MULTI SPECIES CONSERVATION STRATEGY MILESTONE 84 -- ROLLED UP SUMMARY

MILESTONE 84 -- Develop and implement temperature management programs within major tributaries in the San Joaquin River Basin. The goal of the programs should be achievement of the ERP temperature targets for salmon and steelhead. The programs shall include provisions to: a) develop accurate and reliable water temperature prediction models; b) evaluate the use of minimum carryover storage levels and other operational tools; c) evaluate the use of new facilities such as temperature control devices; and d) recommend operational and/or physical facilities as a long-term solution.	**PROJECTS REVIEWED -** ERP-02-P28, AFRP-01-08, AFRP-01-12, AFRP-02-02		**SUMMARY --** An ERP contract and an AFRP project have initiated actions to achieve this milestone on the Stanislaus-Lower San Joaquin River and on the Stanislaus below Goodwin Dam. Additionally, the Merced River Water Temperature Feasibility Investigation Reconnaissance Report may provide the basis for an operational solution. There is no current temperature management program on the Tuolumne River, however there is work being done on a long range plan for outreach and stewardship that may create interest in addressing temperature management. A cooperative agreement between the AFRP and the Tuolumne River Technical Advisory Committee resulted in release of two documents: the Tuolumne River Watershed Map and the Lower Tuolumne River Corridor and Its Lands; a brochure depicting land use patterns in the Tuolumne River corridor. Documentation of these land use patterns could lend to identification and resolution of thermal impacts. Another study has just begun that could also result in identification of thermal impacts.			**AGENCY NOTES --**	**NOTES CONT'D --**

MULTI SPECIES CONSERVATION STRATEGY MILESTONE 84 -- EVALUATION OF INDIVIDUAL PROJECTS REVIEWED TO FORMULATE THE ROLLED UP SUMMARY

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
84	SJR	EP	Develop and implement temperature management programs within major tributaries in the San Joaquin River Basin. The goal of the programs should be achievement of the ERP temperature targets for salmon and steelhead. The programs shall include provisions to: a) develop accurate and reliable water temperature prediction models; b) evaluate the use of		84 A. Status of accurate and reliable water temperature prediction models for the Stanislaus River	ERP-02-P28	May-03	Apr-06	661,902		661,902	General Manager, Tri-Dam Project	Steve Felte		Stanislaus-Lower San Joaquin River Water Temperature Modeling and Analysis	Task 3: Extend the existing model to downstream San Joaquin River reaches to create a Stanislaus-San Joaquin River Temperature Model. Task 4: Refine the Stanislaus-San Joaquin River Temperature Model using current water temperature and meteorological data. ***Project not complete. This project is currently developing a Stanislaus-Lower San Joaquin River Water Temperature Model. The model is designed to assess the relationship between operational alternatives, water temperature regimes and fish mortality in the Stanislaus River, specifically, fall-run Chinook salmon and steelhead rainbow trout. J.D. Wikert, USFWS.***
84	SJR	EP			84 A. Status of accurate and reliable water temperature prediction models for the Stanislaus River	AFRP-02-02						AFRP	JD Wikert USFWS		Develop a Consensus Based Plan to Direct the Long Term Implementation of Prioritized Restoration/Research in the Stanislaus River Below Goodwin Dam	Objective: Develop a consensus based plan to direct the long term implementation of prioritized restoration/research in the Stanislaus River below Goodwin Dam. ***The project is currently focused on finishing a summary of the existing fisheries data. The summary will be provided to the Stanislaus River Fish Group for review and comment in January 2004. Work continues on the Restoration Plan and conceptual model.***
84	SJR	EP			84 B. Status of evaluation of operational tools for temperature management in the Stanislaus River	ERP-02-P28	May-03	Apr-06	661,902		661,902	General Manager, Tri-Dam Project	Steve Felte		Stanislaus-Lower San Joaquin River Water Temperature Modeling and Analysis	Task 5: Perform Operational Studies. Task 6: Perform pre-feasibility studies of alternative management actions. ***Project not complete. This project is currently developing a Stanislaus-Lower San Joaquin River Water Temperature Model. The model is designed to assess the relationship between operational alternatives, water temperature regimes and fish mortality in the Stanislaus River , specifically, fall-run Chinook salmon and Steelhead rainbow trout. J.D. Wikert, USFWS.***

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
84	SJR	EP			84 B. Status of evaluation of operational tools for temperature management in the Stanislaus River	AFRP-02-02						AFRP	JD Wikert USFWS		Develop a Consensus Based Plan to Direct the Long Term Implementation of Prioritized Restoration/Research in the Stanislaus River Below Goodwin Dam	Objective: Develop a consensus based plan to direct the long term implementation of prioritized restoration/research in the Stanislaus River below Goodwin Dam. ***The project is currently focused on finishing a summary of the existing fisheries data. The summary will be provided to the Stanislaus River Fish Group for review and comment in January 2004. Work continues on the Restoration Plan and conceptual model.***
84	SJR	EP			84 C. Status of the evaluation of the use of temperature control devices on the Stanislaus River.	ERP-02-P28	May-03	Apr-06	661,902		661,902	General Manager, Tri-Dam Project	Steve Felte		Stanislaus-Lower San Joaquin River Water Temperature Modeling and Analysis	Task 5: Perform Operational Studies. Task 6: Perform pre-feasibility studies of alternative management actions. ***Project not complete. This project is currently developing a Stanislaus-Lower San Joaquin River Water Temperature Model. The model is designed to assess the relationship between operational alternatives, water temperature regimes and fish mortality in the Stanislaus River , specifically, fall-run Chinook salmon and Steelhead rainbow trout. J.D. Wikert, USFWS.***
84	SJR	EP			84 C. Status of the evaluation of the use of temperature control devices on the Stanislaus River.	AFRP-02-02						AFRP	JD Wikert USFWS		Develop a Consensus Based Plan to Direct the Long Term Implementation of Prioritized Restoration/Research in the Stanislaus River Below Goodwin Dam	Objective: Develop a consensus based plan to direct the long term implementation of prioritized restoration/research in the Stanislaus River below Goodwin Dam. ***The project is currently focused on finishing a summary of the existing fisheries data. The summary will be provided to the Stanislaus River Fish Group for review and comment in January 2004. Work continues on the Restoration Plan and conceptual model.***
84	SJR	EP			84 D. Status of a temperature management program which achieves the ERP temperature targets for salmon and steelhead for the Stanislaus River	ERP-02-P28	May-03	Apr-06	661,902		661,902	General Manager, Tri-Dam Project	Steve Felte		Stanislaus-Lower San Joaquin River Water Temperature Modeling and Analysis	Task 7: Develop Implementation Plans. Plans will identify alternatives for improvements in water temperature control. Improvements may include modifications to operations and physical structures. ***Project not complete. This project is currently developing a Stanislaus-Lower San Joaquin River Water Temperature Model. The model is designed to assess the relationship between operational alternatives, water temperature regimes and fish mortality in the Stanislaus River, specifically, fall-run Chinook salmon and Steelhead rainbow trout. J.D. Wikert, USFWS.***
84	SJR	EP			84 D. Status of a temperature management program which achieves the ERP temperature targets for salmon and steelhead for the Stanislaus River	AFRP-02-02						AFRP	JD Wikert USFWS		Develop a Consensus Based Plan to Direct the Long Term Implementation of Prioritized Restoration/Research in the Stanislaus River Below Goodwin Dam	Objective: Develop a consensus based plan to direct the long term implementation of prioritized restoration/research in the Stanislaus River below Goodwin Dam. ***The project is currently focused on finishing a summary of the existing fisheries data. The summary will be provided to the Stanislaus River Fish Group for review and comment in January 2004. Work continues on the Restoration Plan and conceptual model.***

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
84	SJR	EP			84 E. Status of accurate and reliable water temperature prediction models for the Tuolumne River	AFRP-01-12		Aug-03				AFRP	Cesar Blanco USFWS		Tuolumne River watershed outreach and stewardship proposal	***Objective: To create and utilize outreach materials as tools to build awareness, understanding and support for the Tuolumne River Technical Advisory Committee Plan, "Habitat Restoration Plan for the Lower Tuolumne River Corridor". The cooperative agreement between the AFRP and TRPT was completed in October of 2001. TRPT released two documents: the Tuolumne River Watershed Map and the Lower Tuolumne River Corridor and Its Lands; a brochure depicting land use patterns in the Tuolumne River corridor. The TRPT received a no-cost time extension extending the end date to April 2003 to complete their outreach to landowners who might be interested in easement opportunities. TRPT submitted a final report in August 2003 documenting their outreach efforts. This report, along with the Tuolumne River Watershed Map and the Lower Tuolumne River Corridor and Its Lands can be found on the AFRP website.***
84	SJR	EP			84 F. Status of evaluation of operational tools for temperature management in the Tuolumne River	AFRP-01-12		Aug-03				AFRP	Cesar Blanco USFWS		Tuolumne River watershed outreach and stewardship proposal	***Objective: To create and utilize outreach materials as tools to build awareness, understanding and support for the Tuolumne River Technical Advisory Committee Plan, "Habitat Restoration Plan for the Lower Tuolumne River Corridor". The cooperative agreement between the AFRP and TRPT was completed in October of 2001. TRPT released two documents: the Tuolumne River Watershed Map and the Lower Tuolumne River Corridor and Its Lands; a brochure depicting land use patterns in the Tuolumne River corridor. The TRPT received a no-cost time extension extending the end date to April 2003 to complete their outreach to landowners who might be interested in easement opportunities. TRPT submitted a final report in August 2003 documenting their outreach efforts. This report, along with the Tuolumne River Watershed Map and the Lower Tuolumne River Corridor and Its Lands can be found on the AFRP website.***
84	SJR	EP			84 G. Status of the evaluation of the use of temperature control devices on the Tuolumne River.	AFRP-01-12		Aug-03				AFRP	Cesar Blanco USFWS		Tuolumne River watershed outreach and stewardship proposal	***Objective: To create and utilize outreach materials as tools to build awareness, understanding and support for the Tuolumne River Technical Advisory Committee Plan, "Habitat Restoration Plan for the Lower Tuolumne River Corridor". The cooperative agreement between the AFRP and TRPT was completed in October of 2001. TRPT released two documents: the Tuolumne River Watershed Map and the Lower Tuolumne River Corridor and Its Lands; a brochure depicting land use patterns in the Tuolumne River corridor. The TRPT received a no-cost time extension extending the end date to April 2003 to complete their outreach to landowners who might be interested in easement opportunities. TRPT submitted a final report in August 2003 documenting their outreach efforts. This report, along with the Tuolumne River Watershed Map and the Lower Tuolumne River Corridor and Its Lands can be found on the AFRP website.***

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
84	SJR	EP			84 H. Status of a temperature management program which achieves the ERP temperature targets for salmon and steelhead for the Tuolumne River	AFRP-01-12		Aug-03				AFRP	Cesar Blanco USFWS		Tuolumne River watershed outreach and stewardship proposal	***Objective: To create and utilize outreach materials as tools to build awareness, understanding and support for the Tuolumne River Technical Advisory Committee Plan, "Habitat Restoration Plan for the Lower Tuolumne River Corridor". The cooperative agreement between the AFRP and TRPT was completed in October of 2001. TRPT released two documents: the Tuolumne River Watershed Map and the Lower Tuolumne River Corridor and Its Lands; a brochure depicting land use patterns in the Tuolumne River corridor. The TRPT received a no-cost time extension extending the end date to April 2003 to complete their outreach to landowners who might be interested in easement opportunities. TRPT submitted a final report in August 2003 documenting their outreach efforts. This report, along with the Tuolumne River Watershed Map and the Lower Tuolumne River Corridor and Its Lands can be found on the AFRP website.***
84	SJR	EP			84 I. Status of accurate and reliable water temperature prediction models for the Merced River	AFRP-01-08		Jan-04				AFRP	Jeff McLain USFWS		Merced River water temperature management feasibility study	Objective: To develop information that can be used to evaluate effective options for water temperature management in the Merced River and improve conditions for anadromous salmonids, principally during the fall and spring seasons. ***The final Merced River Water Temperature Feasibility Investigation Reconnaissance Report and accompanying data CD was received by the AFRP in early January 2004. A digital copy is available on this web site and hard copies can be requested from the representative HRC.***
84	SJR	EP			84 J. Status of evaluation of operational tools for temperature management in the Merced River	AFRP-01-08		Jan-04				AFRP	Jeff McLain USFWS		Merced River water temperature management feasibility study	Objective: To develop information that can be used to evaluate effective options for water temperature management in the Merced River and improve conditions for anadromous salmonids, principally during the fall and spring seasons. ***The final Merced River Water Temperature Feasibility Investigation Reconnaissance Report and accompanying data CD was received by the AFRP in early January 2004. A digital copy is available on this web site and hard copies can be requested from the representative HRC.***
84	SJR	EP			84 K. Status of the evaluation of the use of temperature control devices on the Merced River.	AFRP-01-08		Jan-04				AFRP	Jeff McLain USFWS		Merced River water temperature management feasibility study	Objective: To develop information that can be used to evaluate effective options for water temperature management in the Merced River and improve conditions for anadromous salmonids, principally during the fall and spring seasons. ***The final Merced River Water Temperature Feasibility Investigation Reconnaissance Report and accompanying data CD was received by the AFRP in early January 2004. A digital copy is available on this web site and hard copies can be requested from the representative HRC.***
84	SJR	EP			84 L. Status of a temperature management program which achieves the ERP temperature targets for salmon and steelhead for the Merced River	AFRP-01-08		Jan-04				AFRP	Jeff McLain USFWS		Merced River water temperature management feasibility study	Objective: To develop information that can be used to evaluate effective options for water temperature management in the Merced River and improve conditions for anadromous salmonids, principally during the fall and spring seasons. ***The final Merced River Water Temperature Feasibility Investigation Reconnaissance Report and accompanying data CD was received by the AFRP in early January 2004. A digital copy is available on this web site and hard copies can be requested from the representative HRC.***

MULTI SPECIES CONSERVATION STRATEGY MILESTONE 85 -- ROLLED UP SUMMARY

MILESTONE 85 -- Develop and implement a program to address the thermal impacts of irrigation return flows in the San Joaquin River Basin. The goal of the program should be achieve Basin Plan objectives for water temperature. The program should include provisions to: a) identify locations of irrigation return flows with thermal impacts; b) develop measures to avoid or eliminate thermal impacts from irrigation return flows; and c) prioritize problem sites based on impacts to Chinook salmon and steelhead. If feasible, proceed with implementation of some or all actions to address thermal impacts of irrigation return flows.	**PROJECTS REVIEWED -** ERP-97-C08, ERP-00-B05	**SUMMARY --** Two projects addressing the thermal impacts of irrigation return flows occurred in the San Joaquin River Basin. One was to expand the existing San Joaquin River Real-Time Temperature collection system to include an internet network of collected data as well as temperature modeling and the second project addressed the development of a Real Time Water Quality Management Program in the Grasslands Water District near Los Banos.		**AGENCY NOTES --**	**NOTES CONT'D --**

MULTI SPECIES CONSERVATION STRATEGY MILESTONE 85 -- EVALUATION OF INDIVIDUAL PROJECTS REVIEWED TO FORMULATE THE ROLLED UP SUMMARY

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
85	SJR	EP	Develop and implement a program to address the thermal impacts of irrigation return flows in the San Joaquin River Basin. The goal of the program should be achieve Basin Plan objectives for water temperature. The program should include provisions to: a) identify locations of irrigation return flows with thermal impacts; b) develop measures to avoid or eliminate thermal impacts from irrigation return flows; and c) prioritize problem sites based on impacts to Chinook salmon and steelhead. If feasible, proceed with implementation of some or all actions to address thermal impacts of irrigation return flows.		85 A. Status of the development of a program to address the thermal impacts of irrigation return flows in the San Joaquin River Basin. The goal of the program should be achieve Basin Plan objectives for water temperature.											
85	SJR	EP			85 B. Status of the implementation of a program to address the thermal impacts of irrigation return flows in the San Joaquin River Basin. The goal of the program should be achieve Basin Plan objectives for water temperature.	ERP-97-C08	Jan-99	Dec-00	931,857			DWR	Earle Cummings		San Joaquin River Real-time Water Quality Management Program	Implementation of a comprehensive monitoring, assessment and research program for aquatic habitats. Installation of Stream stage and salinity equipment to generate continuous radio telemetered data from the field. ***Monitoring project, completed. Ernie Taylor, DWR.***

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
85	SJR	EP			85 B. Status of the implementation of a program to address the thermal impacts of irrigation return flows in the San Joaquin River Basin. The goal of the program should be achieve Basin Plan objectives for water temperature.	ERP-00-B05	Sep-00	Sep-04	652,330		652,330	Grasslands Water District	Don Marciochi, General Manager		Adaptive Real-Time Water Quality Management of Seasonal Wetlands in the Grassland Water District	Development and implementation of a program to address the thermal impacts of irrigation return flows in the San Joaquin Basin. Project includes designing and installing a monitoring system for quantity and quality of wetland drainage flow from the Grassland Water District. ***Don Marciochi, Grasslands Water District. Monitoring. Project Still ongoing. Extended to 9/2004.***
85	SJR	EP			85 C. Status of identifying locations of irrigation return flows with thermal impacts											
85	SJR	EP			85 D. Status of developing measures to avoid or eliminate thermal impacts from irrigation return flows;	ERP-00-B05	Sep-00	Sep-04	652,330		652,330	Grasslands Water District	Don Marciochi, General Manager		Adaptive Real-Time Water Quality Management of Seasonal Wetlands in the Grassland Water District	Development and implementation of a program to address the thermal impacts of irrigation return flows in the San Joaquin Basin. Project includes designing and installing a monitoring system for quantity and quality of wetland drainage flow from the Grassland Water District.
85	SJR	EP			85 E. Status of prioritizing problem sites based on impacts to Chinook salmon and steelhead. If feasible, proceed with implementation of some or all actions to address thermal impacts of irrigation return flows.											

MULTI SPECIES CONSERVATION STRATEGY MILESTONE 86 -- ROLLED UP SUMMARY

MILESTONE 86 -- Complete a fluvial geomorphic assessment of coarse sediment supply needs and sources to maintain, improve, or supplement gravel recruitment and natural sediment transport processes linked to stream channel maintenance, erosion and deposition, maintenance of fish spawning areas, and the regeneration of riparian vegetation. Develop and implement a program to reduce erosion and maintain gravel recruitment on at least one tributary within each EMZ within the San Joaquin River Basin. In the East San Joaquin Basin EMZ, complete fluvial geomorphic assessments on all tributaries.	**PROJECTS REVIEWED -** ERP-97-C11, ERP-97-N21, ERP-98-C04/C05, ERP-98-E09, ERP-98-F06, ERP-98-F11, ERP-99-B29, ERP-00-E05, ERP-00-F01, ERP-01-C03, ERP-01-N42, ERP-02D-P55, ERP-02-P12-D, ERP-02-P29, AFRP-00-07, AFRP-00-09, AFRP-00-23, AFRP-00-41, AFRP-00-45, AFRP-00-46,	AFRP-01-03, AFRP-01-12, AFRP-02-02, AFRP-02-11,	**SUMMARY --** Several ERP and AFRP contracts have funded various aspects of gravel replenishment on tributaries within EMZs of the San Joaquin River Basin and the East SJ Basin EMZ. Still needed is an assessment of all of these projects to determine if a program was developed and implemented to perform complete fluvial geomorphic assessments and sediment supply needs to maintain fish spawning areas and riparian vegetation. Need to determine progress and need for additional effort and direction.			**AGENCY NOTES --**	**NOTES CONT'D --**

MULTI SPECIES CONSERVATION STRATEGY MILESTONE 86 -- EVALUATION OF INDIVIDUAL PROJECTS REVIEWED TO FORMULATE THE ROLLED UP SUMMARY

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
86	SJR	EP	Complete a fluvial geomorphic assessment of coarse sediment supply needs and sources to maintain, improve, or supplement gravel recruitment and natural sediment transport processes linked to stream channel maintenance, erosion and deposition, maintenance of fish spawning areas, and the regeneration of riparian vegetation. Develop and implement a program to reduce erosion and maintain gravel recruitment on at least one tributary within each EMZ within the San Joaquin River Basin. In the East San Joaquin Basin EMZ, complete fluvial geomorphic assessments on all tributaries.		86 A. Status of a fluvial geomorphic assessment of coarse sediment supply needs and sources to maintain, improve, or supplement gravel recruitment and natural sediment transport processes linked to stream channel maintenance, erosion and deposition, maintenance of fish spawning areas and the regeneration of riparian vegetation for the San Joaquin River Basin.	ERP-97-N21	Sep-98	Sep-01	536,410	97,000	633,410	Carl Mesick Consultants	Carl Mesick		Knights Ferry Gravel Replenishment	Gravel will be placed at 18 project riffles to restore spawning habitat. ***Project completed. Multiphased project with several subsequent non-CALFED funded phases. J.D. Wikert, USFWS.***
86	SJR	EP			86 A. Status of a fluvial geomorphic assessment of coarse sediment supply needs and sources to maintain, improve, or supplement gravel recruitment and natural sediment transport processes linked to stream channel maintenance, erosion and deposition, maintenance of fish spawning areas and the regeneration of riparian vegetation for the San Joaquin River Basin.	ERP-97-C11	Sep-98	Dec-01	250,975	none	250,975	CDFG	Clarence Mayott	4 miles	Spawning Gravel Introduction, Tuolumne River, La Grange & Old Basin Bridge	Project will distribute approx 12,500 cubic yards of gravel creating habitat for salmonids. ***Jeff McLain, USFWS. A portion of 4 river miles of instream habitat. Project completed. This was one phase of a larger project to restore the course sediment supply to the Tuolumne River by introducing clean gravels into the river between La Grange Dam and Old Basso Bridge. The overall project would distribute approximately 25-30,000 cubic yards of gravel at key sites within the upper 4 miles of anadromous salmonid habitat on the Tuolumne River. This particular phase of the project distributed 12,500 cubic yards of gravel below the La Grange Bridge.***

