoring/verification. Mitigation measure numbers correspond to the numbers presented in the Initial Study Environmental Checklist.

AIR QUALITY

Mitigation Measure MFSFL-1: *The project specifications will require the contractor to comply with the dust control provisions of the Sonoma County Water Agency's Standard Contract Documents and the Northern Sonoma County Air Pollution Control District's Rule 430 that regulate fugitive dust emissions. Measures to reduce dust emissions may include, but are not limited to: sprinkling unpaved construction areas with water; covering trucks hauling dirt; limiting dust generating activities during periods of high winds (greater than 15 miles per hour); replacing ground cover in disturbed areas as soon as possible; enclosing, covering, watering, or applying soil binders to exposed stock piles; removing earth tracked onto neighboring paved roads at least once daily; and limiting equipment speed to 10 miles per hour in unpaved areas.*

<input type="checkbox"/>	Project Engineer	<input checked="" type="checkbox"/>	Technical Writing	
<input checked="" type="checkbox"/>	Construction Inspection	<input type="checkbox"/>	Right-of-Way	
			Operations	and
<input type="checkbox"/>	Environmental Resources	<input type="checkbox"/>	Maintenance	

Monitoring: The mitigation measure will be considered effective when the project specifications have included the above provisions and when construction is completed in compliance with the project specifications. Monitoring will terminate upon completion of construction.

Mitigation Measure MFSFL-2: *The project specifications will require that all construction vehicles and equipment emission levels meet current air quality standards and that idling time for all heavy equipment be minimized to reduce on-site emissions.*

<input type="checkbox"/>	Project Engineer	<input checked="" type="checkbox"/>	Technical Writing	
<input checked="" type="checkbox"/>	Construction Inspection	<input type="checkbox"/>	Right-of-Way	
			Operations	and
<input type="checkbox"/>	Environmental Resources	<input type="checkbox"/>	Maintenance	

Monitoring: The mitigation measure will be considered effective when the project specifications have included the above provisions and when construction is completed in compliance with the project specifications. Monitoring will terminate upon completion of construction.

BIOLOGICAL RESOURCES

Mitigation Measure MFSFL-3: *During dewatering activities, fish located within the project site would be removed and relocated to appropriate habitat downstream of the project site. Qualified fisheries biologists, using methods approved by the National Marine Fisheries Service and California Department of Fish and Game, would perform the fish rescue and relocation.*

<input checked="" type="checkbox"/> Project Engineer	<input type="checkbox"/> Technical Writing
<input checked="" type="checkbox"/> Construction Inspection	<input type="checkbox"/> Right-of-Way
	Operations
<input checked="" type="checkbox"/> Environmental Resources	<input type="checkbox"/> Maintenance

and

Monitoring: The mitigation measure will be considered effective when fish rescue operations have been implemented and fish have been successfully removed from the project site. Monitoring will terminate upon completion of construction.

Mitigation Measure MFSFL-4: *Prior to beginning construction activities, pre-construction surveys would be performed within the project site. Should northwestern pond turtle be found within the construction area, individuals would be relocated by a qualified biologist to an area of appropriate habitat outside of the construction area.*

<input checked="" type="checkbox"/> Project Engineer	<input type="checkbox"/> Technical Writing
<input checked="" type="checkbox"/> Construction Inspection	<input type="checkbox"/> Right-of-Way
	Operations
<input checked="" type="checkbox"/> Environmental Resources	<input type="checkbox"/> Maintenance

and

Monitoring: The mitigation measure will be considered effective when pre-construction surveys have been completed and target species have been successfully removed from the project site. Monitoring will terminate upon completion of construction.

Mitigation Measure MFSFL-5: *Whenever feasible, vegetation shall be removed during the non-breeding season. For ground disturbing activities occurring during the breeding season (February 1 to August 31), a qualified wildlife biologist shall conduct pre-construction surveys of the project site for nesting raptors within a 500-foot radius of construction activities, and for other nesting birds within a 50-foot radius of construction activities. Pre-construction surveys shall occur within 14 days of the start of construction activities. If active bird nests are found during pre-construction surveys, a 500-foot "no disturbance" buffer shall be established around active raptor nests during the breeding season. A 50-foot buffer zone shall be established around the nests of other special status birds, or*

until it is determined that all young have fledged. Physical barriers such as fencing will be installed to establish the buffer zones to prevent construction equipment from disturbing the nest. Nests will be monitored weekly during construction activities, and protection measures or construction activities will be modified as necessary.

<input checked="" type="checkbox"/> Project Engineer	<input type="checkbox"/> Technical Writing
<input checked="" type="checkbox"/> Construction Inspection	<input type="checkbox"/> Right-of-Way
<input type="checkbox"/> Environmental Resources	<input type="checkbox"/> Maintenance

Operations and

Monitoring: The mitigation measure will be considered effective when pre-construction surveys have been completed and protection measures have been implemented to protect nests, and/or when disturbance or destruction of nests have been avoided. Monitoring will terminate upon completion of construction.

Mitigation Measure MFSFL-6: *The Water Agency will prepare and implement a revegetation plan to mitigate the loss of native riparian vegetation. Recontoured banks will be seeded and revegetated. Erosion control fabric will be placed on all exposed banks to prevent erosion. Plant species selected for revegetation will be based upon surveys of riparian habitat along the Russian River upstream and downstream of the project site. Planting requirements in the revegetation plan will be based upon species composition and density recommendations associated with the overall habitat enhancement design for the project. The final revegetation plan will include details regarding planting, implementation, maintenance, and monitoring.*

<input checked="" type="checkbox"/> Project Engineer	<input type="checkbox"/> Technical Writing
<input checked="" type="checkbox"/> Construction Inspection	<input checked="" type="checkbox"/> Right-of-Way
<input type="checkbox"/> Environmental Resources	<input type="checkbox"/> Maintenance

Operations and

Monitoring: The mitigation measure will be considered effective when the revegetation plan has been designed and implemented. Monitoring will terminate 5 years after installation of plants.