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
86	SJR	EP			86 A. Status of a fluvial geomorphic assessment of coarse sediment supply needs and sources to maintain, improve, or supplement gravel recruitment and natural sediment transport processes linked to stream channel maintenance, erosion and deposition, maintenance of fish spawning areas and the regeneration of riparian vegetation for the San Joaquin River Basin.	ERP-98-E09	Sep-98	Apr-01	300,000 (Phase II)	26,552 (Phase I)	326,552	Stillwater Sciences & Merced Co. Planning and Development	Jennifer Vick/Bob Smith		Merced River Corridor Restoration Plan	Project will address historical and current supply and transport of coarse and fine sediment. ***Jeff McLain, USFWS. Planning. Final Plan completed.***
86	SJR	EP			86 A. Status of a fluvial geomorphic assessment of coarse sediment supply needs and sources to maintain, improve, or supplement gravel recruitment and natural sediment transport processes linked to stream channel maintenance, erosion and deposition, maintenance of fish spawning areas and the regeneration of riparian vegetation for the San Joaquin River Basin.	ERP-98-F06	Sep-98	Jun-04	1,362,000	5,847,260	7,209,260	USBR	Carolyn Mallory		Tuolumne River Setback Levees and Channel Restoration.	Improve and restore spawning habitat and durability. Monitor geomorphology (pebble counts, tracer rocks, stabilization)and channel characteristics, pre and post project and after flow events. Conduct redd counts and other use surveys. ***Implementation project completed, Jeff McLain, USFWS.***
86	SJR	EP			86 A. Status of a fluvial geomorphic assessment of coarse sediment supply needs and sources to maintain, improve, or supplement gravel recruitment and natural sediment transport processes linked to stream channel maintenance, erosion and deposition, maintenance of fish spawning areas and the regeneration of riparian vegetation for the San Joaquin River Basin.	ERP-99-B29	Sep-99	Jun-00	2,500,000		2,500,000	Friant Water Users Authority	Douglas DeFlitch		Pilot Project to Benefit Riparian Vegetation along the San Joaquin River	This project will augment San Joaquin River flows between June through October, 1999 to promote dispersal and germination of seed from native riparian trees and the survival of young seedlings for riparian habitat. ***Research project completed. Valerie Curley, USBR.***
86	SJR	EP			86 A. Status of a fluvial geomorphic assessment of coarse sediment supply needs and sources to maintain, improve, or supplement gravel recruitment and natural sediment transport processes linked to stream channel maintenance, erosion and deposition, maintenance of fish spawning areas and the regeneration of riparian vegetation for the San Joaquin River Basin.	ERP-00-E05	Feb-00	Sep-02	260,351		260,351	Stillwater Sciences	Jennifer Vick		Merced River Corridor Restoration Project Phase III	This project will develop a long-term restoration and monitoring plan. ***Project completed. Some modeling implementation involved. The Merced River Corridor Restoration Plan was developed in Phase III. In addition to development of that plan, Stillwater Sciences completed field and modeling efforts and developed design guidelines for channel and floodplain restoration. Jeff McLain, USFWS.***

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
86	SJR	EP			86 A. Status of a fluvial geomorphic assessment of coarse sediment supply needs and sources to maintain, improve, or supplement gravel recruitment and natural sediment transport processes linked to stream channel maintenance, erosion and deposition, maintenance of fish spawning areas and the regeneration of riparian vegetation for the San Joaquin River Basin.	ERP-01-N42	Aug-01	Jul-04	1,066,593	0	1,066,593	Community Alliance for Family Farmers	James Tischer		Educating Farmers and Landowners in Biological Resource Management	Project will develop plans to help landowners/growers make beneficial management decisions in relation to water quality improvement and habitat restoration and enhancement. This includes developing two demonstration sites, riparian and working farmland, and an educational outreach program. ***Some implementation, but primarily educational; project completed, Marcia Gibbs, Community Alliance with Family Farmers (CAFF); Project provided training for Merced River landowners in BMPs regarding fine sediment control, erosion control, biotechnical revetment and riparian buffer strip concepts, Rhonda Reed (CBDA).***
86	SJR	EP			86 A. Status of a fluvial geomorphic assessment of coarse sediment supply needs and sources to maintain, improve, or supplement gravel recruitment and natural sediment transport processes linked to stream channel maintenance, erosion and deposition, maintenance of fish spawning areas and the regeneration of riparian vegetation for the San Joaquin River Basin.	ERP-02-P12-D	May-03	Apr-06	2,192,515		2,192,515	Stillwater Sciences	Dr. Peter Downs		Merced River Corridor Restoration Plan Phase IV: Dredger Tailings Reach	Develop a detailed sediment transport model. ***Jeff McLain, USFWS. Planning project not complete.***
86	SJR	EP			86 A. Status of a fluvial geomorphic assessment of coarse sediment supply needs and sources to maintain, improve, or supplement gravel recruitment and natural sediment transport processes linked to stream channel maintenance, erosion and deposition, maintenance of fish spawning areas and the regeneration of riparian vegetation for the San Joaquin River Basin.	AFRP-00-09						AFRP	Jeff McLain USFWS		Evaluate channel restoration and aggregate source potential for Two-mile Bar on the Stanislaus River	Objective: To assess the floodplain restoration potential and develop a conceptual restoration strategy for a 50-acre parcel known as Two-mile Bar, and to conduct aggregate and mineral appraisals to establish a fair market value of the land and provide the basis for acquisition in either fee or easement. ***A cooperative agreement between the AFRP and the Trust for Public Land (TPL) was completed in September of 2000. The TPL coordinated the site survey with the USACOE and subcontracted the aggregate and agricultural appraisals. Appraisals were not completed to federal standards and subsequently where rejected by the USFWS and USBR appraisal reviewers. TPL, CDFG, AFRP, and USBR are currently attempting to get the appraisals brought up to code so the offer to purchase the land can be made.***
86	SJR	EP			86 A. Status of a fluvial geomorphic assessment of coarse sediment supply needs and sources to maintain, improve, or supplement gravel recruitment and natural sediment transport processes linked to stream channel maintenance, erosion and deposition, maintenance of fish spawning areas and the regeneration of riparian vegetation for the San Joaquin River Basin.	AFRP-00-41						AFRP	Jeff McLain USFWS		Develop a sediment management plan for the Tuolumne River	Objective: The purpose of this project is to develop and implement a coarse sediment management plan (Sediment Plan) for the 23 mile alluvial reach of the Tuolumne River between La Grange Dam (River Mile 52) and Waterford (River Mile 29). Implementation of this plan will provide direct benefits to a broad range of ecosystem components, including dynamic geomorphic processes, Chinook salmon, and other native aquatic and riparian species and their habitats. Ojectives of the plan include: Quantify the volume of coarse sediment augmentation needed to maintain sediment supplies stored in the channel; Assess the effects of coarse sediment management on the river channel form and geomorphic processes; Assess the response of biological resources to changes in habitat conditions by refining and applying the EACH (Chinook salmon) production model; Develop a plan to reduce fine sediment supply to the Tuolumne River spawning reach from the Gasburg Creek watershed and other sources. ***The Final Course Sediment Management Plan was submitted in December 2003.***

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
86	SJR	EP			86 A. Status of a fluvial geomorphic assessment of coarse sediment supply needs and sources to maintain, improve, or supplement gravel recruitment and natural sediment transport processes linked to stream channel maintenance, erosion and deposition, maintenance of fish spawning areas and the regeneration of riparian vegetation for the San Joaquin River Basin.	ERP-02-P29	Jul-03	Jun-06	4,350,000	50,000	4,400,000	Turlock Irrigation District	Wilton Fryer		Tuolumne River Sediment Acquisition and Spawning Gravel Transfusion Project	Project Task 8: Gravel Augmentation Implementation. This task will begin gravel augmentation at 2-3 selected sites on the Tuolumne River. Restoring the quantity and quality of spawning habitat below LaGrange Dam will reduce salmonid redd superimposition and egg mortality, increase fry production, and ultimately contribute to achieving salmon population targets. Improving the coarse sediment supply in the channel will help restore the fluvial geomorphic processes and natural channel morphology. ***Jeff McLain, USFWS.Implementation. Project has not started, USFWS is expecting a significant change in the scope of this contract*** .
86	SJR	EP			86 A. Status of a fluvial geomorphic assessment of coarse sediment supply needs and sources to maintain, improve, or supplement gravel recruitment and natural sediment transport processes linked to stream channel maintenance, erosion and deposition, maintenance of fish spawning areas and the regeneration of riparian vegetation for the San Joaquin River Basin.	AFRP-00-45						AFRP	Cesar Blanco USFWS		Develop an adaptive management forum for large-scale restoration projects	Objective: To establish a multi-disciplinary technical forum where large-scale channel restoration project planning, implementation, and monitoring will receive input and review to provide a more structured process of peer review and adaptive management. ***This contract was modified in 2002 to include a fourth forum session and $35,000.00 was added. The forum was held in March 2003 and a final report is pending. The Tuolumne, Merced, and Clear Creek reports have been submitted and are available on the AFRP website.***
86	SJR	EP			86 A. Status of a fluvial geomorphic assessment of coarse sediment supply needs and sources to maintain, improve, or supplement gravel recruitment and natural sediment transport processes linked to stream channel maintenance, erosion and deposition, maintenance of fish spawning areas and the	AFRP-00-46						AFRP	Jeff McLain USFWS		Merced River Wing-Dam Gravel Monitoring	Objective: The monitoring in this project will evaluate how spawning-sized gravel moves from wing-dam sites, comparing two techniques: painted tracer rocks and radio-tagged rocks. This information can be used to assess whether these diversions are suitable locations for gravel introductions. ***Data collection was completed in the fall of 2002 and draft report was distributed for review in February 2003. Final report was submitted in April 2003.***
86	SJR	EP			86A. Status of a fluvial geomorphic assessment of coarse sediment supply needs and sources to maintain, improve, or supplement gravel recruitment and natural sediment transport processes linked to stream channel maintenance, erosion and deposition, maintenance regeneration of riparian vegetation for the San Joaquin River Basin.	ERP-02D-P55	Oct-03	Sep-06	2,488,003	0	2,488,003	Stillwater Sciences	Frank Ligon		Physical Modeling Experiments to Guide River Restoration Projects	The purpose of this project is to conduct physical modeling experiments to address some of the fundamental scientific questions underlying the river restoration strategies of gravel augmentation, dam removal, and channel-floodplain reconstruction. Contributes to restoration efforts. ***Frank Ligon, Stillwater Sciences. Research; project not completed, Just started in Oct 2003.***

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
86	SJR	EP			86A. Status of a fluvial geomorphic assessment of coarse sediment supply needs and sources to maintain, improve, or supplement gravel recruitment and natural sediment transport processes linked to stream channel maintenance, erosion and deposition, maintenance regeneration of riparian vegetation for the San Joaquin River Basin.	AFRP-00-23						AFRP	Jeff McLain USFWS		Study the feasibility of developing a long-term aggregate source for San Joaquin tributary channel restoration projects	Objective: To evaluate the potential (legal, economic and engineering feasibility) to use dredger tailings from the Merced River near Snelling as fill for channel and floodplain restoration efforts. ***In October 2000 a cooperative agreement between the AFRP and CDFG Region 4 was completed. A coordination meeting among the project participants took place in December 2000 to coordinate responsibilities and initiate the project. A draft product has been developed and is being circulated for review.***
86	SJR	EP			86 B. Status of the development of a program to reduce erosion and maintain gravel recruitment on at least one tributary within the San	ERP-97-N21	Sep-98	Mar-01	536,410	97,000	633,410	Carl Mesick Consultants	Carl Mesick		Knights Ferry Gravel Replenishment	This project will add gravel to maintain gravel recruitment and reduce erosion. ***Project completed. Multiphased project with several subsequent non-CALFED funded phases. J.D. Wikert, USFWS.***
86	SJR	EP			86 B. Status of the development of a program to reduce erosion and maintain gravel recruitment on at least one tributary within the San Joaquin River EMZ - Stanislaus River	AFRP-00-09						AFRP	Jeff McLain USFWS		Evaluate channel restoration and aggregate source potential for Two-mile Bar on the Stanislaus River	Objective: To assess the floodplain restoration potential and develop a conceptual restoration strategy for a 50-acre parcel known as Two-mile Bar, and to conduct aggregate and mineral appraisals to establish a fair market value of the land and provide the basis for acquisition in either fee or easement. ***A cooperative agreement between the AFRP and the Trust for Public Land (TPL) was completed in September of 2000. The TPL coordinated the site survey with the USACOE and subcontracted the aggregate and agricultural appraisals. Appraisals were not completed to federal standards and subsequently where rejected by the USFWS and USBR appraisal reviewers. TPL, CDFG, AFRP, and USBR are currently attempting to get the appraisals brought up to code so the offer to purchase the land can be made.***
86	SJR	EP			86 B. Status of the development of a program to reduce erosion and maintain gravel recruitment on at least one tributary within the San Joaquin River EMZ - Stanislaus River	AFRP-02-02						AFRP	JD Wikert USFWS		Develop a Consensus Based Plan to Direct the Long Term Implementation of Prioritized Restoration/Research in the Stanislaus River Below Goodwin Dam	Objective: Develop a consensus based plan to direct the long term implementation of prioritized restoration/research in the Stanislaus River below Goodwin Dam. ***The project is currently focused on finishing a summary of the existing fisheries data. The summary will be provided to the Stanislaus River Fish Group for review and comment in January 2004. Work continues on the Restoration Plan and conceptual model.***
86	SJR	EP			86 B. Status of the development of a program to reduce erosion and maintain gravel recruitment on at least one tributary within the San Joaquin River EMZ - Stanislaus River	AFRP-01-03	Jan-01	Mar-04	534,138		534,138	Carl Mesick Consultants & The Trust for Public Land	Carl Mesick		Spawning habitat restoration in the Stanislaus River, Lover's Leap Reach	Objective: To restore spawning and rearing habitat in the Lover's Leap Reach. Phase 1 of a demonstration project to restore spawning and rearing habitat on five reaches of the Stanislaus River below Goodwin Dam. Phase 1 encompasses acquisition and restoration activities in the upper 12-mile spawning reach (specifically at Two-Mile Bar, Knights Ferry, Six-Mile Bar, Lover's Leap, and Honolulu Bar). ***NEPA-CEQA permitting work continues. Plans are to begin gravel addition during July-August 2004. DWR 4-pumps has offered $500,000 to expand the project. Paperwork is in USFWS DC awaiting approval***

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
86	SJR	EP			86 B. Status of the development of a program to reduce erosion and maintain gravel recruitment on at least one tributary within the San Joaquin River EMZ - Stanislaus River	AFRP-01-12		Aug-03				AFRP	Cesar Blanco USFWS		Tuolumne River watershed outreach and stewardship proposal	***Objective: To create and utilize outreach materials as tools to build awareness, understanding and support for the Tuolumne River Technical Advisory Committee Plan, "Habitat Restoration Plan for the Lower Tuolumne River Corridor". The cooperative agreement between the AFRP and TRPT was completed in October of 2001. TRPT released two documents: the Tuolumne River Watershed Map and the Lower Tuolumne River Corridor and Its Lands; a brochure depicting land use patterns in the Tuolumne River corridor. The TRPT received a no-cost time extension extending the end date to April 2003 to complete their outreach to landowners who might be interested in easement opportunities. TRPT submitted a final report in August 2003 documenting their outreach efforts. This report, along with the Tuolumne River Watershed Map and the Lower Tuolumne River Corridor and Its Lands can be found on the AFRP website.***
86	SJR	EP			86 C. Status of the implementation of a program to reduce erosion and maintain gravel recruitment on at least one tributary within the San Joaquin River EMZ - Stanislaus River	ERP-97-N21	Sep-98	Sep-04	536,410		536,410	Carl Mesick Consultants	Carl Mesick		Knights Ferry Gravel Replenishment	Maintain gravel recruitment one the Stanislaus River. Adding silt -free gravel should alleviate loss of gravel recruitment due to upstream dams and gravel mining. ***Project completed. Multiphased project with several subsequent non-CALFED funded phases. J.D. Wikert, USFWS.***
86	SJR	EP			86 C. Status of the implementation of a program to reduce erosion and maintain gravel recruitment on at least one tributary within the San Joaquin River EMZ - Stanislaus River	AFRP-02-02						AFRP	JD Wikert USFWS		Develop a Consensus Based Plan to Direct the Long Term Implementation of Prioritized Restoration/Research in the Stanislaus River Below Goodwin Dam	Objective: Develop a consensus based plan to direct the long term implementation of prioritized restoration/research in the Stanislaus River below Goodwin Dam. ***The project is currently focused on finishing a summary of the existing fisheries data. The summary will be provided to the Stanislaus River Fish Group for review and comment in January 2004. Work continues on the Restoration Plan and conceptual model.***
86	SJR	EP			86 D. Status of the development of a program to reduce erosion and maintain gravel recruitment on at least one tributary within the San Joaquin River EMZ - Tuolumne River	ERP-97-C11	Sep-98	Dec-01	250,975	none	250,975	CDFG	Clarence Mayott	4 miles	Spawning Gravel Introduction, Tuolumne River, La Grange & Old Basin Bridge	Project will distribute approx 12,500 cubic yards of gravel creating habitat for salmonids. ***Jeff McLain, USFWS. A portion of 4 river miles of instream habitat. Project completed. This was one phase of a larger project to restore the course sediment supply to the Tuolumne River by introducing clean gravels into the river between La Grange Dam and Old Basso Bridge. The overall project would distribute approximately 25-30,000 cubic yards of gravel at key sites within the upper 4 miles of anadromous salmonid habitat on the Tuolumne River. This particular phase of the project distributed 12,500 cubic yards of gravel below the La Grange Bridge.***
86	SJR	EP			86 D. Status of the development of a program to reduce erosion and maintain gravel recruitment on at least one tributary within the San Joaquin River EMZ - Tuolumne River	ERP-98-F06	Sep-98	Jun-04	1,362,000	5,847,260	7,209,260	USBR	Carolyn Mallory		Tuolumne River Setback Levees and Channel Restoration.	Improve and restore spawning habitat and durability. Monitor geomorphology (pebble counts, tracer rocks, stabilization)and channel characteristics, pre and post project and after flow events. Conduct redd counts and other use surveys. ***Implementation project completed, Jeff McLain, USFWS.***

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
86	SJR	EP			86 D. Status of the development of a program to reduce erosion and maintain gravel recruitment on at least one tributary within the San Joaquin River EMZ - Tuolumne River	AFRP-2002-11						AFRP	Jeff McLain USFWS		Partner with Modesto City and County Parks Departments for Restoration Planning and Implementation on the Gateway Parcel	***Objective: Incorporate habitat needs of salmonids in developing the updated Tuolumne River Regional Park Land Use and Master plans. Acquisition of the Gateway parcel located in the center of the regional park has necessitated the development of new land use and master plans for the park. The principal tasks involved in this planning effort include: (1) development of a preliminary program; (2) soliciting public and agency comment, (3) conducting reconnaissance-level field studies; (4) prepare environmental documentation (EIR/EA); and (5) prepare Land Use Plan and Gateway Master Plan. This planning effort will affect a seven mile reach of the Tuolumne River that is used primarily as a migration corridor by fall-run Chinook salmon. The resulting updated plans are expected to improve habitat conditions for salmon by incorporating elements based on increased understanding of the river's ecology, a refined concept of community needs, improvements in the recreation, ecological and planning sciences, and more stringent regulatory constraints.***
86	SJR	EP			86 E. Status of the implementation of a program to reduce erosion and maintain gravel recruitment on at least one tributary within the San Joaquin River EMZ - Tuolumne River	ERP-00-F01	Oct-00	Aug-04	1,984,320		1,984,320	Friends of the Tuolumne River	Dave Boucher		Tuolumne River Bobcat Flat Floodplain Acquisition	Implement a program to maintain gravel recruitment on the Tuolumne River. Acquisition protects this property from its largest threat which is the potential for gravel mining. (Proposed 280 acres (1.6 miles continuous river frontage). ***Property was acquired. Some limited re-vegetation occurred. Money left over from this contract is currently being used for the development of a conceptual restoration plan. Jeff McLain, USFWS.***
86	SJR	EP			86 E. Status of the implementation of a program to reduce erosion and maintain gravel recruitment on at least one tributary within the San Joaquin River EMZ - Tuolumne River	AFRP-00-07						AFRP	Jeff McLain USFWS		Enhance salmon and steelhead/rainbow trout spawning habitat by adding gravel to three riffles below the Old La Grange Bridge on the Tuolumne River	Objective: The purpose of the project is to restore the course sediment supply to the Tuolumne River by introducing clean gravels into the river between La Grange Dam and Old Basso Bridge. Increased and improved Chinook salmon spawning habitat can be expected. ***The cooperative agreement between the AFRP and CDFG was completed in September of 2000. The CDFG is the state environmental documentation lead and the USFWS is the NEPA lead. This project was permitted and gravel additions took place in the summer of 2002. Phase II informal consultation with NOAA Fisheries was complete in July 2003, and remaining funds will be used to add gravel during summer of 2003.***
					86 E. Status of the implementation of a program to reduce erosion and maintain gravel recruitment on at least one tributary within the San Joaquin River EMZ - Tuolumne River	ERP-98-C04/C05	Sep-98	Dec-00	658,000			CDFG	Clarence Mayott		Basso Bridge Ecological Reserve Land Acquisition and Merced River Ranch Land Acquisition	Protect spawning riffles, and protect and enhance riparian species. ***Basso Bridge component Planning and Implementation Project is 75% complete. Three of four parcels totaling 41.6 acres have been purchased on the Tuolumne River. Clarence Mayott, CDFG.***
86	SJR	EP			86 F. Status of the development of a program to reduce erosion and maintain gravel recruitment on at least one tributary within the San Joaquin River EMZ - Merced River	ERP-98-C04/C05	Sep-98	Dec-00	658,000			CDFG	Clarence Mayott		Basso Bridge Ecological Reserve Land Acquisition and Merced River Ranch Land Acquisition	Develop a program to maintain gravel recruitment on the Merced River. Purpose of acquisition: To develop and utilize surface gravel in construction of salmon restoration projects; to provide stockpile of spawning gravel for additions to the Merced River. Merced River Ranch Land acquisition component ***is complete. Purchased 318 acres to restore riparian, wetland, and aquatic habitat along the Merced River. Clarence Mayott, CDFG.***

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT		CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
							START DATE	END DATE								
86	SJR	EP			86 F. Status of the development of a program to reduce erosion and maintain gravel recruitment on at least one tributary within the San Joaquin River EMZ - Merced River	ERP-00-E05	Feb-00	Sep-02	260,351		260,351	Stillwater Sciences	Jennifer Vick		Merced River Corridor Restoration Project Phase III	This project will develop a long-term restoration and monitoring plan. ***Project completed. Some modeling implementation involved. The Merced River Corridor Restoration Plan was developed in Phase III. In addition to development of that plan, Stillwater Sciences completed field and modeling efforts and developed design guidelines for channel and floodplain restoration. Jeff McLain, USFWS.***
86	SJR	EP			86 F. Status of the development of a program to reduce erosion and maintain gravel recruitment on at least one tributary within the San Joaquin River EMZ - Merced River	ERP-01-N42	Aug-01	Jul-04	1,066,593	0	1,066,593	Community Alliance for Family Farmers	James Tischer		Educating Farmers and Landowners in Biological Resource Management	Project will develop plans to help landowners/growers make beneficial management decisions in relation to water quality improvement and habitat restoration and enhancement. This includes developing two demonstration sites, riparian and working farmland, and an educational outreach program. ***Some implementation, but primarily educational; project completed, Marcia Gibbs, Community Alliance with Family Farmers (CAFF); Project provided training for Merced River landowners in BMPs regarding fine sediment control, erosion control, biotechnical revetment and riparian buffer strip concepts, Rhonda Reed (CBDA).***
86	SJR	EP			86 G. Status of the implementation of a program to reduce erosion and maintain gravel recruitment on at least one tributary within the San Joaquin River EMZ - Merced River	ERP-01-C03	Jul-01	Jun-04	1,699,101	6,176,800	7,875,901	Department of Water Resources	Stephani Spaar		Merced River Salmon Enhancement River Mile 42-44 Phase II	The Merced River Salmon Enhancement project will scale the channel between River miles 42 and 44 to fit the post-dam flow regime. Over the entire reach, the channel will be reshaped to include spawning riffles, runs and pools, with a meander that fits the approximate\e slope and bankfull flow of 1,700 cfs. The floodplains will be replanted with native riparian\vegetation.(Proposed 2 miles; 45 acres of pond area removed; 10 acres of pond area isolated). ***Implementation project not completed. (Proposed restoration of 2.0 miles of instream and riparian habitat). Fred Jurick, CDFG.***
86	SJR	EP			86 G. Status of the implementation of a program to reduce erosion and maintain gravel recruitment on at least one tributary within the San Joaquin River EMZ - Merced River	ERP-02-P12-D	May-03	Apr-06	2,192,515		2,192,515	Stillwater Sciences	Dr. Peter Downs		Merced River Corridor Restoration Plan Phase IV: Dredger Tailings Reach	Develop a detailed sediment transport model. ***Jeff McLain, USFWS. Planning.***
86	SJR	EP			86 G. Status of the implementation of a program to reduce erosion and maintain gravel recruitment on at least one tributary within the San Joaquin River EMZ - Merced River	ERP-98-F11	Mar-99	Sep-04	2,433,759			Department of Water Resources	Stephani Spaar		Phase 3: Merced River Salmon Habitat Enhancement	Reduce erosion and maintain gravel recruitment on the Merced River. Reconfigure the channel to improve river and floodplain dynamics and sediment transport. ***Fred Jurick, CDFG. Implementation. 2.0 miles of instream and riparian habitat. This project was merged into ERP-01-C03. Project not completed. Non-CALFED funded project contribution: 360 acres of CE along the Merced River of riparian and floodplain habitat. Created new river channel, bought gravel rights, and did restored instream habitat***

MULTI SPECIES CONSERVATION STRATEGY MILESTONE 87 -- ROLLED UP SUMMARY

MILESTONE 87 -- Develop floodplain management plans, including feasibility studies to construct setback levees, to restore and improve opportunities for rivers to inundate their floodplain on a seasonal basis for at least one tributary within each of the EMZs in the San Joaquin River Basin. Among the areas to be included are at least 10 miles of stream channel in the West San Joaquin EMZ.		**PROJECTS REVIEWED -** ERP-97-B04, ERP-97-B05, ERP-97-M09, ERP-98-E09, ERP-98-F06, ERP-98-F11, ERP-00-E05, ERP-00-F01, ERP-01-C03, ERP-02-D01, ERP-02D-P55, ERP-02D-P59, ERP-02-P12-D, ERP-02-P19-D, AFRP-00-08, AFRP-00-09, AFRP-00-42, AFRP-00-43, AFRP-00-45,	AFRP-01-09, AFRP-01-12, AFRP-02-02, AFRP-02-11,	**SUMMARY --** Several ERP and AFRP projects provide for planning and feasibility studies for tributaries in all EMZs of the San Joaquin River Basin and West San Joaquin EMZ to seasonally inundate respective floodplains and examine opportunities to set back levees to enhance floodplains. Although numerous plans, studies, engineering and feasibility projects have been undertaken, a compilation and evaluation of all actions should occur to determine what should continue.			**AGENCY NOTES --**	**NOTES CONT'D --**

MULTI SPECIES CONSERVATION STRATEGY MILESTONE 87 -- EVALUATION OF INDIVIDUAL PROJECTS REVIEWED TO FORMULATE THE ROLLED UP SUMMARY

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
87	SJR	EP	Develop floodplain management plans, including feasibility studies to construct setback levees, to restore and improve opportunities for rivers to inundate their floodplain on a seasonal basis for at least one tributary within each of the EMZs in the San Joaquin River Basin. Among the areas to be included are at least 10 miles of stream channel in the West San Joaquin EMZ.		87 A. Status of floodplain management plans, including feasibility studies to construct setback levees for at least one tributary within the San Joaquin River Basin EMZ. - Stanislaus River	ERP-02-D01	Jan-02		1,681,123	381,100	2,062,223	Tuolumne River Preservation Trust	Patrick Koepele		Tuolumne River - Big Bend Project	Floodplain management to restore and improve opportunities for rivers to inundate their floodplain on a seasonal basis on the Tuolumne River. Improve channel-floodplain connectivity to allow inundation at a greater frequency (254 acres proposed). ***Implementation project not completed; still in planning phase. Project acquired 197 acres, 180 acres of CE, and is trying to acquire 16 more acres. Patrick Koepele, Tuolumne River Preservation Trust.***
87	SJR	EP			87 A. Status of floodplain management plans, including feasibility studies to construct setback levees for at least one tributary within the San Joaquin River Basin EMZ. - Stanislaus River	AFRP-01-09	Sep-00	Sep-04	312,451	13,000	325,451	Ducks Unlimited, Inc.	Dan Connelly		Non-structural alternative at the San Joaquin River National Wildlife Refuge: Refinement of habitat enhancement	Objective: To conduct an engineering and hydraulic analysis of the proposed non-structural flood control alternative (NSA) within the San Joaquin National Wildlife Refuge (SJNWR) to evaluate frequency, duration, and location of floodplain innundation and to predict potential benefits and impacts to anadromous fish. Incorporate information from the engineering analysis with management objectives of the SJRNWR to develop additional floodplain management recommendations and manipulations that could potentially be implemented to benefit anadromous fish. ***The Anadromous Fish Restoration Program in cooperation with Ducks Unlimited funded Philip Williams & Associates (PWA) to model the alternatives developed by the COE (phase I). PWA has started phase II which seeks to refine the recommendations proposed by the COE. During this refinement, PWA will be soliciting input from experts on how to improve the model to better benefit native fish, wildlife, and plants.***

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
87	SJR	EP			87 A. Status of floodplain management plans, including feasibility studies to construct setback levees for at least one tributary within the San Joaquin River Basin EMZ. - Stanislaus River	AFRP-02-02						AFRP	JD Wikert USFWS		Develop a Consensus Based Plan to Direct the Long Term Implementation of Prioritized Restoration/Research in the Stanislaus River Below Goodwin Dam	Objective: Develop a consensus based plan to direct the long term implementation of prioritized restoration/research in the Stanislaus River below Goodwin Dam. ***The project is currently focused on finishing a summary of the existing fisheries data. The summary will be provided to the Stanislaus River Fish Group for review and comment in January 2004. Work continues on the Restoration Plan and conceptual model.***
87	SJR	EP			87 A. Status of floodplain management plans, including feasibility studies to construct setback levees for at least one tributary within the San Joaquin River Basin EMZ. - Stanislaus River	AFRP-00-08						AFRP	JD Wikert USFWS		Evaluate proposed non-structural flood control management alternatives on the San Joaquin River National Wildlife Refuge (SJRNWR)	Objective: To conduct an engineering and hydraulic analysis of the proposed non-structural flood control alternative (NSA) within the San Joaquin National Wildlife Refuge (SJNWR) to evaluate frequency, duration, and location of floodplain innundation and to predict potential benefits and impacts to anadromous fish. Incorporate information from the engineering analysis with management objectives of the SJRNWR to develop additional floodplain management recommendations and manipulations that could potentially be implemented to benefit anadromous fish. ***A cooperative agreement between the AFRP and Ducks Unlimited was completed in September 2000. DU subcontracted with Philip Williams and Associates (PWA) to complete the non-structural modeling. Phase I of the hydraulic modeling was completed in May of 2001. PWA is currently working on Phase II of the modeling work which includes the development of three nonstructural alternatives. Refuge seasonal wetlands design plans were developed through NSA work group and incorporated into alternatives.***
87	SJR	EP			87 A. Status of floodplain management plans, including feasibility studies to construct setback levees for at least one tributary within the San Joaquin River Basin EMZ. - Stanislaus River	AFRP-00-45						AFRP	Cesar Blanco USFWS		Develop an adaptive management forum for large-scale restoration projects	Objective: To establish a multi-disciplinary technical forum where large-scale channel restoration project planning, implementation, and monitoring will receive input and review to provide a more structured process of peer review and adaptive management. ***This contract was modified in 2002 to include a fourth forum session and $35,000.00 was added. The forum was held in March 2003 and a final report is pending. The Tuolumne, Merced, and Clear Creek reports have been submitted and are available on the AFRP website.***
87	SJR	EP			87 B. Status of floodplain management plans to restore and improve opportunities for rivers to inundate their floodplain on a seasonal basis for at least one tributary within the San Joaquin Basin EMZ. - Stanislaus River.	ERP-00-F01	Oct-00	Aug-04	1,984,320		1,984,320	Friends of the Tuolumne River	Dave Boucher		Tuolumne River Bobcat Flat Floodplain Acquisition	Acquisition project for the purpose of restoring property to self-sustaining natural floodplain. Proposed 280 Acres of alluvial floodplain (1.6 miles of continuous river frontage). ***Project complete. Property was acquired. Some limited re-vegetation occurred. Money left over from this contract is currently being used for the development of a conceptual restoration plan. Jeff McLain, USFWS.***

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
87	SJR	EP			87 B. Status of floodplain management plans to restore and improve opportunities for rivers to inundate their floodplain on a seasonal basis for at least one tributary within the San Joaquin Basin EMZ. - Stanislaus River.	AFRP-01-12		Aug-03				AFRP	Cesar Blanco USFWS		Tuolumne River watershed outreach and stewardship proposal	***Objective: To create and utilize outreach materials as tools to build awareness, understanding and support for the Tuolumne River Technical Advisory Committee Plan, "Habitat Restoration Plan for the Lower Tuolumne River Corridor". The cooperative agreement between the AFRP and TRPT was completed in October of 2001. TRPT released two documents: the Tuolumne River Watershed Map and the Lower Tuolumne River Corridor and Its Lands; a brochure depicting land use patterns in the Tuolumne River corridor. The TRPT received a no-cost time extension extending the end date to April 2003 to complete their outreach to landowners who might be interested in easement opportunities. TRPT submitted a final report in August 2003 documenting their outreach efforts. This report, along with the Tuolumne River Watershed Map and the Lower Tuolumne River Corridor and Its Lands can be found on the AFRP website.***
87	SJR	EP			87 B. Status of floodplain management plans to restore and improve opportunities for rivers to inundate their floodplain on a seasonal basis for at least one tributary within the San Joaquin Basin EMZ. - Stanislaus River.	AFRP-00-09						AFRP	Jeff McLain USFWS		Evaluate channel restoration and aggregate source potential for Two-mile Bar on the Stanislaus River	Objective: To assess the floodplain restoration potential and develop a conceptual restoration strategy for a 50-acre parcel known as Two-mile Bar, and to conduct aggregate and mineral appraisals to establish a fair market value of the land and provide the basis for acquisition in either fee or easement. ***A cooperative agreement between the AFRP and the Trust for Public Land (TPL) was completed in September of 2000. The TPL coordinated the site survey with the USACOE and subcontracted the aggregate and agricultural appraisals. Appraisals were not completed to federal standards and subsequently where rejected by the USFWS and USBR appraisal reviewers. TPL, CDFG, AFRP, and USBR are currently attempting to get the appraisals brought up to code so the offer to purchase the land can be made.***
87	SJR	EP			87 B. Status of floodplain management plans to restore and improve opportunities for rivers to inundate their floodplain on a seasonal basis for at least one tributary within the San Joaquin Basin EMZ. - Stanislaus River.	AFRP-02-02						AFRP	JD Wikert USFWS		Develop a Consensus Based Plan to Direct the Long Term Implementation of Prioritized Restoration/Research in the Stanislaus River Below Goodwin Dam	Objective: Develop a consensus based plan to direct the long term implementation of prioritized restoration/research in the Stanislaus River below Goodwin Dam. ***The project is currently focused on finishing a summary of the existing fisheries data. The summary will be provided to the Stanislaus River Fish Group for review and comment in January 2004. Work continues on the Restoration Plan and conceptual model.***
87	SJR	EP			87 B. Status of floodplain management plans to restore and improve opportunities for rivers to inundate their floodplain on a seasonal basis for at least one tributary within the San Joaquin Basin EMZ. - Stanislaus River.	AFRP-00-42						AFRP	JD Wikert USFWS		Develop a river corridor physical habitat assessment and restoration plan for the Stanislaus River	Objective: To evaluate current channel, floodplain, and river corridor processes and habitat condition of the entire lower Stanislaus River in the context of historical and current agents of change; develop a restoration strategy document for floodplain, riparian and channel habitats of the Stanislaus River corridor. ***The next step will be for the Fish Group to develop a request for proposals and solicit input from technical interests.***
87	SJR	EP			87 B. Status of floodplain management plans to restore and improve opportunities for rivers to inundate their floodplain on a seasonal basis for at least one tributary within the San Joaquin Basin EMZ. - Stanislaus River.	AFRP-00-43						AFRP	JD Wikert USFWS		Develop a river corridor physical habitat assessment and restoration plan for the Stanislaus River	Objective: To evaluate current channel, floodplain, and river corridor processes and habitat condition of the entire lower Stanislaus River in the context of historical and current agents of change; develop a restoration strategy document for floodplain, riparian and channel habitats of the Stanislaus River corridor. ***The next step will be for the Fish Group to develop a request for proposals and solicit input from technical interests.***

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
87	SJR	EP			87 B. Status of floodplain management plans to restore and improve opportunities for rivers to inundate their floodplain on a seasonal basis for at least one tributary within the San Joaquin Basin EMZ. - Stanislaus River.	ERP-02-P19-D	Mar-04		10,839,000		10,839,000	Turlock Irrigation District	Wilton Fryer		Tuolumne River Mining Reach Restoration Project: Warner-Deardorff Segment No. 3 Construction	Feasibility studies to restore and improve opportunities for rivers to inundate their floodplain on a seasonal basis on the Tuolumne River. Reconstruct natural channel geometry scaled to current channel forming flows, which allows active fluvial processes to maintain the restored aquatic habitat within a 500 foot wide riparian floodway. (Proposed 73 acres,1.3 miles riverine habitat). ***Implementation project not complete. Jeff McLain, USFWS.***
87	SJR	EP			87 B. Status of floodplain management plans to restore and improve opportunities for rivers to inundate their floodplain on a seasonal basis for at least one tributary within the San Joaquin Basin EMZ. - Stanislaus River.	ERP-02D-P55	Oct-03	Sep-06	2,488,003	0	2,488,003	Stillwater Sciences	Frank Ligon		Physical Modeling Experiments to Guide River Restoration Projects	The purpose of this project is to conduct physical modeling experiments to address some of the fundamental scientific questions underlying the river restoration strategies of gravel augmentation, dam removal, and channel-floodplain reconstruction. Contributes to restoration efforts. ***Frank Ligon, Stillwater Sciences. Research; project not completed, Just started in Oct 2003.***
87	SJR	EP			87 B. Status of floodplain management plans to restore and improve opportunities for rivers to inundate their floodplain on a seasonal basis for at least one tributary within the San Joaquin Basin EMZ. - Stanislaus River.	ERP-97-B04	Aug-98	Mar-02	10,947,000	10,000,000	20,947,000.00	San Luis National Wildlife Refuge Complex	Kim Forrest, Refuge Manager		San Joaquin River National Wildlife Refuge Riparian Habitat Protection and Floodplain Restoration Project	This contract represents Phase I of an overall project to acquire lands along the San Joaquin River for the benefit of fish and wildlife. Four separate parcels will be purchased totaling 6169 acres; this acreage will become part of the SJR NWR. This phase will also include pre-restoration planning. A Baseline Biological Inventory was completed as part of this project prior to future phase restoration. Phase II of this project will entail earth-moving and restoration. ***This project was completed, it included planning and baseline monitoring. Kim Forrest, USFWS, 209.826.3508***
87	SJR	EP			87 B. Status of floodplain management plans to restore and improve opportunities for rivers to inundate their floodplain on a seasonal basis for at least one tributary within the San Joaquin Basin EMZ. - Stanislaus River.	AFRP-00-45						AFRP	Cesar Blanco USFWS		Develop an adaptive management forum for large-scale restoration projects	Objective: To establish a multi-disciplinary technical forum where large-scale channel restoration project planning, implementation, and monitoring will receive input and review to provide a more structured process of peer review and adaptive management. ***This contract was modified in 2002 to include a fourth forum session and $35,000.00 was added. The forum was held in March 2003 and a final report is pending. The Tuolumne, Merced, and Clear Creek reports have been submitted and are available on the AFRP website.***
87	SJR	EP			87 C. Status of floodplain management plans, including feasibility studies to construct setback levees for at least one tributary within the San Joaquin River Basin EMZ. - Tuolumne River	ERP-02-P19-D	Mar-04		10,839,000		10,839,000	Turlock Irrigation District	Wilton Fryer		Tuolumne River Mining Reach Restoration Project: Warner-Deardorff Segment No. 3 Construction	Feasibility studies to restore and improve opportunities for rivers to inundate their floodplain on a seasonal basis on the Tuolumne River. Reconstruct natural channel geometry scaled to current channel forming flows, which allows active fluvial processes to maintain the restored aquatic habitat within a 500 foot wide riparian floodway. (Proposed 73 acres,1.3 miles riverine habitat). ***Implementation project not complete. Jeff McLain, USFWS.***
87	SJR	EP			87 C. Status of floodplain management plans, including feasibility studies to construct setback levees for at least one tributary within the San Joaquin River Basin EMZ. - Tuolumne River	ERP-98-F06	Sep-98	Jun-04	1,362,000	5,847,260	7,209,260	USBR	Carolyn Mallory		Tuolumne River Setback Levees and Channel Restoration.	Improve and restore spawning habitat and durability. Monitor geomorphology (pebble counts, tracer rocks, stabilization)and channel characteristics, pre and post project and after flow events. Conduct redd counts and other use surveys. ***Implementation project completed, Jeff McLain, USFWS.***

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
87	SJR	EP			87 C. Status of floodplain management plans, including feasibility studies to construct setback levees for at least one tributary within the San Joaquin River Basin EMZ. - Tuolumne River	ERP-02D-P59			6,427,131		6,427,131.00	San Luis National Wildlife Refuge Complex	Kim Forrest, Refuge Manager		Recovery Implementation for Riparian Brush Rabbit and Riparian Woodrat on the lower Stanislaus River	***Project not begun yet. Proposing to establish for riparian brush rabbits a Lower Stanislaus River Riparian Preserve of 500-1,000 acres on the south bank of Stanislaus River in Stanislaus County, within an area defined by the confluence with the San Joaquin River up to river mile 9.5. Additionally, proposing expansion of the habitat at Caswell Memorial State Park, San Joaquin County, while monitoring the riparian brush rabbits response; and monitor the recently reintroduced rabbits at the San Joaquin River National Wildlife Refuge on the San Joaquin River in Stanislaus County to gain a better understanding of the reintroduction process. Kim Forrest, USFWS.***
87	SJR	EP			87 C. Status of floodplain management plans, including feasibility studies to construct setback levees for at least one tributary within the San Joaquin River Basin EMZ. - Tuolumne River	AFRP-02-11						AFRP	Jeff McLain USFWS		Partner with Modesto City and County Parks Departments for Restoration Planning and Implementation on the Gateway Parcel	***Objective: Incorporate habitat needs of salmonids in developing the updated Tuolumne River Regional Park Land Use and Master plans. Acquisition of the Gateway parcel located in the center of the regional park has necessitated the development of new land use and master plans for the park. The original plans were developed in the 1960s. The principal tasks involved in this planning effort include: (1) development of a preliminary program that broadly defines potential uses and activities within the Park corridor and a set of baseline environmental objectives; (2) soliciting public and agency comment; (3) conducting reconnaissance-level field studies to document environmental setting and identify environmental opportunities and constraints; (4) prepare environmental documentation (EIR/EA); and (5) prepare Land Use Plan and Gateway Master Plan. This planning effort will affect a seven mile reach of the Tuolumne River that is used primarily as a migration corridor by fall-run Chinook salmon.***
87	SJR	EP			87 C. Status of floodplain management plans, including feasibility studies to construct setback levees for at least one tributary within the San Joaquin River Basin EMZ. - Tuolumne River	ERP-97-M09	Jul-00	Dec-01	2,801,000	4,384,060	7,185,060	Turlock Irrigation District	Wilton Fryer		Tuolumne River Setback Levees and Channel Restoration (7/11 Segment of Mining Reach)	Construction of set back levees. Construct a system of setback levees to create a more natural dynamic morphology that will improve ….riparian habitat. ***Jeff McLain, USFWS, 209.946.6400 x 304. Implementation. .6 river miles of riparian and riverine aquatic habitat. Project completed. This project is part of a larger restoration project to eventually restore the entire Mining Reach (6.1 miles@ RM 34.2 to 40.3) on the Tuolumne River. This specific project will eventually restore the 7/11 segment (.6 miles @ RM 37.7-40.3). This project filled-in mining pits for instream habitat and floodplain enhancement.***
87	SJR	EP			87 C. Status of floodplain management plans, including feasibility studies to construct setback levees for at least one tributary within the San Joaquin River Basin EMZ. - Tuolumne River	AFRP-00-45						AFRP	Cesar Blanco USFWS		Develop an adaptive management forum for large-scale restoration projects	Objective: To establish a multi-disciplinary technical forum where large-scale channel restoration project planning, implementation, and monitoring will receive input and review to provide a more structured process of peer review and adaptive management. ***This contract was modified in 2002 to include a fourth forum session and $35,000.00 was added. The forum was held in March 2003 and a final report is pending. The Tuolumne, Merced, and Clear Creek reports have been submitted and are available on the AFRP website.***