CULTURAL RESOURCES

Mitigation Measure MFSFL-7: *The project specifications will require the contractor to comply with the Water Agency's Standard Contract Documents regarding the discovery of cultural resources. The Water Agency Construction Inspector and construction personnel will be notified of the possibility of encountering archaeological materials during project construction. The project specifications will provide that if discovery is made of items of historical, archaeological or paleontological interest, the contractor will immediately cease all work activities in the area of discovery. Archaeological indicators may include, but are not limited to,*

dwelling sites, locally darkened soils, stone implements or other artifacts, fragments of glass or ceramics, animal bones, human bones, and fossils. After cessation of excavation, the contractor will immediately contact the Water Agency's Construction Inspector. The contractor will not resume work until authorization is received from the Construction Inspector. If archaeological indicators are discovered during construction, the Water Agency will retain the services of a qualified professional archaeologist to evaluate the significance of the items prior to resuming any activities that could impact the site. If it is determined that the find is unique and/or potentially eligible for listing in the California Register, and the site cannot be avoided, an archaeologist shall provide a research design and excavation plan outlining recovery of the resource, analysis, and reporting of the find. The research design and excavation plan will be submitted to the Water Agency's Construction Inspection Section and approved by the Water Agency prior to construction being resumed.

<input checked="" type="checkbox"/> Project Engineer	<input checked="" type="checkbox"/> Technical Writing	
<input checked="" type="checkbox"/> Construction Inspection	<input type="checkbox"/> Right-of-Way	
<input type="checkbox"/> Environmental Resources	<input type="checkbox"/> Operations	and
	<input type="checkbox"/> Maintenance	

Monitoring: The mitigation measure will be considered effective if the contractor identifies a potential cultural resource site and construction is halted at the site until an evaluation of the site's significance can be made. Monitoring will terminate upon completion of construction.

HAZARDS AND HAZARDOUS MATERIALS

Mitigation Measure MFSFL-8: The project specifications will require the contractor to comply with the Sonoma County Water Agency's Standard Contract Documents to protect the project area from being contaminated by the accidental release of any hazardous materials and/or wastes. Disposal of all hazardous materials will be in compliance with all current hazardous waste disposal laws. The construction contractor will contact the local fire agency and the Sonoma County Department of Environmental Health for any site-specific requirements regarding hazardous materials or hazardous waste containment or handling.

<input type="checkbox"/> Project Engineer	<input checked="" type="checkbox"/> Technical Writing	
<input checked="" type="checkbox"/> Construction Inspection	<input type="checkbox"/> Right-of-Way	
<input type="checkbox"/> Environmental Resources	<input type="checkbox"/> Operations	and
	<input type="checkbox"/> Maintenance	

Monitoring: The mitigation measure will be considered effective when the project specifications have included the above provisions and when construction is completed

in compliance with the project specifications. Monitoring will terminate upon completion of construction and acceptance of contractor's work by the Water Agency.

Mitigation Measure MFSFL-9: *The project specifications will require the contractor to prepare a Safety Plan in accordance with the Sonoma County Water Agency's Standard Contract Documents. If hazardous materials are encountered during construction activities, the contractor will be required to halt construction immediately and notify the Water Agency's Construction Inspection Section. Disposal of all hazardous materials will be in compliance with all applicable hazardous waste disposal laws.*

<input type="checkbox"/>	Project Engineer	<input checked="" type="checkbox"/>	Technical Writing	
<input checked="" type="checkbox"/>	Construction Inspection	<input type="checkbox"/>	Right-of-Way	
			Operations	and
<input type="checkbox"/>	Environmental Resources	<input type="checkbox"/>	Maintenance	

Monitoring: The mitigation measure will be considered effective when the project specifications have included the above provisions and when construction is completed in compliance with the project specifications. Monitoring will terminate upon completion of construction.

Exhibit A. Mitigation Monitoring Report Sample
SONOMA COUNTY WATER AGENCY MITIGATION MONITORING REPORT

Project Name: Starr Creek Drainage Improvements Report No.: SCDI-4B

Project Type: Water Supply Flood Control Sanitation Other

Inspection/Verification Date: April 20, 1994

Inspection/Verification Performed By: Patty Clark Flugum, Susan Kuehn

(print name and initial)

(division/department) Technical Writing Section

Report Prepared By: Patty Clark Flugum

Impact Type: AIR

Mitigation Measure: The Technical Writing Section staff will verify that the specifications include the following provision. The Project specifications shall require the contractor(s) to comply with the dust control provisions of *Standard Specifications for Public Works Construction* and any requirements of the Bay Area Air Quality Management District.

Mitigation Measure Status: Complete

Section 2.15, ENVIRONMENTAL PROTECTION

Subsection 2.15.2, Cleanup, Dust, and Air Pollution Control (in specs)

Exceptions From Mitigation Measures Described Above: none

Remaining Work Needed To Complete Mitigation Measure: none

Estimated Date For Completion of Mitigation: August 31, 1993

Mitigation Monitoring Report Due Date: September 30, 1993

To be filled out by the Environmental Resources Section:

Date sent to

division/department: _____

Date returned to May 2, 1994

ECS: _____

Date entered into MMP database & project May 5, 1994

binder: _____

Entered into MMP database RTW

by: _____

Date next Mitigation Report is N/A

required: _____