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
87	SJR	EP			87 D. Status of floodplain management plans to restore and improve opportunities for rivers to inundate their floodplain on a seasonal basis for at least one tributary within the San Joaquin Basin EMZ. - Tuolumne River.	ERP-97-B05	Mar-98	Sep-00	334,000	0	334,000	San Luis National Wildlife Refuge Complex	Kim Forrest, Refuge Manager		Feasibility Analysis for the San Joaquin-Bear Creek Floodplain Restoration Project, San Luis National Wildlife Refuge.	This project is conducting a feasibility analysis that will eventually lead to a demonstration project that would require deauthorization of modification of a 10-mile section of levees along the San Joaquin River to restore more natural flooding hydrology. ***Project completed. This was a planning project dealing with the feasibility of allowing passive breaches along a section of the SJR near the Bear Creek Unit of the Refuge. Kim Forrest, USFWS.***
87	SJR	EP			87 D. Status of floodplain management plans to restore and improve opportunities for rivers to inundate their floodplain on a seasonal basis for at least one tributary within the San Joaquin Basin EMZ. - Tuolumne River.	AFRP-02-11						AFRP	Jeff McLain USFWS		Partner with Modesto City and County Parks Departments for Restoration Planning and Implementation on the Gateway Parcel	***Objective: Incorporate habitat needs of salmonids in developing the updated Tuolumne River Regional Park Land Use and Master plans. Acquisition of the Gateway parcel located in the center of the regional park has necessitated the development of new land use and master plans for the park. The principal tasks involved in this planning effort include: (1) development of a preliminary program that broadly defines potential uses and activities within the Park corridor and a set of baseline environmental objectives; (2) soliciting public and agency comment in part by conducting interviews with key stakeholders and facilitating public workshops and meetings; (3) conducting reconnaissance-level field studies to document environmental setting and identify environmental opportunities and constraints; (4) prepare environmental documentation (EIR/EA); and (5) prepare Land Use Plan and Gateway Master Plan. This planning effort will affect a seven mile reach of the Tuolumne River that is used primarily as a migration corridor by fall-run Chinook salmon.***
87	SJR	EP			87 D. Status of floodplain management plans to restore and improve opportunities for rivers to inundate their floodplain on a seasonal basis for at least one tributary within the San Joaquin Basin EMZ. - Tuolumne River.	ERP-02D-P55	Oct-03	Sep-06	2,488,003	0	2,488,003	Stillwater Sciences	Frank Ligon		Physical Modeling Experiments to Guide River Restoration Projects	The purpose of this project is to conduct physical modeling experiments to address some of the fundamental scientific questions underlying the river restoration strategies of gravel augmentation, dam removal, and channel-floodplain reconstruction. Contributes to restoration efforts. ***Frank Ligon 707.822.9607 Stillwater Sciences. Research; project not completed, Just started in Oct 2003.***
87	SJR	EP			87 D. Status of floodplain management plans to restore and improve opportunities for rivers to inundate their floodplain on a seasonal basis for at least one tributary within the San Joaquin Basin EMZ. - Tuolumne River.	AFRP-00-45						AFRP	Cesar Blanco USFWS		Develop an adaptive management forum for large-scale restoration projects	Objective: To establish a multi-disciplinary technical forum where large-scale channel restoration project planning, implementation, and monitoring will receive input and review to provide a more structured process of peer review and adaptive management. ***This contract was modified in 2002 to include a fourth forum session and $35,000.00 was added. The forum was held in March 2003 and a final report is pending. The Tuolumne, Merced, and Clear Creek reports have been submitted and are available on the AFRP website.***
87	SJR	EP			87 E. Status of floodplain management plans, including feasibility studies to construct setback levees for at least one tributary within the San Joaquin River Basin EMZ. - Merced River	AFRP-00-45						AFRP	Cesar Blanco USFWS		Develop an adaptive management forum for large-scale restoration projects	Objective: To establish a multi-disciplinary technical forum where large-scale channel restoration project planning, implementation, and monitoring will receive input and review to provide a more structured process of peer review and adaptive management. ***This contract was modified in 2002 to include a fourth forum session and $35,000.00 was added. The forum was held in March 2003 and a final report is pending. The Tuolumne, Merced, and Clear Creek reports have been submitted and are available on the AFRP website.***

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
87	SJR	EP			87 F. Status of floodplain management plans to restore and improve opportunities for rivers to inundate their floodplain on a seasonal basis for at least one tributary within the San Joaquin Basin EMZ. - Merced River.	ERP-98-E09	Sep-98	Apr-01	300,000 0	265,520	326,552	Stillwater Sciences & Merced Co. Planning and Development	Jennifer Vick/Bob Smith		Merced River Corridor Restoration Plan	Project will address historical and current supply and transport of coarse and fine sediment. ***Jeff McLain. Planning. Final Plan completed. The final plan recommends actions to re-establish floodplain at elevations that are functional under the contemporary regulated flow regime, to establish a floodplain corridor and reconnect the river to its floodplain.***
87	SJR	EP			87 F. Status of floodplain management plans to restore and improve opportunities for rivers to inundate their floodplain on a seasonal basis for at least one tributary within the San Joaquin Basin EMZ. - Merced River.	ERP-98-F11	Mar-99	Sep-02	2,433,759		2,433,759	Department of Water Resources	Stephani Spaar		Phase 3: Merced River Salmon Habitat Enhancement	Reduce erosion and maintain gravel recruitment on the Merced River. Reconfigure the channel to improve river and floodplain dynamics and sediment transport. ***Fred Jurick 916.445.3967 Department of Fish and Game. Implementation. 2.0 miles of instream and riparian habitat. This project was merged into ERP-01-C03. Project not completed. Non-CALFED funded project contribution: 360 acres of CE along the Merced River of riparian and floodplain habitat. Created new river channel, bought gravel rights, and did restored instream habitat***
67	SJR	EP			87 F. Status of floodplain management plans to restore and improve opportunities for rivers to inundate their floodplain on a seasonal basis for at least one tributary within the San Joaquin Basin EMZ. - Merced River.	ERP-02-P12-D	May-03	Apr-06	2,192,515		2,192,515	Stillwater Sciences	Dr. Peter Downs		Merced River Corridor Restoration Plan Phase IV: Dredger Tailings Reach	Project will facilitate floodplain re-grading strategies that will encourage more frequent floodplain inundation. ***Planning project not complete. Jeff McLain, USFWS.***
87	SJR	EP			87 F. Status of floodplain management plans to restore and improve opportunities for rivers to inundate their floodplain on a seasonal basis for at least one tributary within the San Joaquin Basin EMZ. - Merced River.	ERP-02D-P55	Oct-03	Sep-06	2,488,003	0	2,488,003	Stillwater Sciences	Frank Ligon		Physical Modeling Experiments to Guide River Restoration Projects	The purpose of this project is to conduct physical modeling experiments to address some of the fundamental scientific questions underlying the river restoration strategies of gravel augmentation, dam removal, and channel-floodplain reconstruction. Contributes to restoration efforts. ***Research Project not completed, just started in October 2003. Frank Ligon, Stillwater Sciences.***
87	SJR	EP			87 F. Status of floodplain management plans to restore and improve opportunities for rivers to inundate their floodplain on a seasonal basis for at least one tributary within the San Joaquin Basin EMZ. - Merced River.	ERP-00-E05	Feb-00	Sep-02	260,351		260,351	Stillwater Sciences	Jennifer Vick		Merced River Corridor Restoration Project Phase III	This project will develop a long-term restoration and monitoring plan. ***Project completed. Some modeling implementation involved. The Merced River Corridor Restoration Plan was developed in Phase III. In addition to development of that plan, Stillwater Sciences completed field and modeling efforts and developed design guidelines for channel and floodplain restoration. Jeff McLain, USFWS.***
87	SJR	EP			87 F. Status of floodplain management plans to restore and improve opportunities for rivers to inundate their floodplain on a seasonal basis for at least one tributary within the San Joaquin Basin EMZ. - Merced River.	ERP-01-C03	Jul-01	Jun-04	1,699,101	6,176,800	7,875,901	Department of Water Resources	Stephani Spaar		Merced River Salmon Enhancement River Mile 42-44 Phase II	The Merced River Salmon Enhancement project will scale the channel between River miles 42 and 44 to fit the post-dam flow regime. Over the entire reach, the channel will be reshaped to include spawning riffles, runs and pools, with a meander that fits the approximate\e slope and bankfull flow of 1,700 cfs. The floodplains will be replanted with native riparian\vegetation. (Proposed 2 miles; 45 acres of pond area removed; 10 acres of pond area isolated). ***Implementation project not completed. (Proposed restoration of 2.0 miles of instream and riparian habitat). Fred Jurick, CDFG.***

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87	SJR	EP			87 F. Status of floodplain management plans to restore and improve opportunities for rivers to inundate their floodplain on a seasonal basis for at least one tributary within the San Joaquin Basin EMZ. - Merced River.	AFRP-00-45						AFRP	Cesar Blanco USFWS		Develop an adaptive management forum for large-scale restoration projects	Objective: To establish a multi-disciplinary technical forum where large-scale channel restoration project planning, implementation, and monitoring will receive input and review to provide a more structured process of peer review and adaptive management. ***This contract was modified in 2002 to include a fourth forum session and $35,000.00 was added. The forum was held in March 2003 and a final report is pending. The Tuolumne, Merced, and Clear Creek reports have been submitted and are available on the AFRP website.***
87	SJR	EP			87 G. Status of floodplain management plans to restore and improve opportunities for rivers to inundate their floodplain on a seasonal basis. Among the areas to be included are at least 10 miles of stream channel in the West San Joaquin EMZ.	ERP-02D-P55	Oct-03	Sep-06	2,488,003	0	2,488,003	Stillwater Sciences	Frank Ligon		Physical Modeling Experiments to Guide River Restoration Projects	The purpose of this project is to conduct physical modeling experiments to address some of the fundamental scientific questions underlying the river restoration strategies of gravel augmentation, dam removal, and channel-floodplain reconstruction. Contributes to restoration efforts. ***Research Project not completed, just started in October 2003. Frank Ligon, Stillwater Sciences.***

MULTI SPECIES CONSERVATION STRATEGY MILESTONE 88 -- ROLLED UP SUMMARY

MILESTONE 88 -- Develop a cooperative program to restore salmonid spawning and rearing habitat in the Tuolumne, Stanislaus, and Merced Rivers that includes the following elements: (1) reconstructing channels at selected sites by isolating or filling in in channel gravel extraction areas; (2) increasing natural meander by removing riprap and relocating other structures that impair stream meander; and (3) restoring more natural channel configurations to reduce salmonid predator habitat and improve migration corridors.	**PROJECTS REVIEWED --** ERP-97-M08, ERP-97-M09, ERP-97-N21, ERP-98-E09, ERP-98-F06, ERP-98-F11, ERP-99-B04, ERP-99-B05, ERP-99-F01, ERP-99-F02, ERP-99-R01, ERP-00-E05, ERP-00-F01, ERP-01-N03, ERP-01-C03, ERP-01-N09, ERP-02-D01, ERP-02-P19-D, AFRP-00-06, AFRP-00-09, AFRP-00-12, AFRP-00-35, AFRP-01-02, AFRP-01-12, AFRP-02-02, AFRP-03-03	**SUMMARY --** Several ERP and AFRP projects have been awarded that contribute to reconstruction and restoration efforts to create more natural stream channels, spawning and rearing habitat, natural meanders, and migration corridors by restoring gravel extraction sites and removal of riprap and other channel obstructions. These actions are expected to reduce habitat for predators of salmon. Most projects have focused on the Tuolumne River, followed by the Merced, then Stanislaus Rivers. While the projects are independent, they are often linked or phased projects that add to the length of restored reaches on these tributaries.			**AGENCY NOTES --**	**NOTES CONT'D --**

MULTI SPECIES CONSERVATION STRATEGY MILESTONE 88 -- EVALUATION OF INDIVIDUAL PROJECTS REVIEWED TO FORMULATE THE ROLLED UP SUMMARY

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
88	SJR	EP	Develop a cooperative program to restore salmonid spawning and rearing habitat in the Tuolumne, Stanislaus, and Merced Rivers that includes the following elements: (1) reconstructing channels at selected sites by isolating or filling in in channel gravel extraction areas; (2) increasing natural meander by removing riprap and relocating other structures that impair stream meander; and (3) restoring more natural channel configurations to reduce salmonid predator habitat and improve migration corridors.		88 A. Status of the development of a cooperative program to restore salmonid spawning and rearing habitat in the Tuolumne River.	ERP-99-F01	Sep-99	Mar-02	164,800		164,800	Turlock Irrigation District	Wilton Fryer		Tuolumne River Run Pool 10 Restoration	Restoration of instream aquatic habitat and shaded riverine aquatic habitat and reduction of predatory fish habitat for the benefit of salmon. The full SRP 10 project will rebuild a portion of the Tuolumne River channel, at river mile 25.4. The project will remove mining pit ponds. ***This project is complete. This is part of the larger full SRP 10 Restoration Project to restore RM 25.4 on the Tuolumne River. This phase included levee breach repair and baseline monitoring. This project contributes to eventual full restoration which will reduce salmonid fish predator habitat, restore and increase habitat for salmon production, reconstruct natural channel geometry, and restore native riparian plant communities. Jeff McLain, USFWS.***
88	SJR	EP			88 A. Status of the development of a cooperative program to restore salmonid spawning and rearing habitat in the Tuolumne River.	ERP-00-F01	Oct-00	Aug-04	1,984,320		1,984,320	Friends of the Tuolumne River	Dave Boucher		Tuolumne River Bobcat Flat Floodplain Acquisition	Acquisition project for the purpose of restoring property to self-sustaining natural floodplain. Proposed 280 Acres of alluvial floodplain (1.6 miles of continuous river frontage). ***Project complete. Property was acquired. Money left over from this contract is currently being used for the development of a conceptual restoration plan. Jeff McLain, USFWS.***

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88	SJR	EP			88 A. Status of the development of a cooperative program to restore salmonid spawning and rearing habitat in the Tuolumne River.	AFRP-00-12						AFRP	Jeff McLain USFWS		Tuolumne River: Special Run Pool 10 Dike Repair and Pre-Project Monitoring	Objective: A levee separating a gravel extraction pit from the Tuolumne River was damaged during the 1997 floods connecting the deepwater habitat with the Tuolumne River. This project will reduce juvenile salmonid fish predator habitat by repairing the levee and isolating the mining pit from the Tuolumne River. This project will also collect a second year of pre-project monitoring to better establish base line conditions for the full SRP 10 restoration project. ***The levee breach repair was completed in 2001 and the pre-project monitoring was completed in early 2002.***
88	SJR	EP			88 A. Status of the development of a cooperative program to restore salmonid spawning and rearing habitat in the Tuolumne River.	ERP-01-N09	Aug-04	Aug-04	910,468			Turlock Irrigation District	Wilton Fryer		Tuolumne River Fine Sediment Management	Implements actions to remove sand and clean five pool and riffles sites in the spawning reach of the Tuolumne River. T***his is a planning, design and implementation project. Implementation has not started, yet the planning and design phases are completed. Project is 32% complete. Wilton Fryer, Turlock Irrigation District.***
88	SJR	EP			88 A. Status of the development of a cooperative program to restore salmonid spawning and rearing habitat in the Tuolumne River.	ERP-99-F02	Sep-99	Mar-02	3,332,050	3,145,000	1,984,320	Turlock Irrigation District	Wilton Fryer		Tuolumne River Mining Reach Restoration Project No. 2 - MJ Ruddy Segment	The MJ Ruddy Segment is Project No. 2 located between river mile 36.5 and 37.6 on the Tuolumne River. Objectives: 1) Restore and increase habitat for natural salmon production. 2) Reconstruct natural channel geometry scaled to current channel forming flows. 3) Restore native riparian plant communities. 4) Reduce salmonid fish predator habitat. ***Jeff McLain, USFWS. Implementation. Project not completed. This project is part of a larger restoration project to eventually restore the entire Mining Reach (6.1 miles@ RM 34.2 to 40.3) on the Tuolumne River. This project will eventually restore MJ Ruddy Reach (1.1 miles @ RM 36.5-37.6). No actual restoration has been accomplished to date; land has not been purchased.***
88	SJR	EP			88 A. Status of the development of a cooperative program to restore salmonid spawning and rearing habitat in the Tuolumne River.	AFRP-02-11						AFRP	Jeff McLain USFWS		Partner with Modesto City and County Parks Departments for Restoration Planning and Implementation on the Gateway Parcel	***Objective: Incorporate habitat needs of salmonids in developing the updated Tuolumne River Regional Park Land Use and Master plans. Acquisition of the Gateway parcel located in the center of the regional park has necessitated the development of new land use and master plans for the park. The original plans were developed in the 1960s. The principal tasks involved in this planning effort include: (1) development of a preliminary program that broadly defines potential uses and activities within the Park corridor and a set of baseline environmental objectives; (2) soliciting public and agency comment; (3) conducting reconnaissance-level field studies to document environmental setting and identify environmental opportunities and constraints; (4) prepare environmental documentation (EIR/EA); and (5) prepare Land Use Plan and Gateway Master Plan. This planning effort will affect a seven mile reach of the Tuolumne River that is used primarily as a migration corridor by fall-run Chinook salmon.***

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88	SJR	EP			88 A. Status of the development of a cooperative program to restore salmonid spawning and rearing habitat in the Tuolumne River.	ERP-97-M08	Feb-98		2,353,100			Turlock Irrigation District	Tim Ford		Tuolumne River Special Run Pool 9 Restoration	Reconstructing channels by isolating or filling in channel gravel extraction areas.Will change warmwater predator species habitat resulting from gravel mining to a more natural, dynamic morphology that will improve habitat for chinook salmon. ***Jeff McLain, USFWS. Implementation. .2 miles of riparian and riverine aquatic habitat. This project was completed. A final joint Environmental Assessment and Initial study for the restoration projects Special Run Pool (SRP) 9 and 10 (ERP 99 F01) and four project segments of the Gravel Mining Reach was completed in October 1999 with funding from this agreement. Pre-project monitoring that included habitat mapping, fish community evaluation, salmon smolt survival experiments, and geomorphic variables occurred during spring through fall of 1998. Instream work, floodplain construction, and revegetation was completed in 2001. Restored floodplain is currently being maintained to enhance survival of plantings.***
88	SJR	EP			88 A. Status of the development of a cooperative program to restore salmonid spawning and rearing habitat in the Tuolumne River.	AFRP-01-12		Aug-03				AFRP	Cesar Blanco USFWS		Tuolumne River watershed outreach and stewardship proposal	Objective: To create and utilize outreach materials as tools to build awareness, understanding and support for the Tuolumne River Technical Advisory Committee Plan, "Habitat Restoration Plan for the Lower Tuolumne River Corridor". ***The cooperative agreement between the AFRP and TRPT was completed in October of 2001. TRPT released two documents: the Tuolumne River Watershed Map and the Lower Tuolumne River Corridor and Its Lands; a brochure depicting land use patterns in the Tuolumne River corridor. The TRPT received a no-cost time extension extending the end date to April 2003 to complete their outreach to landowners who might be interested in easement opportunities. TRPT submitted a final report in August 2003 documenting their outreach efforts. This report, along with the Tuolumne River Watershed Map and the Lower Tuolumne River Corridor and Its Lands can be found on the AFRP website.***
88	SJR	EP			88 B. Status on the Tuolumne River of reconstructing channels at selected sites by isolating or filling in in channel gravel extraction areas.	ERP-97-M08	Feb-98		2,353,100		2,353,100	Turlock Irrigation District	Tim Ford		Tuolumne River Special Run Pool 9 Restoration	Reconstructing channels by isolating or filling in channel gravel extraction areas.Will change warmwater predator species habitat resulting from gravel mining to a more natural, dynamic morphology that will improve habitat for chinook salmon. ***Jeff McLain, USFWS. Implementation. .2 miles of riparian and riverine aquatic habitat (credited for Milestone 94B). This project was completed. A final joint Environmental Assessment and Initial study for the restoration projects Special Run Pool (SRP) 9 and 10 (ERP 99 F01) and four project segments of the Gravel Mining Reach was completed in October 1999 with funding from this agreement. Pre-project monitoring that included habitat mapping, fish community evaluation, salmon smolt survival experiments, and geomorphic variables occurred during spring through fall of 1998. Instream work, floodplain construction, and revegetation was completed in 2001. Restored floodplain is currently being maintained to enhance survival of plantings.***

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88	SJR	EP			88 B. Status on the Tuolumne River of reconstructing channels at selected sites by isolating or filling in in channel gravel extraction areas.	AFRP-02-11						AFRP	Jeff McLain USFWS		Partner with Modesto City and County Parks Departments for Restoration Planning and Implementation on the Gateway Parcel	***Objective: Incorporate habitat needs of salmonids in developing the updated Tuolumne River Regional Park Land Use and Master plans. Acquisition of the Gateway parcel located in the center of the regional park has necessitated the development of new land use and master plans for the park. The original plans were developed in the 1960s. The tasks involved in this planning effort include: (1) development of a preliminary program that broadly defines potential uses and activities within the Park corridor and a set of baseline environmental objectives; (2) soliciting public and agency comment; (3) conducting reconnaissance-level field studies to document environmental setting and identify environmental opportunities and constraints; (4) prepare environmental documentation (EIR/EA); and (5) prepare Land Use Plan and Gateway Master Plan. This planning effort will affect a seven mile reach of the Tuolumne River that is used primarily as a migration corridor by fall-run Chinook salmon.***
88	SJR	EP			88 B. Status on the Tuolumne River of reconstructing channels at selected sites by isolating or filling in in channel gravel extraction areas.	AFRP-00-12						AFRP	Jeff McLain USFWS		Tuolumne River: Special Run Pool 10 Dike Repair and Pre-Project Monitoring	Objective: A levee separating a gravel extraction pit from the Tuolumne River was damaged during the 1997 floods connecting the deepwater habitat with the Tuolumne River. This project will reduce juvenile salmonid fish predator habitat by repairing the levee and isolating the mining pit from the Tuolumne River. This project will also collect a second year of pre-project monitoring to better establish base line conditions for the full SRP 10 restoration project. ***The levee breach repair was completed in 2001 and the pre-project monitoring was completed in early 2002.***
88	SJR	EP			88 B. Status on the Tuolumne River of reconstructing channels at selected sites by isolating or filling in in channel gravel extraction areas.	ERP-98-F06	Sep-98	Jun-04	1,362,000	5,847,260	7,209,260	USBR	Carolyn Mallory		Tuolumne River Setback Levees and Channel Restoration.	Improve and restore spawning habitat and durability. Monitor geomorphology (pebble counts, tracer rocks, stabilization)and channel characteristics, pre and post project and after flow events. Conduct redd counts and other use surveys. ***Implementation project completed, Jeff McLain, USFWS.***

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88	SJR	EP			88 B. Status on the Tuolumne River of reconstructing channels at selected sites by isolating or filling in in channel gravel extraction areas.	ERP-97-M09	Jul-00	Dec-01	2,801,000	4,384,060	7,185,060	Turlock Irrigation District	Wilton Fryer		Tuolumne River Setback Levees and Channel Restoration	Channel reconstruction in deep pit areas created by past gravel mining. ***Jeff McLain, USFWS. Implementation. .6 river miles of riparian and riverine aquatic habitat. Project completed. This project is part of a larger restoration project to eventually restore the entire Mining Reach (6.1 miles@ RM 34.2 to 40.3) on the Tuolumne River. This specific project will eventually restore the 7/11 segment (.6 miles @ RM 37.7-40.3). This project filled-in mining pits for instream habitat and floodplain enhancement.***
88	SJR	EP			88 B. Status on the Tuolumne River of reconstructing channels at selected sites by isolating or filling in in channel gravel extraction areas.	ERP-99-F01	Sep-99	Mar-02	164,800		164,800	Turlock Irrigation District	Wilton Fryer		Tuolumne River Special Run Pool (SRP) 10 Restoration	Restoration of instream aquatic habitat and shaded riverine aquatic habitat and reduction of predatory fish habitat for the benefit of salmon. The full SRP 10 project will rebuild a portion of the Tuolumne River channel, at river mile 25.4. The project will remove mining pit ponds. ***Jeff McLain, USFWS. Implementation and Monitoring. This project is complete. This is part of the larger full SRP 10 Restoration Project to restore RM 25.4 on the Tuolumne River. This phase included levee breach repair and baseline monitoring. This project contributes to eventual full restoration which will reduce salmonid fish predator habitat, restore and increase habitat for salmon production, reconstruct natural channel geometry, and restore native riparian plant communities. This project dovetails in with restoration of Special Run Pool 9 (ERP 97 M08)***
88	SJR	EP			88 B. Status on the Tuolumne River of reconstructing channels at selected sites by isolating or filling in in channel gravel extraction areas.	AFRP-01-02	na	na	3,501,000	3,376,000	6,877,000	Turlock Irrigation District	Wilton Fryer		Tuolumne River Mining Reach Restoration No. 3, Warner-Deardorff Segment	This project is 1 of 4 phases of the overall Mining Reach Project to restore floodplain and riparian habitat to 6.1 miles of the Tuolumne River. This project ties into the permanent floodplain channel reconstruction at the downstream end of a set back dike constructed during a previous project phase. Deep pit areas created by past gravel mining will be filled in to re-create a riffle and run pattern that follows the restored meander channel of the river. ***Jeff McLain , USFWS. Planning and pre-project monitoring; in planning phase. To date necessary cooperative agreements have been obtained; some engineering work has been done to facilitate hydraulic and fluvial models, environmental permits, monitoring, and right-of-way footprints. Design and monitoring work is continuing. When finished, the preliminary design will be distributed for technical review and comment which will be used to finalize the design plans. Yes, this restoration will eventually cover 1.3 miles: river mile 35.2 to 36.5. References to 6.1 miles includes the entire river reach covered by four phased pro***
88	SJR	EP			88 B. Status on the Tuolumne River of reconstructing channels at selected sites by isolating or filling in in channel gravel extraction areas.	ERP-02-P19-D	Mar-04		10,839,000		10,839,000	Turlock Irrigation District	Wilton Fryer		Tuolumne River Mining Reach Restoration Project: Warner-Deardorff Segment No. 3 Construction	Reconstructing channels at selected sites on the Tuolumne River by isolating for filling in in-channel gravel extraction areas. Improve salmonid spawning and rearing habitats by filling in-channel mining pits. ***Implementation project not complete. Jeff McLain, USFWS.***
88	SJR	EP			88 B. Status on the Tuolumne River of reconstructing channels at selected sites by isolating or filling in in channel gravel extraction areas.	ERP-01-N09	Aug-04	Aug-04	910,468		910,468	Turlock Irrigation District	Wilton Fryer		Tuolumne River Fine Sediment Management	Implements actions to remove sand and clean five pool and riffles sites in the spawning reach of the Tuolumne River. ***This is a planning, design and implementation project. Implementation has not started, yet the planning and design phases are completed. Project is 32% complete. Wilton Fryer, Turlock Irrigation District.***

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88	SJR	EP			88 B. Status on the Tuolumne River of reconstructing channels at selected sites by isolating or filling in in channel gravel extraction areas.	ERP-99-F02	Sep-99	Mar-02	3,332,050	3,145,000	17,716,000	Turlock Irrigation District	Wilton Fryer		Tuolumne River Mining Reach Restoration Project No. 2 - MJ Ruddy Segment	The MJ Ruddy Segment is Project No. 2 located between river mile 36.5 and 37.6 on the Tuolumne River. Objectives: 1) Restore and increase habitat for natural salmon production. 2) Reconstruct natural channel geometry scaled to current channel forming flows. 3) Restore native riparian plant communities. 4) Reduce salmonid fish predator habitat. ***Jeff McLain, USFWS. Implementation. Project not completed. This project is part of a larger restoration project to eventually restore the entire Mining Reach (6.1 miles@ RM 34.2 to 40.3) on the Tuolumne River. This project will eventually restore MJ Ruddy Reach (1.1 miles @ RM 36.5-37.6). No actual restoration has been accomplished to date; land has not been purchased.***
88	SJR	EP			88 B. Status on the Tuolumne River of reconstructing channels at selected sites by isolating or filling in in channel gravel extraction areas.	AFRP-00-06						AFRP	Jeff McLain USFWS		Continue to restore the 7/11 segment of the mining reach on the Tuolumne River	***Objective: To restore and increase riparian and instream habitat to support natural production of the San Joaquin fall-run Chinook salmon; Reconstruct a natural channel geometry scaled to current channel forming flows; Restore native riparian plant communities within their predicted hydrological regime; and Reduce the occurrence of salmonid fish predator habitat.***
88	SJR	EP			88 B. Status on the Tuolumne River of reconstructing channels at selected sites by isolating or filling in in channel gravel extraction areas.	ERP-01-N03	Nov-01	Nov-04	543,530	0	543,530	Turlock Irrigation District	Wilton Fryer		Tuolumne River Restoration: Special Run Pool 10	Project will fill in deep lake like pool areas created by past instream gravel mining thus reducing salmon fish predator habitat. ***Project completed. Jeff McLain, USFWS***
88	SJR	EP			88 C. Status on the Tuolumne River of increasing natural meander by removing riprap and relocating other structures that impair stream meander	AFRP-01-12		Aug-03				AFRP	Cesar Blanco USFWS		Tuolumne River watershed outreach and stewardship proposal	***Objective: To create and utilize outreach materials as tools to build awareness, understanding and support for the Tuolumne River Technical Advisory Committee Plan, "Habitat Restoration Plan for the Lower Tuolumne River Corridor". The cooperative agreement between the AFRP and TRPT was completed in October of 2001. TRPT released two documents: the Tuolumne River Watershed Map and the Lower Tuolumne River Corridor and Its Lands; a brochure depicting land use patterns in the Tuolumne River corridor. The TRPT received a no-cost time extension extending the end date to April 2003 to complete their outreach to landowners who might be interested in easement opportunities. TRPT submitted a final report in August 2003 documenting their outreach efforts. This report, along with the Tuolumne River Watershed Map and the Lower Tuolumne River Corridor and Its Lands can be found on the AFRP website.***

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88	SJR	EP			88 C. Status on the Tuolumne River of increasing natural meander by removing riprap and relocating other structures that impair stream meander	AFRP-02-11						AFRP	Jeff McLain USFWS		Partner with Modesto City and County Parks Departments for Restoration Planning and Implementation on the Gateway Parcel	***Objective: Incorporate habitat needs of salmonids in developing the updated Tuolumne River Regional Park Land Use and Master plans. Acquisition of the Gateway parcel located in the center of the regional park has necessitated the development of new land use and master plans for the park. The original plans were developed in the 1960s. The tasks involved in this planning effort include: (1) development of a preliminary program that broadly defines potential uses and activities within the Park corridor and a set of baseline environmental objectives; (2) soliciting public and agency comment; (3) conducting reconnaissance-level field studies to document environmental setting and identify environmental opportunities and constraints; (4) prepare environmental documentation (EIR/EA); and (5) prepare Land Use Plan and Gateway Master Plan. This planning effort will affect a seven mile reach of the Tuolumne River that is used primarily as a migration corridor by fall-run Chinook salmon.***
88	SJR	EP			88 C. Status on the Tuolumne River of increasing natural meander by removing riprap and relocating other structures that impair stream meander	ERP-99-R01	Jul-99	Mar-01	1,500,000	$132,892 returned because not all acreage was purchased	1,367,108	Natural Resource Conservation Service	Helen Flack		Floodplain Easements - Lower Tuolumne and San Joaquin Rivers	Acquire and restore area prone to flood damage. Removal or relocate structures that impair stream meander.(Proposed 992.8 acres). ***Project completed. Jeff McLain, USFWS.***
88	SJR	EP			88 C. Status on the Tuolumne River of increasing natural meander by removing riprap and relocating other structures that impair stream meander	AFRP-01-02	na	na	3,501,000	3,376,000	6,877,000	Turlock Irrigation District	Wilton Fryer		Tuolumne River Mining Reach Restoration No. 3, Warner-Deardorff Segment	This project is 1 of 4 phases of the overall Mining Reach Project to restore floodplain and riparian habitat to 6.1 miles of the Tuolumne River. This project ties into the permanent floodplain channel reconstruction at the downstream end of a set back dike constructed during a previous project phase. Deep pit areas created by past gravel mining will be filled in to re-create a riffle and run pattern that follows the restored meander channel of the river. ***Jeff McLain, Planning and pre-project monitoring; in planning phase. To date necessary cooperative agreements have been obtained; some engineering work has been done to facilitate hydraulic and fluvial models, environmental permits, monitoring, and right-of-way footprints. Design and monitoring work is continuing. When finished, the preliminary design will be distributed for technical review and comment which will be used to finalize the design plans. Restoration will eventually cover 1.3 miles: river mile 35.2 to 36.5. References to 6.1 miles includes the entire river reach covered by four phased projects.***
88	SJR	EP			88 C. Status on the Tuolumne River of increasing natural meander by removing riprap and relocating other structures that impair stream meander	ERP-02-D01	Jun-05		1,681,123	381,100	2,062,223	Tuolumne River Preservation Trust	Patrick Koepele		Tuolumne River - Big Bend Project	Increase the natural meander by removing riprap and relocating other structures that impair stream meander from the property to the Tuolumne river. Increase the natural meander by removing riprap and relocating other structures that impair stream meander on the Tuolumne river. ***Implementation project not completed; still in planning phase. Project acquired 197 acres, 180 acres of CE, and is trying to acquire 16 more acres. Patrick Koepele, Tuolumne River Preservation Trust.***
88	SJR	EP			88 C. Status on the Tuolumne River of increasing natural meander by removing riprap and relocating other structures that impair stream meander	ERP-02-P19-D	Mar-03 - Notification Letter		10,839,000		10,839,000	Turlock Irrigation District	Wilton Fryer		Tuolumne River Mining Reach Restoration Project: Warner-Deardorff Segment No. 3 Construction	Increasing natural meander on the Tuolumne River by relocating structures that impair stream meander. Restore river channel ability to migrate within the restored floodway to improve and maintain riparian and salmonid habitat. ***Implementation project not complete. Jeff McLain, USFWS.***

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88	SJR	EP			88 D. Status on the Tuolumne River of restoring more natural channel configurations to reduce salmonid predator habitat and improve migration corridor	ERP-97-M09	Jul-00	Dec-01	2,801,000	4,384,060	7,185,060	Turlock Irrigation District	Wilton Fryer		Tuolumne River Setback Levees and Channel Restoration	Project will return this reach of river to a more natural, dynamic channel . ***Jeff McLain, USFWS, 209.946.6400 x 304. Implementation. .6 river miles of riparian and riverine aquatic habitat. Project completed. This project is part of a larger restoration project to eventually restore the entire Mining Reach (6.1 miles@ RM 34.2 to 40.3) on the Tuolumne River. This specific project will eventually restore the 7/11 segment (.6 miles @ RM 37.7-40.3). This project filled-in mining pits for instream habitat and floodplain enhancement.***
88	SJR	EP			88 D. Status on the Tuolumne River of restoring more natural channel configurations to reduce salmonid predator habitat and improve migration corridor	AFRP-00-06						AFRP	Jeff McLain USFWS		Continue to restore the 7/11 segment of the mining reach on the Tuolumne River	***Objective: To restore and increase riparian and instream habitat to support natural production of the San Joaquin fall-run Chinook salmon; Reconstruct a natural channel geometry scaled to current channel forming flows; Restore native riparian plant communities within their predicted hydrological regime; and Reduce the occurrence of salmonid fish predator habitat.***
88	SJR	EP			88 D. Status on the Tuolumne River of restoring more natural channel configurations to reduce salmonid predator habitat and improve migration corridor	AFRP-01-12		Aug-03				AFRP	Cesar Blanco USFWS		Tuolumne River watershed outreach and stewardship proposal	***Objective: To create and utilize outreach materials as tools to build awareness, understanding and support for the Tuolumne River Technical Advisory Committee Plan, "Habitat Restoration Plan for the Lower Tuolumne River Corridor". The cooperative agreement between the AFRP and TRPT was completed in October of 2001. TRPT released two documents: the Tuolumne River Watershed Map and the Lower Tuolumne River Corridor and Its Lands; a brochure depicting land use patterns in the Tuolumne River corridor. The TRPT received a no-cost time extension extending the end date to April 2003 to complete their outreach to landowners who might be interested in easement opportunities. TRPT submitted a final report in August 2003 documenting their outreach efforts. This report, along with the Tuolumne River Watershed Map and the Lower Tuolumne River Corridor and Its Lands can be found on the AFRP website.***
88	SJR	EP			88 D. Status on the Tuolumne River of restoring more natural channel configurations to reduce salmonid predator habitat and improve migration corridor	AFRP-02-11						AFRP	Jeff McLain USFWS		Partner with Modesto City and County Parks Departments for Restoration Planning and Implementation on the Gateway Parcel	***Objective: Incorporate habitat needs of salmonids in developing the updated Tuolumne River Regional Park Land Use and Master plans. Acquisition of the Gateway parcel located in the center of the regional park has necessitated the development of new land use and master plans for the park. The original plans were developed in the 1960s. The principal tasks involved in this planning effort include: (1) development of a preliminary program that broadly defines potential uses and activities within the Park corridor and a set of baseline environmental objectives; (2) soliciting public and agency comment; (3) conducting reconnaissance-level field studies to document environmental setting and identify environmental opportunities and constraints; (4) prepare environmental documentation (EIR/EA); and (5) prepare Land Use Plan and Gateway Master Plan. This planning effort will affect a seven mile reach of the Tuolumne River that is used primarily as a migration corridor by fall-run Chinook salmon.***

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88	SJR	EP			88 D. Status on the Tuolumne River of restoring more natural channel configurations to reduce salmonid predator habitat and improve migration corridor	ERP-99-F01	Sep-99	Mar-02	164,800		164,800	Turlock Irrigation District	Wilton Fryer		Tuolumne River Mining Reach Restoration Project No. 2 - MJ Ruddy Segment	The MJ Ruddy Segment is Project No. 2 located between river mile 36.5 and 37.6 on the Tuolumne River. Objectives: 1) Restore and increase habitat for natural salmon production. 2) Reconstruct natural channel geometry scaled to current channel forming flows. 3) Restore native riparian plant communities. 4) Reduce salmonid fish predator habitat. ***Jeff McLain, USFWS. Implementation and Monitoring. Yes. This project is complete. This is part of the larger full SRP 10 Restoration Project to restore RM 25.4 on the Tuolumne River. This phase included levee breach repair and baseline monitoring. This project contributes to eventual full restoration which will reduce salmonid fish predator habitat, restore and increase habitat for salmon production, reconstruct natural channel geometry, and restore native riparian plant communities. This project dovetails in with restoration of Special Run Pool 9 (ERP 97 M08)***
88	SJR	EP			88 D. Status on the Tuolumne River of restoring more natural channel configurations to reduce salmonid predator habitat and improve migration corridor	ERP-02-P19-D	Mar-03 - Notification Letter		10,839,000		10,839,000	Turlock Irrigation District	Wilton Fryer		Tuolumne River Mining Reach Restoration Project: Warner-Deardorff Segment No. 3 Construction	Restore more natural channel configurations to reduce salmonid predator habitat and improve migration corridor. Improve juvenile salmon survival by preventing future connection between the Tuolumne River and off-channel mining pits. ***Implementation project not complete. Jeff McLain, USFWS.***
88	SJR	EP			88 D. Status on the Tuolumne River of restoring more natural channel configurations to reduce salmonid predator habitat and improve migration corridor	ERP-99-F02	Sep-99	Mar-02	3,332,050	3,145,000	164,800	Turlock Irrigation District	Wilton Fryer		Tuolumne River Mining Reach Restoration Project No. 2 - MJ Ruddy Segment	The MJ Ruddy Segment is Project No. 2 located between river mile 36.5 and 37.6 on the Tuolumne River. Objectives: 1) Restore and increase habitat for natural salmon production. 2) Reconstruct natural channel geometry scaled to current channel forming flows. 3) Restore native riparian plant communities. 4) Reduce salmonid fish predator habitat. ***Jeff McLain, USFWS. Implementation. Project not completed. This project is part of a larger restoration project to eventually restore the entire Mining Reach (6.1 miles@ RM 34.2 to 40.3) on the Tuolumne River. This project will eventually restore MJ Ruddy Reach (1.1 miles @ RM 36.5-37.6). No actual restoration has been accomplished to date; land has not been purchased.***
88	SJR	EP			88 D. Status on the Tuolumne River of restoring more natural channel configurations to reduce salmonid predator habitat and improve migration corridor	ERP-01-N03	Nov-01	Nov-04	543,530	0	543,530	Turlock Irrigation District	Wilton Fryer		Tuolumne River Restoration: Special Run Pool 10	Project will fill in deep lake like pool areas created by past instream gravel mining thus reducing salmon fish predator habitat. ***Project completed. Jeff McLain, USFWS***
88	SJR	EP			88 D. Status on the Tuolumne River of restoring more natural channel configurations to reduce salmonid predator habitat and improve migration corridor	ERP-97-M08	Feb-98		2,353,100		2,353,100	Turlock Irrigation District	Tim Ford		Tuolumne River Special Run Pool 9 Restoration	Reconstructing channels by isolating or filling in channel gravel extraction areas.Will change warmwater predator species habitat resulting from gravel mining to a more natural, dynamic morphology that will improve habitat for chinook salmon. ***Jeff McLain, USFWS. Implementation. .2 miles of riparian and riverine aquatic habitat.This project was completed. A final joint Environmental Assessment and Initial study for the restoration projects Special Run Pool (SRP) 9 and 10 (ERP 99 F01) and four project segments of the Gravel Mining Reach was completed in October 1999 with funding from this agreement. Pre-project monitoring that included habitat mapping, fish community evaluation, salmon smolt survival experiments, and geomorphic variables occurred during spring through fall of 1998. Instream work, floodplain construction, and revegetation was completed in 2001. Restored floodplain is currently being maintained to enhance survival of plantings.***

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
88	SJR	EP			88 E. Status of the development of a cooperative program to restore salmonid spawning and rearing habitat in the Stanislaus River.	ERP-97-N21	Sep-98	Sep-01	536,410	97,000	633,410	Carl Mesick Consultants	Carl Mesick		Knights Ferry Gravel Replenishment	Restore salmonid spawning and rearing habitat in the Stanislaus River by reconstructing channels at selected sites. Adding silt-free gravel to create pools, runs and riffles will result in more favorable salmonid habitat. ***Project completed. Multiphased project with several subsequent non-CALFED funded phases. J.D. Wikert, USFWS.***
88	SJR	EP			88 E. Status of the development of a cooperative program to restore salmonid spawning and rearing habitat in the Stanislaus River.	AFRP-00-09						AFRP	Jeff McLain USFWS		Evaluate channel restoration and aggregate source potential for Two-mile Bar on the Stanislaus River	Objective: To assess the floodplain restoration potential and develop a conceptual restoration strategy for a 50-acre parcel known as Two-mile Bar, and to conduct aggregate and mineral appraisals to establish a fair market value of the land and provide the basis for acquisition in either fee or easement. ***A cooperative agreement between the AFRP and the Trust for Public Land (TPL) was completed in September of 2000. The TPL coordinated the site survey with the USACOE and subcontracted the aggregate and agricultural appraisals. Appraisals were not completed to federal standards and subsequently where rejected by the USFWS and USBR appraisal reviewers. TPL, CDFG, AFRP, and USBR are currently attempting to get the appraisals brought up to code so the offer to purchase the land can be made.***
88	SJR	EP			88 E. Status of the development of a cooperative program to restore salmonid spawning and rearing habitat in the Stanislaus River.	AFRP-02-02						AFRP	JD Wikert USFWS		Develop a Consensus Based Plan to Direct the Long Term Implementation of Prioritized Restoration/Research in the Stanislaus River Below Goodwin Dam	Objective: Develop a consensus based plan to direct the long term implementation of prioritized restoration/research in the Stanislaus River below Goodwin Dam. ***The project is currently focused on finishing a summary of the existing fisheries data. The summary will be provided to the Stanislaus River Fish Group for review and comment in January 2004. Work continues on the Restoration Plan and conceptual model.***
88	SJR	EP			88 F. Status on the Stanislaus River of reconstructing channels at selected sites by isolating or filling in in channel gravel extraction areas.	AFRP-00-09						AFRP	Jeff McLain USFWS		Evaluate channel restoration and aggregate source potential for Two-mile Bar on the Stanislaus River	Objective: To assess the floodplain restoration potential and develop a conceptual restoration strategy for a 50-acre parcel known as Two-mile Bar, and to conduct aggregate and mineral appraisals to establish a fair market value of the land and provide the basis for acquisition in either fee or easement. ***A cooperative agreement between the AFRP and the Trust for Public Land (TPL) was completed in September of 2000. The TPL coordinated the site survey with the USACOE and subcontracted the aggregate and agricultural appraisals. Appraisals were not completed to federal standards and subsequently where rejected by the USFWS and USBR appraisal reviewers. TPL, CDFG, AFRP, and USBR are currently attempting to get the appraisals brought up to code so the offer to purchase the land can be made.***
88	SJR	EP			88 F. Status on the Stanislaus River of reconstructing channels at selected sites by isolating or filling in in channel gravel extraction areas.	AFRP-02-02						AFRP	JD Wikert USFWS		Develop a Consensus Based Plan to Direct the Long Term Implementation of Prioritized Restoration/Research in the Stanislaus River Below Goodwin Dam	Objective: Develop a consensus based plan to direct the long term implementation of prioritized restoration/research in the Stanislaus River below Goodwin Dam. ***The project is currently focused on finishing a summary of the existing fisheries data. The summary will be provided to the Stanislaus River Fish Group for review and comment in January 2004. Work continues on the Restoration Plan and conceptual model.***

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
88	SJR	EP			88 G. Status on the Stanislaus River of increasing natural meander by removing riprap and relocating other structures that impair stream meander	AFRP-00-09						AFRP	Jeff McLain USFWS		Evaluate channel restoration and aggregate source potential for Two-mile Bar on the Stanislaus River	Objective: To assess the floodplain restoration potential and develop a conceptual restoration strategy for a 50-acre parcel known as Two-mile Bar, and to conduct aggregate and mineral appraisals to establish a fair market value of the land and provide the basis for acquisition in either fee or easement. ***A cooperative agreement between the AFRP and the Trust for Public Land (TPL) was completed in September of 2000. The TPL coordinated the site survey with the USACOE and subcontracted the aggregate and agricultural appraisals. Appraisals were not completed to federal standards and subsequently where rejected by the USFWS and USBR appraisal reviewers. TPL, CDFG, AFRP, and USBR are currently attempting to get the appraisals brought up to code so the offer to purchase the land can be made.***
88	SJR	EP			88 G. Status on the Stanislaus River of increasing natural meander by removing riprap and relocating other structures that impair stream meander	AFRP-02-02						AFRP	JD Wikert USFWS		Develop a Consensus Based Plan to Direct the Long Term Implementation of Prioritized Restoration/Research in the Stanislaus River Below Goodwin Dam	Objective: Develop a consensus based plan to direct the long term implementation of prioritized restoration/research in the Stanislaus River below Goodwin Dam. ***The project is currently focused on finishing a summary of the existing fisheries data. The summary will be provided to the Stanislaus River Fish Group for review and comment in January 2004. Work continues on the Restoration Plan and conceptual model.***
88	SJR	EP			88 H. Status on the Stanislaus River of restoring more natural channel configurations to reduce salmonid predator habitat and improve migration corridor	AFRP-00-09						AFRP	Jeff McLain USFWS		Evaluate channel restoration and aggregate source potential for Two-mile Bar on the Stanislaus River	Objective: To assess the floodplain restoration potential and develop a conceptual restoration strategy for a 50-acre parcel known as Two-mile Bar, and to conduct aggregate and mineral appraisals to establish a fair market value of the land and provide the basis for acquisition in either fee or easement. ***A cooperative agreement between the AFRP and the Trust for Public Land (TPL) was completed in September of 2000. The TPL coordinated the site survey with the USACOE and subcontracted the aggregate and agricultural appraisals. Appraisals were not completed to federal standards and subsequently where rejected by the USFWS and USBR appraisal reviewers. TPL, CDFG, AFRP, and USBR are currently attempting to get the appraisals brought up to code so the offer to purchase the land can be made.***
88	SJR	EP			88 H. Status on the Stanislaus River of restoring more natural channel configurations to reduce salmonid predator habitat and improve migration corridor	AFRP-02-02						AFRP	JD Wikert USFWS		Develop a Consensus Based Plan to Direct the Long Term Implementation of Prioritized Restoration/Research in the Stanislaus River Below Goodwin Dam	Objective: Develop a consensus based plan to direct the long term implementation of prioritized restoration/research in the Stanislaus River below Goodwin Dam. ***The project is currently focused on finishing a summary of the existing fisheries data. The summary will be provided to the Stanislaus River Fish Group for review and comment in January 2004. Work continues on the Restoration Plan and conceptual model.***
88	SJR	EP			88 I. Status of the development of a cooperative program to restore salmonid spawning and rearing habitat in the Merced River.	ERP-98-E09	Sep-98	Apr-01	300,000	26,552	326,552	Stillwater Sciences & Merced Co. Planning and Development	Jennifer Vick/Bob Smith		Merced River Corridor Restoration Plan	Project will address historical and current supply and transport of coarse and fine sediment. ***Jeff McLain, USFWS. Planning. Final Plan completed. The final plan recommends actions to re-establish floodplain at elevations that are functional under the contemporary regulated flow regime, to establish a floodplain corridor and reconnect the river to its floodplain.***

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
88	SJR	EP			88 I. Status of the development of a cooperative program to restore salmonid spawning and rearing habitat in the Merced River.	ERP-99-B04		Dec-02	762,000		762,000		Rhonda Reed		Preliminary Design and Engineering of Lower Western Stone Restoration Site, Merced River Ratzlaff/Robinson Channel Restoration Project	development of a cooperative program to restore salmonid spawning and rearing habitat to the Merced River. DWR shall prepare preliminary design and engineering plans for the restoration of a 3/4 mile long lower Western Stone reach restoration site. DWR will coordinate with USACOE and Merced Irrigation District. ***Fred Jurick, CDFG.Planning project not completed. Public scoping is still being conducted.***
88	SJR	EP			88 I. Status of the development of a cooperative program to restore salmonid spawning and rearing habitat in the Merced River.	ERP-00-E05	Feb-00	Sep-02	260,351		260,351	Stillwater Sciences	Jennifer Vick		Merced River Corridor Restoration Project Phase III	This project will develop a long-term restoration and monitoring plan. ***Project completed. Some modeling implementation involved. The Merced River Corridor Restoration Plan was developed in Phase III. In addition to development of that plan, Stillwater Sciences completed field and modeling efforts and developed design guidelines for channel and floodplain restoration. Jeff McLain, USFWS.***
88	SJR	EP			88 I. Status of the development of a cooperative program to restore salmonid spawning and rearing habitat in the Merced River.	ERP-01-C03	Jul-01	Jun-04	1,699,101	6,176,800	7,875,901	Department of Water Resources	Stephani Spaar		Merced River Salmon Enhancement River Mile 42-44 Phase II	The Merced River Salmon Enhancement project will scale the channel between River miles 42 and 44 to fit the post-dam flow regime. Over the entire reach, the channel will be reshaped to include spawning riffles, runs and pools, with a meander that fits the approximate\e slope and bankfull flow of 1,700 cfs. The floodplains will be replanted with native riparian\vegetation. (Proposed 2 miles; 45 acres of pond area removed; 10 acres of pond area isolated). ***Implementation project not completed. (Proposed restoration of 2.0 miles of instream and riparian habitat). Fred Jurick, CDFG.***
88	SJR	EP			88 I. Status of the development of a cooperative program to restore salmonid spawning and rearing habitat in the Merced River.	ERP-98-F11	Mar-99	Sep-02	2,433,759		2,433,759	Department of Water Resources	Stephani Spaar		Phase 3: Merced River Salmon Habitat Enhancement	Reduce erosion and maintain gravel recruitment on the Merced River. Reconfigure the channel to improve river and floodplain dynamics and sediment transport. ***Fred Jurick, CDFG. Implementation. 2.0 miles of instream and riparian habitat. This project was merged into ERP-01-C03. Project not completed. Non-CALFED funded project contribution: 360 acres of CE along the Merced River of riparian and floodplain habitat. Created new river channel, bought gravel rights, and did restored instream habitat***
88	SJR	EP			88 I. Status of the development of a cooperative program to restore salmonid spawning and rearing habitat in the Merced River.	AFRP-00-35						AFRP	Jeff McLain USFWS		Evaluate use of PHABSIM/2D modeling of spawning and rearing habitat to assess benefits of channel restoration on the Merced River	Objective: The primary objective of the project is to use a 2-dimensional hydraulic and topographic model to help evaluate benefits to salmon spawning and rearing habitat created by a large scale channel restoration project on the Merced River. ***Pre-project monitoring for the PHABSIM 2-D modeling effort occurred in the summer and fall of 2000 with FY00 funds, and in 2001 with FY01 funds. Post project monitoring started in the spring of 2002.***
88	SJR	EP			88 I. Status of the development of a cooperative program to restore salmonid spawning and rearing habitat in the Merced River.	AFRP-03-03			149,440		149,440	AFRP	Jeff McLain USFWS		Evaluating the Success of Spawning Habitat Enhancement on the Merced River, Robinson Reach	***Objective: The objective of the study is to determine the location and number of redds in the Robinson Reach and to assess the suitability of spawning habitat based on level of use. Included in this objective is to identify riffle features that increase the number of redds excavated by salmon within a newly constructed spawning riffle. A cooperative agreement was signed in September 2003, and spawning evaluations began in October 2003.***

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
88	SJR	EP			88 J. Status on the Merced River of reconstructing channels at selected sites by isolating or filling in in channel gravel extraction areas.	ERP-98-E09	Sep-98	Apr-01	300,000	26,552	326,552	Stillwater Sciences & Merced Co. Planning and Development	Jennifer Vick/Bob Smith		Merced River Corridor Restoration Plan	Project will address historical and current supply and transport of coarse and fine sediment. ***Jeff McLain, USFWS. Planning. Final Plan completed. The final plan recommends actions to re-establish floodplain at elevations that are functional under the contemporary regulated flow regime, to establish a floodplain corridor and reconnect the river to its floodplain.***
88	SJR	EP			88 J. Status on the Merced River of reconstructing channels at selected sites by isolating or filling in in channel gravel extraction areas.	ERP-01-C03	Jul-01	Jun-04	1,699,101	6,176,800	7,875,901	Department of Water Resources	Stephani Spaar		Merced River Salmon Enhancement River Mile 42-44 Phase II	The Merced River Salmon Enhancement project will scale the channel between River miles 42 and 44 to fit the post-dam flow regime. Over the entire reach, the channel will be reshaped to include spawning riffles, runs and pools, with a meander that fits the approximate\e slope and bankfull flow of 1,700 cfs. The floodplains will be replanted with native riparian\vegetation. (Proposed 2 miles; 45 acres of pond area removed; 10 acres of pond area isolated). ***Implementation project not completed. (Proposed restoration of 2.0 miles of instream and riparian habitat). Fred Jurick, CDFG.***
88	SJR	EP			88 J. Status on the Merced River of reconstructing channels at selected sites by isolating or filling in in channel gravel extraction areas.	ERP-98-F11	March, 1999	Sept, 2002	2,433,759			Department of Water Resources	Stephani Spaar		Phase 3: Merced River Salmon Habitat Enhancement	Reduce erosion and maintain gravel recruitment on the Merced River. Reconfigure the channel to improve river and floodplain dynamics and sediment transport. ***Fred Jurick, CDFG. Implementation. 2.0 miles of instream and riparian habitat. This project was merged into ERP-01-C03. Project not completed. Non-CALFED funded project contribution: 360 acres of CE along the Merced River of riparian and floodplain habitat. Created new river channel, bought gravel rights, and did restored instream habitat***
88	SJR	EP			88 J. Status on the Merced River of reconstructing channels at selected sites by isolating or filling in in channel gravel extraction areas.	AFRP-00-35						AFRP	Jeff McLain USFWS		Evaluate use of PHABSIM/2D modeling of spawning and rearing habitat to assess benefits of channel restoration on the Merced River	Objective: The primary objective of the project is to use a 2-dimensional hydraulic and topographic model to help evaluate benefits to salmon spawning and rearing habitat created by a large scale channel restoration project on the Merced River. ***Pre-project monitoring for the PHABSIM 2-D modeling effort occurred in the summer and fall of 2000 with FY00 funds, and in 2001 with FY01 funds. Post project monitoring started in the spring of 2002.***
88	SJR	EP			88 J. Status on the Merced River of reconstructing channels at selected sites by isolating or filling in in channel gravel extraction areas.	AFRP-03-03			149,440		149,440	AFRP	Jeff McLain USFWS		Evaluating the Success of Spawning Habitat Enhancement on the Merced River, Robinson Reach	Objective: The objective of the study is to determine the location and number of redds in the Robinson Reach and to assess the suitability of spawning habitat based on level of use. Included in this objective is to identify riffle features that increase the number of redds excavated by salmon within a newly constructed spawning riffle. This study will create a knowledge base that can be used to improve the design features of future phases of MRSHEP and that can be applied to other restoration efforts on rivers of similar scale and fluvial character. The following research hypotheses will be investigated to accomplish the objective: 1. Chinook salmon redd densities will be higher in the constructed portion of the Robinson Reach than in the adjacent
88	SJR	EP			88K. Status on the Merced River of increasing natural stream meander by removing riprap and relocating other structures that impair stream meander.	AFRP-00-35						AFRP	Jeff McLain USFWS		Evaluate use of PHABSIM/2D modeling of spawning and rearing habitat to assess benefits of channel restoration on the Merced River	Objective: The primary objective of the project is to use a 2-dimensional hydraulic and topographic model to help evaluate benefits to salmon spawning and rearing habitat created by a large scale channel restoration project on the Merced River. ***Pre-project monitoring for the PHABSIM 2-D modeling effort occurred in the summer and fall of 2000 with FY00 funds, and in 2001 with FY01 funds. Post project monitoring started in the spring of 2002.***

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
88	SJR	EP			88K. Status on the Merced River of increasing natural stream meander by removing riprap and relocating other structures that impair stream meander.	AFRP-03-03			149,440		149,440	AFRP	Jeff McLain USFWS		Evaluating the Success of Spawning Habitat Enhancement on the Merced River, Robinson Reach	Objective: The objective of the study is to determine the location and number of redds in the Robinson Reach and to assess the suitability of spawning habitat based on level of use. Included in this objective is to identify riffle features that increase the number of redds excavated by salmon within a newly constructed spawning riffle. This study will create a knowledge base that can be used to improve the design features of future phases of MRSHEP and that can be applied to other restoration efforts on rivers of similar scale and fluvial character. The following research hypotheses will be investigated to accomplish the objective: 1. Chinook salmon redd densities will be higher in the constructed portion of the Robinson Reach than in the adjacent
88	SJR	EP			88 L. Status on the Merced River of restoring more natural channel configurations to reduce salmonid predator habitat and improve migration corridor	ERP-01-C03	Jul-01	Jun-04	1,699,101	6,176,800	7,875,901	Department of Water Resources	Stephani Spaar		Merced River Salmon Enhancement River Mile 42-44 Phase II	The Merced River Salmon Enhancement project will scale the channel between River miles 42 and 44 to fit the post-dam flow regime. Over the entire reach, the channel will be reshaped to include spawning riffles, runs and pools, with a meander that fits the approximate\e slope and bankfull flow of 1,700 cfs. The floodplains will be replanted with native riparian\vegetation.(Proposed 2 miles; 45 acres of pond area removed; 10 acres of pond area isolated). ***Implementation project not completed. (Proposed restoration of 2.0 miles of instream and riparian habitat). Fred Jurick, CDFG.***
88	SJR	EP			88 L. Status on the Merced River of restoring more natural channel configurations to reduce salmonid predator habitat and improve migration corridor	ERP-98-E09	Sep-98	Apr-01	300,000	26,552	326,552	Stillwater Sciences & Merced Co. Planning and Development	Jennifer Vick/Bob Smith		Merced River Corridor Restoration Plan	Project will address historical and current supply and transport of coarse and fine sediment. ***Jeff McLain, USFWS. Planning. Final Plan completed. The final plan recommends actions to re-establish floodplain at elevations that are functional under the contemporary regulated flow regime, to establish a floodplain corridor and reconnect the river to its floodplain.***
88	SJR	EP			88 L. Status on the Merced River of restoring more natural channel configurations to reduce salmonid predator habitat and improve migration corridor	ERP-98-F11	Mar-99	Sep-02	2,433,759		2,433,759	Department of Water Resources	Stephani Spaar		Phase 3: Merced River Salmon Habitat Enhancement	Reduce erosion and maintain gravel recruitment on the Merced River. Reconfigure the channel to improve river and floodplain dynamics and sediment transport. ***Fred Jurick, CDFG. Implementation. 2.0 miles of instream and riparian habitat. This project was merged into ERP-01-C03. Project not completed. Non-CALFED funded project contribution: 360 acres of CE along the Merced River of riparian and floodplain habitat. Created new river channel, bought gravel rights, and did restored instream habitat***
88	SJR	EP			88 L. Status on the Merced River of restoring more natural channel configurations to reduce salmonid predator habitat and improve migration corridor	AFRP-00-35						AFRP	Jeff McLain USFWS		Evaluate use of PHABSIM/2D modeling of spawning and rearing habitat to assess benefits of channel restoration on the Merced River	Objective: The primary objective of the project is to use a 2-dimensional hydraulic and topographic model to help evaluate benefits to salmon spawning and rearing habitat created by a large scale channel restoration project on the Merced River. ***Pre-project monitoring for the PHABSIM 2-D modeling effort occurred in the summer and fall of 2000 with FY00 funds, and in 2001 with FY01 funds. Post project monitoring started in the spring of 2002.***
88	SJR	EP			88 L. Status on the Merced River of restoring more natural channel configurations to reduce salmonid predator habitat and improve migration corridor	AFRP-2003-03			149,440		149,440	AFRP	Jeff McLain USFWS		Evaluating the Success of Spawning Habitat Enhancement on the Merced River, Robinson Reach	Objective: The objective of the study is to determine the location and number of redds in the Robinson Reach and to assess the suitability of spawning habitat based on level of use. Included in this objective is to identify riffle features that increase the number of redds excavated by salmon within a newly constructed spawning riffle. This study will create a knowledge base that can be used to improve the design features of future phases of MRSHEP and that can be applied to other restoration efforts on rivers of similar scale and fluvial character. The following research hypotheses will be investigated to accomplish the objective: 1. Chinook salmon redd densities will be higher in the constructed portion of the Robinson Reach than in the adjacent upstream and downstream natural spawning sites, a Chinook salmon

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
88	SJR	EP			88 L. Status on the Merced River of restoring more natural channel configurations to reduce salmonid predator habitat and improve migration corridor	ERP-99-B05	Sep-99	Mar-00	1,584,002		1,584,002	DFG	Fred Jurick		Partial funding for Phase I Construction of the Robinson/Gallo Salmon Restoration Project: Ratzlaff Reach Site	Restore natural channel configurations on the Merced River to reduce salmonid predator habitat and improve the migration corridor. ***Fred Jurick, CDFG. Implementation project completed. Restored .5 miles of instream habitat, and created 10 acres of riparian habitat.***

MULTI SPECIES CONSERVATION STRATEGY MILESTONE 89 -- ROLLED UP SUMMARY

MILESTONE 89 -- Restore and maintain a defined stream-meander zone and increase floodplain habitat on the San Joaquin River between Vernalis and the mouth of the Merced River.		**PROJECTS REVIEWED -** ERP-97-B05, ERP-98-F21, ERP-01-N08, AFRP-01-12		**SUMMARY --** These ERP and AFRP contracts may address this milestone of restoring floodplains by breaching San Joaquin River levees to the degree that they fall within the geographic scope of this milestone. One contract provided for a planning and outreach program for the Lower Tuolumne River and Its Lands, and three other contracts targeted the feasibility analysis, planning and acquisition of nearly 3400 acres along the San Joaquin River on San Luis NWR with the intent of breaching levees and increasing floodplain habitat.			**AGENCY NOTES --**	**NOTES CONT'D --**

MULTI SPECIES CONSERVATION STRATEGY MILESTONE 89 -- EVALUATION OF INDIVIDUAL PROJECTS REVIEWED TO FORMULATE THE ROLLED UP SUMMARY

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
89	SJR	EP	Restore and maintain a defined stream-meander zone and increase floodplain habitat on the San Joaquin River between Vernalis and the mouth of the Merced River.		89. A. Status of the restoration and maintenance of a defined stream-meander zone and increased floodplain habitat on the San Joaquin River between Vernalis and the mouth of the Merced River.	ERP-97-B05	Mar-98	Sep-00	334,000	0	334,000	San Luis National Wildlife Refuge Complex	Kim Forrest, Refuge Manager		Feasibility Analysis for the San Joaquin-Bear Creek Floodplain Restoration Project, San Luis National Wildlife Refuge.	This project is conducting a feasibility analysis that will eventually lead to a demonstration project that would require deauthorization of modification of a 10-mile section of levees along the San Joaquin River to restore more natural flooding hydrology. ***Project completed. This was a planning project dealing with the feasibility of allowing passive breaches along a section of the SJR near the Bear Creek Unit of the Refuge. Kim Forrest, USFWS.***
89	SJR	EP			89. A. Status of the restoration and maintenance of a defined stream-meander zone and increased floodplain habitat on the San Joaquin River between Vernalis and the mouth of the Merced River.	AFRP-01-12		Aug-03				AFRP	Cesar Blanco USFWS		Tuolumne River watershed outreach and stewardship proposal	***Objective: To create and utilize outreach materials as tools to build awareness, understanding and support for the Tuolumne River Technical Advisory Committee Plan, "Habitat Restoration Plan for the Lower Tuolumne River Corridor". The cooperative agreement between the AFRP and TRPT was completed in October of 2001. TRPT released two documents: the Tuolumne River Watershed Map and the Lower Tuolumne River Corridor and Its Lands; a brochure depicting land use patterns in the Tuolumne River corridor. The TRPT received a no-cost time extension extending the end date to April 2003 to complete their outreach to landowners who might be interested in easement opportunities. TRPT submitted a final report in August 2003 documenting their outreach efforts. This report, along with the Tuolumne River Watershed Map and the Lower Tuolumne River Corridor and Its Lands can be found on the AFRP website.***

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
89	SJR	EP			89. A. Status of the restoration and maintenance of a defined stream-meander zone and increased floodplain habitat on the San Joaquin River between Vernalis and the mouth of the Merced River.	ERP-98-F21	Jan-99	Sep-00	1,100,000		1,100,000	USFWS	Gary Zahm		Lower San Joaquin River Floodplain Habitat Protection and Restoration Project	Acquisition of 223.54 acres. Still negotiating for more property. ***Project Completed. This was an acquisition project for 223.54 acres of land for eventual restoration of floodplain habitat. Kim Forrest, USFWS.***
89	SJR	EP			89. A. Status of the restoration and maintenance of a defined stream-meander zone and increased floodplain habitat on the San Joaquin River between Vernalis and the mouth of the Merced River.	ERP-01-N08	Apr-02	Apr-05	7,646,233	1,885,000	9,531,233	USFWS San Luis Natl Wildlife Refuge Complex	Kim Forrest		San Joaquin River NWR Riparian Habitat Protection and Floodplain Restoration Project-Phase II	Task E: Breaching Flood Control Levees. Levees will be breached to open up historical floodplains along the San Joaquin River. ***Acquisition and Implementation Project 80% complete. 3,166 acres acquired . Kim Forrest, USFWS.***

MULTI SPECIES CONSERVATION STRATEGY MILESTONE 90 -- ROLLED UP SUMMARY

MILESTONE 90 -- Establish a river meander corridor between the Chowchilla Bypass and Mendota Pool to expand the floodway corridor to convey increased anticipated flood flows and restore floodplain habitat.		**PROJECTS REVIEWED -** ERP-99-B29		**SUMMARY --** This project released experimental flows down the mainstem San Joaquin River to confirm flows could flow down the mainstem past Gravelly Ford. Although considerable work is left to be done to identify the feasibility that a river can meander there as part of creating a meander belt, this contract does contribute to this milestone. Addtionally, those flows would promote dispersal and germination of seed from native riparian trees and the survival of young seedlings for riparian habitat.			**AGENCY NOTES --**	**NOTES CONT'D --**

MULTI SPECIES CONSERVATION STRATEGY MILESTONE 90 -- EVALUATION OF INDIVIDUAL PROJECTS REVIEWED TO FORMULATE THE ROLLED UP SUMMARY

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
90	SJR	EP	Establish a river meander corridor between the Chowchilla Bypass and Mendota Pool to expand the floodway corridor to convey increased anticipated flood flows and restore floodplain habitat.		90 A. Status of establishing a river meander corridor between the Chowchilla Bypass and Mendota Pool to expand the floodway corridor to convey increased anticipated flood flows and restore floodplain habitat.	ERP-99-B29	Sep-99	Jun-00	2,500,000		2,500,000	Friant Water Users Authority	Douglas DeFlitch		Pilot Project to Benefit Riparian Vegetation along the San Joaquin River	This project will augment San Joaquin River flows between June through October, 1999 to promote dispersal and germination of seed from native riparian trees and the survival of young seedlings for riparian habitat. ***Research project completed. Valerie Curley, USBR. Additionally, the project report identifies that the data can be used to evaluate in-river discharges at location downstream of Gravelly Ford and the Chowchilla Bypass. Although considerable work is left to be done to identify the feasibility that a river can meander there as part of creating a meander belt, this contract does contribute to this milestone; Rhonda Reed, CBDA.***

MULTI SPECIES CONSERVATION STRATEGY MILESTONE 91 -- ROLLED UP SUMMARY

MILESTONE 91 -- In the San Joaquin River and West San Joaquin Basin EMZs, cooperatively enhance at least 15 to 25% of the ERP target for wildlife friendly agricultural practices		**PROJECTS REVIEWED -** ERP-02D-P59		**SUMMARY --** One ERP contract proposes to establish for riparian brush rabbits a Lower Stanislaus River Riparian Preserve of 500-1,000 acres on the south bank of Stanislaus River. This ERP contract and a variety of other fund sources (FWS, DFG, WCB) have provided for restoration of more than 4600 acres to wetland and upland habitats and agricultural easements on over 10,950 acres of agricultural lands which benefit wildlife. May need to continue monitoring and more detailed accounting of various habitat types and agricultural practices, but this milestone appears to be well on its way to completion.			**AGENCY NOTES --**	**NOTES CONT'D --**

MULTI SPECIES CONSERVATION STRATEGY MILESTONE 91 -- EVALUATION OF INDIVIDUAL PROJECTS REVIEWED TO FORMULATE THE ROLLED UP SUMMARY

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
91	SJR	H	In the San Joaquin River and West San Joaquin Basin EMZs, cooperatively enhance at least 15 to 25% of the ERP target for wildlife friendly agricultural practices	Cooperatively enhance 15,290 acres of private agricultural land to support nesting and wintering waterfowl consistent with the objectives of the Central Valley Habitat Joint venture and the North American Waterfowl Management Plan.	91 A. Status of wildlife friendly agricultural practices program in the San Joaquin River Basin EMZ.	ERP-02D-P59			6,427,131		6,427,131	San Luis National Wildlife Refuge Complex	Kim Forrest, Refuge Manager		Recovery Implementation for Riparian Brush Rabbit and Riparian Woodrat on the lower Stanislaus River	***Project not begun yet. Proposing to establish for riparian brush rabbits a Lower Stanislaus River Riparian Preserve of 500-1,000 acres on the south bank of Stanislaus River in Stanislaus County, within an area defined by the confluence with the San Joaquin River up to river mile 9.5. Additionally, proposing expansion of the habitat at Caswell Memorial State Park, San Joaquin County, while monitoring the riparian brush rabbits response; and monitor the recently reintroduced rabbits at the San Joaquin River National Wildlife Refuge on the San Joaquin River in Stanislaus County to gain a better understanding of the reintroduction process. Kim Forrest, USFWS.***

MULTI SPECIES CONSERVATION STRATEGY MILESTONE 92 -- ROLLED UP SUMMARY

MILESTONE 92 -- In the West San Joaquin Basin EMZ, restoring or create 100 acres of fresh emergent wetland habitat.		**PROJECTS REVIEWED -** ERP-01-N08		**SUMMARY --** The San Joaquin River NWR Riparian Habitat Protection and Floodplain Restoration Project-Phase II has provided for restoration of 300 acres of wetlands and another 200 acres of wetlands have been enhanced on a 3,166 acre acquisition. **The expectation of 100 acres of fresh emergent wetland habitat being restored or created has been exceeded five fold.**			**AGENCY NOTES --**	**NOTES CONT'D --**

MULTI SPECIES CONSERVATION STRATEGY MILESTONE 92 -- EVALUATION OF INDIVIDUAL PROJECTS REVIEWED TO FORMULATE THE ROLLED UP SUMMARY

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
92	SJR	H	In the West San Joaquin Basin EMZ, restoring or create 100 acres of fresh emergent wetland habitat.		92 A. Status of restoring or creating 100 acres of fresh emergent wetland habitat in the West San Joaquin Basin EMZ	ERP-01-N08	Apr-02	Apr-05	7,646,233	1,885,000	9,531,233	USFWS San Luis Natl Wildlife Refuge Complex	Kim Forrest	500 acres of restored wetlands, 200 acres of enhanced wetlands	San Joaquin River NWR Riparian Habitat Protection and Floodplain Restoration Project-Phase II	Task D. Wetlands and Riparian Restoration. Project will revegetate floodplains, restore historic wetland basins and slough channels. ***Acquisition and Implementation Project 80% complete. 3,166 acres acquired. Of that acquisition, 300 acres of wetlands have been restored, and 200 acres of wetlands have been enhanced. Additionally, DWR funded restoration of 200 acres of wetlands on same acquisition site (part of 3,166 acres). Kim Forrest, USFWS.***

MULTI SPECIES CONSERVATION STRATEGY MILESTONE 93 -- ROLLED UP SUMMARY

MILESTONE 93 -- In the West San Joaquin Basin EMZ, restore or enhance 1,000 acres of perennial grassland associated with existing or proposed wildlife corridors, wetlands, or floodplain habitats.		**PROJECTS REVIEWED -**		**SUMMARY --** No ERP contracts were developed to restore or enhance 1,000 acres of perennial grassland associated with existing or proposed wildlife corridors, wetlands, or floodplain habitats in the West San Joaquin Basin EMZ. However, more than 400 acres have been developed by the San Luis NWR and could be used as a cornerstone for further restoration or enhancement. CALFED contracts have not addressed this milestone. However, approximately 3,985 acres of upland has been restored by/or with grants from NAWCA.			**AGENCY NOTES --**	**NOTES CONT'D --**

MULTI SPECIES CONSERVATION STRATEGY MILESTONE 93 -- EVALUATION OF INDIVIDUAL PROJECTS REVIEWED TO FORMULATE THE ROLLED UP SUMMARY

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
93	SJR	H	In the West San Joaquin Basin EMZ, restore or enhance 1,000 acres of perennial grassland associated with existing or proposed wildlife corridors, wetlands, or floodplain habitats.		93 A. Status of the restoration or enhancement of 1,000 acres of perennial grassland associated with existing or proposed wildlife corridors, wetlands, or floodplain habitats in the West San Joaquin Basin EMZ,											

MULTI SPECIES CONSERVATION STRATEGY MILESTONE 94 -- ROLLED UP SUMMARY

MILESTONE 94 -- Develop and implement a program to establish, restore, and maintain riparian habitat to improve floodplain habitat, salmonid shaded riverine aquatic habitat and instream cover along at least one tributary within the East San Joaquin and San Joaquin River EMZs.		**PROJECTS REVIEWED -** ERP-97-B04, ERP-97-M08, ERP-97-M09, ERP-98-C04, ERP-98-C05, ERP-98-C18, ERP-98-E09, ERP-98-F07, ERP-98-F11, ERP-98-F21, ERP-99-B05, ERP-99-B29, ERP-99-F01, ERP-99-F02, ERP-00-E05, ERP-00-F01, ERP-00-F04, ERP-01-C03, ERP-01-N03, ERP-01-N08, ERP-01-N42, ERP-02-D01, ERP-02D-P59, ERP-02-P12-D, ERP-02-P19-D, AFRP-00-06, AFRP-00-09, AFRP-00-43, AFRP-00-45, AFRP-01-02, AFRP-02-02, AFRP-02-11, ERP-99-R01	**SUMMARY --** Several ERP and AFRP contracts have addressed this milestone. In the Stanislaus EMU, restoration of up to 2,319 acres is in progress with a goal of restoring 1.6 miles of continuous river frontage. Some instream work also was completed (restoring sections damaged by gravel extraction), and there are additional contracts to restore approximately 1.3 miles of instream habitat. In the Tuolumne EMU approximately 137 acres were restored to riparian habitat; 6,169 additional acres were acquired for restoration; 1,142 acres and portions within a 1.1 mile stretch of the Tuolumne River are in progress of being restored. There is additional planning for restoring another 6.1 miles on the Tuolumne in progress. In the Merced EMU, 370 acres were protected and portions were restored; 2.5 miles of instream habitat were restored; and 2 miles of instream and riparian restoration is in the design and planning process. The Adaptive Management Forum provided significant review and advice to improve the restoration designs of most recent contracts.		**AGENCY NOTES --**	**NOTES CONT'D --**

MULTI SPECIES CONSERVATION STRATEGY MILESTONE 94 -- EVALUATION OF INDIVIDUAL PROJECTS REVIEWED TO FORMULATE THE ROLLED UP SUMMARY

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
94	SJR	H			94 A. Status of program to establish, restore, and maintain riparian habitat to improve floodplain habitat, salmonid shaded riverine aquatic habitat, and instream cover along the Stanislaus River	ERP-00-F04	Feb-00	Dec-03	223,666		223,666	Stillwater Sciences	John Stella		A Mechanistic Approach to Riparian Restoration in the San Joaquin Basin Phase I and II	This project will identify the physical and biological mechanisms affecting the establishment of riparian vegetation in the San Joaquin Basin, in order to identify the most cost-effective strategies and sites for riparian protection and restoration. Phase I: Develop a Mechanistic Conceptual Model of Riparian Plant Establishment, Analyze Pilot Data, and Select Study Sites. Phase II: Develop a Physical/Biological Restoration Model Based on San Joaquin Basin Study Sites. ***Research project completed. Jeff McLain, USFWS.***
94	SJR	H			94 A. Status of program to establish, restore, and maintain riparian habitat to improve floodplain habitat, salmonid shaded riverine aquatic habitat, and instream cover along the Stanislaus River	ERP-98-C18	Dec-98	Nov-01	24,000	0	24,000	CDWR	Derrick Adachi		HAZMAT Review for ERP Land Acquisitions	DWR will oversee or evaluate the work of outside consultants and contractors to ensure the all applicable regulatory requirements and standard operating procedures for environmental site assessments and remedial actions are complied with. DWR will also provide or conduct environmental site assessment activities. ***Project complete. They have and continue under an interagency agreement to provide HAZMAT review for ERP restoration projects. Derrick Adachi, DWR.***
94	SJR	H			94 A. Status of program to establish, restore, and maintain riparian habitat to improve floodplain habitat, salmonid shaded riverine aquatic habitat, and instream cover along the Stanislaus River	AFRP-02-02						AFRP	JD Wikert USFWS		Develop a Consensus Based Plan to Direct the Long Term Implementation of Prioritized Restoration/Research in the Stanislaus River Below Goodwin Dam	Objective: Develop a consensus based plan to direct the long term implementation of prioritized restoration/research in the Stanislaus River below Goodwin Dam. ***The project is currently focused on finishing a summary of the existing fisheries data. The summary will be provided to the Stanislaus River Fish Group for review and comment in January 2004. Work continues on the Restoration Plan and conceptual model.***
94	SJR	H			94 A. Status of program to establish, restore, and maintain riparian habitat to improve floodplain habitat, salmonid shaded riverine aquatic habitat, and instream cover along the Stanislaus River	AFRP-00-43						AFRP	JD Wikert USFWS		Develop a river corridor physical habitat assessment and restoration plan for the Stanislaus River	Objective: To evaluate current channel, floodplain, and river corridor processes and habitat condition of the entire lower Stanislaus River in the context of historical and current agents of change; develop a restoration strategy document for floodplain, riparian and channel habitats of the Stanislaus River corridor. ***The next step will be for the Fish Group to develop a request for proposals and solicit input from technical interests.***

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
94	SJR	H			94 A. Status of program to establish, restore, and maintain riparian habitat to improve floodplain habitat, salmonid shaded riverine aquatic habitat, and instream cover along the Stanislaus River	AFRP-00-45						AFRP	Cesar Blanco USFWS		Develop an adaptive management forum for large-scale restoration projects	Objective: To establish a multi-disciplinary technical forum where large-scale channel restoration project planning, implementation, and monitoring will receive input and review to provide a more structured process of peer review and adaptive management. ***This contract was modified in 2002 to include a fourth forum session and $35,000.00 was added. The forum was held in March 2003 and a final report is pending. The Tuolumne, Merced, and Clear Creek reports have been submitted and are available on the AFRP website.***
94	SJR	H			94 A. Status of program to establish, restore, and maintain riparian habitat to improve floodplain habitat, salmonid shaded riverine aquatic habitat, and instream cover along the Stanislaus River	ERP-01-N42	Aug-01	Jul-04	1,066,593	0	1,066,593	Community Alliance for Family Farmers	James Tischer		Educating Farmers and Landowners in Biological Resource Management	Project will develop plans to help landowners/growers make beneficial management decisions in relation to water quality improvement and habitat restoration and enhancement. This includes developing two demonstration sites, riparian and working farmland, and an educational outreach program. ***Some implementation, but primarily educational; project completed, Marcia Gibbs, Community Alliance with Family Farmers (CAFF); Project provided training for Merced River landowners in BMPs regarding fine sediment control, erosion control, biotechnical revetment and riparian buffer strip concepts, Rhonda Reed (CBDA).***
94	SJR	H			94 A. Status of program to establish, restore, and maintain riparian habitat to improve floodplain habitat, salmonid shaded riverine aquatic habitat, and instream cover along the Stanislaus River	AFRP-00-09						AFRP	Jeff McLain USFWS		Evaluate channel restoration and aggregate source potential for Two-mile Bar on the Stanislaus River	Objective: To assess the floodplain restoration potential and develop a conceptual restoration strategy for a 50-acre parcel known as Two-mile Bar, and to conduct aggregate and mineral appraisals to establish a fair market value of the land and provide the basis for acquisition in either fee or easement. ***A cooperative agreement between the AFRP and the Trust for Public Land (TPL) was completed in September of 2000. The TPL coordinated the site survey with the USACOE and subcontracted the aggregate and agricultural appraisals. Appraisals were not completed to federal standards and subsequently where rejected by the USFWS and USBR***
94	SJR	H			94 A. Status of program to establish, restore, and maintain riparian habitat to improve floodplain habitat, salmonid shaded riverine aquatic habitat, and instream cover along the Stanislaus River	ERP-01-N03	Nov-01	Nov-04	543,530	0	543,530	Turlock Irrigation District	Wilton Fryer		Tuolumne River Restoration: Special Run Pool 10	Project will fill in deep lake like pool areas created by past instream gravel mining thus reducing salmon fish predator habitat. ***Jeff McLain, USFWS. Project completed.***
94	SJR	H			94 A. Status of program to establish, restore, and maintain riparian habitat to improve floodplain habitat, salmonid shaded riverine aquatic habitat, and instream cover along the Stanislaus River	ERP-02D-P59			6,427,131.00		6,427,131	San Luis National Wildlife Refuge Complex	Kim Forrest, Refuge Manager		Recovery Implementation for Riparian Brush Rabbit and Riparian Woodrat on the lower Stanislaus River	***Project not begun yet. Proposing to establish for riparian brush rabbits a Lower Stanislaus River Riparian Preserve of 500-1,000 acres on the south bank of Stanislaus River in Stanislaus County, within an area defined by the confluence with the San Joaquin River up to river mile 9.5. Additionally, proposing expansion of the habitat at Caswell Memorial State Park, San Joaquin County, while monitoring the riparian brush rabbits response; and monitor the recently reintroduced rabbits at the San Joaquin River National Wildlife Refuge on the San Joaquin River in Stanislaus County to gain a better understanding of the reintroduction process. Kim Forrest, USFWS.***
94	SJR	H			94 B. Status of program to establish, restore, and maintain riparian habitat to improve floodplain habitat, salmonid shaded riverine aquatic habitat, and instream cover along the Tuolumne River	ERP-97-B04	Aug-98	Mar-02	10,947,000	10,000,000	20,947,000	San Luis National Wildlife Refuge Complex	Kim Forrest, Refuge Manager		San Joaquin River National Wildlife Refuge Riparian Habitat Protection and Floodplain Restoration Project	This contract represents Phase I of an overall project to acquire lands along the San Joaquin River for the benefit of fish and wildlife. Four separate parcels will be purchased totaling 6169 acres; this acreage will become part of the SJR NWR. This phase will also include pre-restoration planning. A Baseline Biological Inventory was completed as part of this project prior to future phase restoration. Phase II of this project will entail earth-moving and restoration. ***This project was completed, it included planning and baseline monitoring. Kim Forrest, USFWS.***

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94	SJR	H			94 B. Status of program to establish, restore, and maintain riparian habitat to improve floodplain habitat, salmonid shaded riverine aquatic habitat, and instream cover along the Tuolumne River	AFRP-02-11						AFRP	Jeff McLain USFWS		Partner with Modesto City and County Parks Departments for Restoration Planning and Implementation on the Gateway Parcel	***Objective: Incorporate habitat needs of salmonids in developing the updated Tuolumne River Regional Park Land Use and Master plans. Acquisition of the Gateway parcel located in the center of the regional park has necessitated the development of new land use and master plans for the park. The original plans were developed in the 1960s. The principal tasks involved in this planning effort include: (1) development of a preliminary program that broadly defines potential uses and activities within the Park corridor and a set of baseline environmental objectives; (2) soliciting public and agency comment; (3) conducting reconnaissance-level field studies; (4) prepare environmental documentation (EIR/EA); and (5) prepare Land Use Plan and Gateway Master Plan. This planning effort will affect a seven mile reach of the Tuolumne River that is used primarily as a migration corridor by fall-run Chinook salmon.***
94	SJR	H			94 B. Status of program to establish, restore, and maintain riparian habitat to improve floodplain habitat, salmonid shaded riverine aquatic habitat, and instream cover along the Tuolumne River	ERP-99-R01	Jul-99	Mar-01	1,500,000	$132,892 returned because not all acreage was purchased	1,367,108	Natural Resource Conservation Service	Helen Flack		Floodplain Easements - Lower Tuolumne and San Joaquin Rivers	Establish, restore and maintain riparian floodplain habitat. (Proposed 992.8 acres) by acquiring and restoring area prone to flood damage. ***Project completed. Jeff McLain, USFWS.***
94	SJR	H			94 B. Status of program to establish, restore, and maintain riparian habitat to improve floodplain habitat, salmonid shaded riverine aquatic habitat, and instream cover along the Tuolumne River	ERP-00-F01	Oct-00	Aug-04	1,984,320		1,984,320	Friends of the Tuolumne River	Dave Boucher		Tuolumne River Bobcat Flat Floodplain Acquisition	Program to establish, and maintain riparian habitat, improve floodplain habitat, salmonid shaded riverine aquatic habitat, and instream cover along the Tuolumne River. Acquisition of property is first step to restore self-sustaining natural floodplain processes, preserve stream meander belt, provide shaded riverine riparian habitat (Proposed 1.6 miles continuous miles of river frontage). ***Project complete. Property was acquired. Some limited re-vegetation occurred. Money left over from this contract is currently being used for the development of a conceptual restoration plan. Jeff McLain, USFWS.***
94	SJR	H			94 B. Status of program to establish, restore, and maintain riparian habitat to improve floodplain habitat, salmonid shaded riverine aquatic habitat, and instream cover along the Tuolumne River	ERP-97-M08	Feb-98		2,353,100		2,353,100	Turlock Irrigation District	Tim Ford	.2 miles SRA and instream habitats	Tuolumne River Special Run Pool 9 Restoration	Restoration of instream aquatic and shaded riverine aquatic habitats and reduction of predatory fish habitat by restoring a 400 to 500 foot wide riparian floodplain with a riffle and run pattern that follows the natural meander channel and native vegetation plantings on fill terraces. Restore and increase salmonid habitat; reconstruct natural river channel geometry, restore native riparian plant communities. Implementation Project complete. ***Jeff McLain, USFWS. .2 miles of riparian and riverine aquatic habitat. A final joint EA/IS for the restoration projects Special Run Pool (SRP) 9 and 10 (ERP 99 F01) and four project segments of the Gravel Mining Reach was completed in October 1999 with funding from this agreement. Pre-project monitoring that included habitat mapping, fish community evaluation, salmon smolt survival experiments, and geomorphic variables occurred during spring-fall of 1998. Instream work, floodplain construction, and revegetation was completed in 2001. Restored floodplain is currently being maintained to enhance survival o***

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
94	SJR	H			94 B. Status of program to establish, restore, and maintain riparian habitat to improve floodplain habitat, salmonid shaded riverine aquatic habitat, and instream cover along the Tuolumne River	ERP-97-M09	Jul-00	Dec-01	2,801,000	4,384,060	7,185,060	Turlock Irrigation District	Wilton Fryer	.6 miles riparian and riverine aquatic habitat	Tuolumne River Setback Levees and Channel Restoration	This project will revegetate 45 acres of which 25 acres will be created for new riparian floodplains. ***Jeff McLain, USFWS. Implementation. .6 river miles of riparian and riverine aquatic habitat. Project completed. This project is part of a larger restoration project to eventually restore the entire Mining Reach (6.1 miles@ RM 34.2 to 40.3) on the Tuolumne River. This specific project will eventually restore the 7/11 segment (.6 miles @ RM 37.7-40.3). This project filled-in mining pits for instream habitat and floodplain enhancement.***
94	SJR	H			94 B. Status of program to establish, restore, and maintain riparian habitat to improve floodplain habitat, salmonid shaded riverine aquatic habitat, and instream cover along the Tuolumne River	ERP-98-F21	Jan-99	Sep-00	1,100,000		1,100,000	USFWS	Gary Zahm		Lower San Joaquin River Floodplain Habitat Protection and Restoration Project	Acquisition of 223.54 acres. Still negotiating for more property. This project will acquire and restore riparian and floodplain habitats. (Proposed 303 acres, riparian and floodplain) T ***his was an acquisition project for 223.54 acres of land for eventual restoration of floodplain habitat. Kim Forrest, USFWS.***
94	SJR	H			94 B. Status of program to establish, restore, and maintain riparian habitat to improve floodplain habitat, salmonid shaded riverine aquatic habitat, and instream cover along the Tuolumne River	ERP-99-B29	Sep-99	Jun-00	2,500,000		2,500,000	Friant Water Users Authority	Douglas DeFlitch		Pilot Project to Benefit Riparian Vegetation along the San Joaquin River	This project will augment San Joaquin River flows between June through October, 1999 to promote dispersal and germination of seed from native riparian trees and the survival of young seedlings for riparian habitat. ***Research project completed. Valerie Curley, USBR.***
94	SJR	H			94 B. Status of program to establish, restore, and maintain riparian habitat to improve floodplain habitat, salmonid shaded riverine aquatic habitat, and instream cover along the Tuolumne River	AFRP-01-02			3,501,000	3,376,000	6,877,000	Turlock Irrigation District	Wilton Fryer		Tuolumne River Mining Reach Restoration No. 3, Warner-Deardorff Segment	This project is 1 of 4 phases of the overall Mining Reach Project to restore floodplain and riparian habitat to 6.1 miles of the Tuolumne River. This project ties into the permanent floodplain channel reconstruction at the downstream end of a set back dike constructed during a previous project phase. Deep pit areas created by past gravel mining will be filled in to re-create a riffle and run pattern that follows the restored meander channel of the river. ***Jeff McLain, USFWS. Planning and pre-project monitoring; project is in planning phase. Necessary cooperative agreements have been obtained; some engineering work has been done to facilitate hydraulic and fluvial models, environmental permits, monitoring, and right-of-way footprints. Design and monitoring work is continuing. This restoration will eventually cover 1.3 miles: river mile 35.2 to 36.5. References to 6.1 miles includes the entire river reach covered by four phased projects.***
94	SJR	H			94 B. Status of program to establish, restore, and maintain riparian habitat to improve floodplain habitat, salmonid shaded riverine aquatic habitat, and instream cover along the Tuolumne River	ERP-98-F07		Oct-03	732,000		732,000	East Stanislaus Resource Conservation District	John Hertle	137 acres	Grayson River Ranch Perpetual Easement and Restoration	Restoration of 137 acres of floodplain habitat. ***Project complete. This project created floodplain habitats (grading and revegetation) allowing for fine sediment deposition to help perpetuate and maintain riparian habitats in addition to providing floodplain habitats to increase quality and quantity of salmonids spawning and migratory habitats. Jeff McLain, USFWS.***

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
94	SJR	H			94 B. Status of program to establish, restore, and maintain riparian habitat to improve floodplain habitat, salmonid shaded riverine aquatic habitat, and instream cover along the Tuolumne River	ERP-01-N08	Apr-02	Apr-05	7,646,233	1,885,000	9,531,233	USFWS San Luis Natl Wildlife Refuge Complex	Kim Forrest	1077 acres of riparian Habitat	San Joaquin River NWR Riparian Habitat Protection and Floodplain Restoration Project-Phase II	Task D. Wetlands and Riparian Restoration. Project will revegetate floodplains, restore historic wetland basins and slough channels. (Proposed 1,142 acres Riparian and riverine aquatic habitat). ***Acquisition and Implementation Project 80% complete. 3,166 acres acquired . 777 acres of riparian habitat restored, with additional 300 acres of riparian habitat restored by DWR on this same acquisition site (part of the 3,166 acres). Kim Forrest, USFWS.***
94	SJR	H			94 B. Status of program to establish, restore, and maintain riparian habitat to improve floodplain habitat, salmonid shaded riverine aquatic habitat, and instream cover along the Tuolumne River	ERP-99-F01	Sep-99	Mar-02	164,800		164,800	Turlock Irrigation District	Wilton Fryer		Tuolumne River Special Run Pool (SRP) 10 Restoration	Restoration of instream aquatic habitat and shaded riverine aquatic habitat and reduction of predatory fish habitat for the benefit of salmon. The full SRP 10 project will rebuild a portion of the Tuolumne River channel, at river mile 25.4. The project will remove mining pit ponds. ***This project is complete. This is part of the larger full SRP 10 Restoration Project to restore RM 25.4 on the Tuolumne River. This phase included levee breach repair and baseline monitoring. This project contributes to eventual full restoration which will reduce salmonid fish predator habitat, restore and increase habitat for salmon production, reconstruct natural channel geometry, and restore native riparian plant communities. Jeff McLain, USFWS.***
94	SJR	H			94 B. Status of program to establish, restore, and maintain riparian habitat to improve floodplain habitat, salmonid shaded riverine aquatic habitat, and instream cover along the Tuolumne River	ERP-99-F02	Sep-99	Mar-02	3,332,050	3,145,000	17,140,233	Turlock Irrigation District	Wilton Fryer		Tuolumne River Mining Reach Restoration Project No. 2 - MJ Ruddy Segment	The MJ Ruddy Segment is Project No. 2 located between river mile 36.5 and 37.6 on the Tuolumne River. Objectives: 1) Restore and increase habitat for natural salmon production. 2) Reconstruct natural channel geometry scaled to current channel forming flows. 3) Restore native riparian plant communities. 4) Reduce salmonid fish predator habitat. ***Jeff McLain, USFWS. Implementation. Project not completed. This project is part of a larger restoration project to eventually restore the entire Mining Reach (6.1 miles@ RM 34.2 to 40.3) on the Tuolumne River. This project will eventually restore MJ Ruddy Reach (1.1 miles @ RM 36.5-37.6). No actual restoration has been accomplished to date; land has not been purchased.***
94	SJR	H			94 B. Status of program to establish, restore, and maintain riparian habitat to improve floodplain habitat, salmonid shaded riverine aquatic habitat, and instream cover along the Tuolumne River	ERP-02-P19-D	Mar-03 - Notificatio n Letter		10,839,000		10,839,000	Turlock Irrigation District	Wilton Fryer		Tuolumne River Mining Reach Restoration Project: Warner-Deardorff Segment No. 3 Construction	Program to establish, restore and maintain riparian habitat to improve floodplain habitat, salmonid shaded riverine aquatic habitat and instream cover along the Tuolumne River. Improve salmonid spawning and rearing habitats by restoring an alternate bar (pool riffle) morphology, restoring spawning habitat within a channel that is allowed to meander within a riparian floodway and filling in-channel mining pits. (proposed 1.3 miles). ***Implementation project not complete. Jeff McLain, USFWS.***
94	SJR	H			94 B. Status of program to establish, restore, and maintain riparian habitat to improve floodplain habitat, salmonid shaded riverine aquatic habitat, and instream cover along the Tuolumne River	AFRP-00-06						AFRP	Jeff McLain USFWS		Continue to restore the 7/11 segment of the mining reach on the Tuolumne River	***Objective: To restore and increase riparian and instream habitat to support natural production of the San Joaquin fall-run Chinook salmon; Reconstruct a natural channel geometry scaled to current channel forming flows; Restore native riparian plant communities within their predicted hydrological regime; and Reduce the occurrence of salmonid fish predator habitat.***
94	SJR	H			94 B. Status of program to establish, restore, and maintain riparian habitat to improve floodplain habitat, salmonid shaded riverine aquatic habitat, and instream cover along the Tuolumne River	ERP-00-F04	Feb-00	Dec-03	223,666		223,666	Stillwater Sciences	John Stella		A Mechanistic Approach to Riparian Restoration in the San Joaquin Basin Phase I and II	This project will identify the physical and biological mechanisms affecting the establishment of riparian vegetation in the San Joaquin Basin, in order to identify the most cost-effective strategies and sites for riparian protection and restoration. Phase I: Develop a Mechanistic Conceptual Model of Riparian Plant Establishment, Analyze Pilot Data, and Select Study Sites. Phase II: Develop a Physical/Biological Restoration Model Based on San Joaquin Basin Study Sites. ***Research project completed. Jeff McLain, USFWS.***

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
94	SJR	H			94 B. Status of program to establish, restore, and maintain riparian habitat to improve floodplain habitat, salmonid shaded riverine aquatic habitat, and instream cover along the Tuolumne River	ERP-02-D01	Jun-05		1,681,123	381,100	2,062,223	Tuolumne River Preservation Trust	Patrick Koepele		Tuolumne River - Big Bend Project	Restore conditions for riparian vegetation growth along sections of the rivers in the East San Joaquin EMZ. Improve functionality of floodplain to support riparian species. (Proposed 254 acres) ***Implementation project not completed; still in planning phase. Project acquired 197 acres, 180 acres of CE, and is trying to acquire 16 more acres. Patrick Koepele, Tuolumne River Preservation Trust.***
94	SJR	H			94 C. Status of program to establish, restore, and maintain riparian habitat to improve floodplain habitat, salmonid shaded riverine aquatic habitat, and instream cover along the Merced River	ERP-98-E09	Sep-98	Apr-01	300,000	26,552	326,552	Stillwater Sciences & Merced Co. Planning and Development	Jennifer Vick/Bob Smith		Merced River Corridor Restoration Plan	Restore riparian habitat. ***Jeff McLain, Planning. Final Plan completed. The final plan recommends actions to re-establish floodplain at elevations that are functional under the contemporary regulated flow regime, to establish a floodplain corridor and reconnect the river to its floodplain.***
94	SJR	H			94 C. Status of program to establish, restore, and maintain riparian habitat to improve floodplain habitat, salmonid shaded riverine aquatic habitat, and instream cover along the Merced River	ERP-98-F11	Mar-99	Sep-02	2,433,759			Department of Water Resources	Stephani Spaar		Phase 3: Merced River Salmon Habitat Enhancement	Reduce erosion and maintain gravel recruitment on the Merced River. Reconfigure the channel to improve river and floodplain dynamics and sediment transport. ***Fred Jurick, CDFG. Implementation. 2.0 miles of instream and riparian habitat. This project was merged into ERP-01-C03. Project not completed. Non-CALFED funded project contribution: 360 acres of CE along the Merced River of riparian and floodplain habitat. Created new river channel, bought gravel rights, and did restored instream habitat***
94	SJR	H			94 C. Status of program to establish, restore, and maintain riparian habitat to improve floodplain habitat, salmonid shaded riverine aquatic habitat, and instream cover along the Merced River	ERP-99-B05	Sep-99	Mar-00	1,584,002		1,584,002	DFG	Fred Jurick	10 acres riparian habitat; .5 miles instream habitat	Partial funding for Phase I Construction of the Robinson/Gallo Salmon Restoration Project: Ratzlaff Reach Site	Restore natural channel configurations on the Merced River to reduce salmonid predator habitat and improve the migration corridor. ***Fred Jurick, CDFG. Implementation project completed. Restored .5 miles of instream habitat, and created 10 acres of riparian habitat.***
94	SJR	H			94 C. Status of program to establish, restore, and maintain riparian habitat to improve floodplain habitat, salmonid shaded riverine aquatic habitat, and instream cover along the Merced River	ERP-00-F04	Feb-00	Dec-03	223,666		223,666	Stillwater Sciences	John Stella		A Mechanistic Approach to Riparian Restoration in the San Joaquin Basin Phase I and II	This project will identify the physical and biological mechanisms affecting the establishment of riparian vegetation in the San Joaquin Basin, in order to identify the most cost-effective strategies and sites for riparian protection and restoration. Phase I: Develop a Mechanistic Conceptual Model of Riparian Plant Establishment, Analyze Pilot Data, and Select Study Sites. Phase II: Develop a Physical/Biological Restoration Model Based on San Joaquin Basin Study Sites. ***Research project completed. Jeff McLain, USFWS.***
94	SJR	H			94 C. Status of program to establish, restore, and maintain riparian habitat to improve floodplain habitat, salmonid shaded riverine aquatic habitat, and instream cover along the Merced River	ERP-01-C03	Jul-01	Jun-04	1,699,101	6,176,800	7,875,901	Department of Water Resources	Stephani Spaar		Merced River Salmon Enhancement River Mile 42-44 Phase II	The Merced River Salmon Enhancement project will scale the channel between River miles 42 and 44 to fit the post-dam flow regime. Over the entire reach, the channel will be reshaped to include spawning riffles, runs and pools, with a meander that fits the approximate\e slope and bankfull flow of 1,700 cfs. The floodplains will be replanted with native riparian\vegetation. (Proposed 2 miles; 45 acres of pond area removed; 10 acres of pond area isolated). ***Fred Jurick, CDFG. Implementation project not completed. 2.0 instream and riparian habitat.***
94	SJR	H			94 C. Status of program to establish, restore, and maintain riparian habitat to improve floodplain habitat, salmonid shaded riverine aquatic habitat, and instream cover along the Merced River	ERP-02-P12-D	May-03	Apr-06	2,192,515		2,192,515	Stillwater Sciences	Dr. Peter Downs		Merced River Corridor Restoration Plan Phase IV: Dredger Tailings Reach	Develop a detailed sediment transport model. ***Jeff McLain, USFWS. Planning project not completed. Project Task 6: Assess the most effective and efficient revegetation techniques of reconstructed floodplains; design plan to restore approximately 60 acres of floodplains along a 3600 linear feet of river channel. This task is currently being carried out.***

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
94	SJR	H			94 C. Status of program to establish, restore, and maintain riparian habitat to improve floodplain habitat, salmonid shaded riverine aquatic habitat, and instream cover along the Merced River	ERP-00-E05	Feb-00	Sep-02	260,351		260,351	Stillwater Sciences	Jennifer Vick		Merced River Corridor Restoration Project Phase III	This project will develop a long-term restoration and monitoring plan. ***Project completed. Some modeling implementation involved. The Merced River Corridor Restoration Plan was developed in Phase III. In addition to development of that plan, Stillwater Sciences completed field and modeling efforts and developed design guidelines for channel and floodplain restoration. Jeff McLain, USFWS.***
94	SJR	H			94 C. Status of program to establish, restore, and maintain riparian habitat to improve floodplain habitat, salmonid shaded riverine aquatic habitat, and instream cover along the Merced River	ERP-98-C04/C05	Sep-98	Dec-00	830,500		830,500	CDFG	Clarence Mayott		Basso Bridge Ecological Reserve Land Acquisition and Merced River Ranch Land Acquisition	Acquire, in order to restore, riparian habitat to improver floodplain habitat, salmonid shaded riverine aquatic habitat and instream cover along the Merced River. Purpose of acquisition: to restore, preserve and enhance riparian floodplain, wetland and aquatic habitat along the Merced River. ***Merced River Ranch Land Acquisition component is complete; 318 acres have been purchased to restore riparian, wetland, and aquatic habitat along the Merced River. Clarence Mayott or Dean Marston, CDFG.***

MULTI SPECIES CONSERVATION STRATEGY MILESTONE 95 -- ROLLED UP SUMMARY

MILESTONE 95 -- Implement 25 percent of the ERP target for diverse, self-sustaining riparian community for all EMZs in the San Joaquin River Basin. Bring at least three of the currently existing but unprotected delta coyote thistle occurrences into protection through purchase or conservation agreement, and ensure appropriate management. Increase suitable habitat for delta coyote thistle by at least 20% and the number of populations and individuals by at least 10% through habitat management and protection. Establish two new riparian brush rabbit habitat preserves within the historical range of the species. Protect and enhance a minimum of 150 contiguous acres of mature, shrub-rich riparian forest and associated highwater refugia on the San Joaquin river, between the Merced River confluence and Vernalis, and on each of the east-side tributaries (the Stanislaus, Tuolumne and Merced Rivers) for habitat values and as potential riparian brush rabbit re-introduction sites.	**PROJECTS REVIEWED -** ERP-97-B04, ERP-97-M08, ERP-97-M09, ERP-98-F07, ERP-99-F01, ERP-99-F02, ERP-01-N08, ERP-02D-P59, AFRP-00-06, ERP-01-N11		**SUMMARY --:** Many ERP contracts and one AFRP contract have contributed to progress on this milestone in the East San Joaquin and San Joaquin River EMZs. In the Stanislaus EMU, approximately 137 acres were restored to riparian habitat; several projects are in progress to restore up to 2,319 acres, with a goal of restoring 1.6 miles of continues miles of river frontage at the San Joaquin River National Wildlife Refuge. There are additional contracts to restore approximately 1.3 miles of instream habitat. In the Tuolumne EMU, 6,169 acres were acquired for restoration; 1,142 acres and portions within a 1.1 mile stretch of the Tuolumne River are in progress of being restored. In addition, planning for restoring 6.1 miles Tuolumne River is also in progress. In the Merced EMU, 370 acres were protected and portions were restored; 0.5 miles of instream habitat were restored; and 2 miles of instream and riparian restoration is in the process of being restored. No contracts have addressed either the protection of delta coyote thistle or increasing suitable habitat for the species. Three contracts targeted habitat needs for the riparian brush rabbit, including enhancing habitat ava			**AGENCY NOTES --**	**NOTES CONT'D --**

MULTI SPECIES CONSERVATION STRATEGY MILESTONE 95 -- EVALUATION OF INDIVIDUAL PROJECTS REVIEWED TO FORMULATE THE ROLLED UP SUMMARY

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
95	SJR	H	Implement 25 percent of the ERP target for diverse, self-sustaining riparian community for all EMZs in the San Joaquin River Basin. Bring at least three of the currently existing but unprotected delta coyote thistle occurrences into protection through purchase or conservation agreement, and ensure appropriate management. Increase suitable habitat for delta coyote thistle by at least 20% and the number of populations and individuals by at least 10% through habitat management and protection. Establish two new riparian brush rabbit habitat preserves within the historical range of the species.	Restore 50 stream miles (1,212 acres) of diverse, self-sustaining riparian community	95 A. Status of restoring 12 stream miles (303 acres) of diverse, self-sustaining riparian community in the San Joaquin Basin EMZ	ERP-97-B04	Aug-98	Mar-02	10,947,000	10,000,000	20,947,000	San Luis National Wildlife Refuge Complex	Kim Forrest, Refuge Manager		San Joaquin River National Wildlife Refuge Riparian Habitat Protection and Floodplain Restoration Project	This contract represents Phase I of an overall project to acquire lands along the San Joaquin River for the benefit of fish and wildlife. Four separate parcels will be purchased totaling 6169 acres; this acreage will become part of the SJR NWR. This phase will also include pre-restoration planning. A Baseline Biological Inventory was completed as part of this project prior to future phase restoration. Phase II of this project will entail earth-moving and restoration. ***This project was completed, it included planning and baseline monitoring. Kim Forrest, USFWS.***

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
95	SJR	H	Protect and enhance a minimum of 150 contiguous acres of mature, shrub-rich riparian forest and associated hgihwater refugia on the San Joaquin river, between the Merced River confluence and Vernalis, and on each of the east-side tributaries (the Stanislaus, Tuolumne and Merced Rivers) for habiatat values and as potential riparian brush rabbit re-introduction sites.		95 A. Status of restoring 12 stream miles (303 acres) of diverse, self-sustaining riparian community in the San Joaquin Basin EMZ	ERP-97-M09	Jul-00	Dec-01	2,801,000	4,384,060	7,185,060	Turlock Irrigation District	Wilton Fryer	.6 miles riparian and riverine aquatic habitat	Tuolumne River Setback Levees and Channel Restoration	Restore a 6.1 mile reach involving instream aquatic and SRA habitats. ***Jeff McLain, USFWS. Implementation. .6 river miles of riparian and riverine aquatic habitat. Project completed. This project is part of a larger restoration project to eventually restore the entire Mining Reach (6.1 miles@ RM 34.2 to 40.3) on the Tuolumne River. This specific project will eventually restore the 7/11 segment (.6 miles @ RM 37.7-40.3). This project filled-in mining pits for instream habitat and floodplain enhancement.***
95	SJR	H			95 A. Status of restoring 12 stream miles (303 acres) of diverse, self-sustaining riparian community in the San Joaquin Basin EMZ	ERP-98-F07		Oct-03	732,000		732,000	East Stanislaus Resource Conservation District	John Hertle	1.2 stream miles of riparian habitat	Grayson River Ranch Perpetual Easement and Restoration	Restoration of 1.2 miles of shaded riverine habitat. ***Project complete. This project created shaded riverine and floodplain habitats. Jeff McLain, USFWS.***
95	SJR	H			95 A. Status of restoring 12 stream miles (303 acres) of diverse, self-sustaining riparian community in the San Joaquin Basin EMZ	ERP-01-N08	Apr-02	Apr-05	7,646,233	1,885,000	9,531,233	USFWS San Luis Natl Wildlife Refuge Complex	Kim Forrest	.5 miles of riparian habitat	San Joaquin River NWR Riparian Habitat Protection and Floodplain Restoration Project-Phase II	Task E. Reintroduction of Riparian Brush Rabbit. Re-establishment of riparian brush rabbit populations within San Joaquin Wildlife Refuge. Suitable riparian habitat restoration will take place as part of this project to support accomplishment of reintroduction. (Proposed goal is one new population) ***Acquisition and Implementation Project 80% complete. 3,166 acres acquired . 5 miles of riparian habitat restored. Kim Forrest, USFWS.***
95	SJR	H			95 A. Status of restoring 12 stream miles (303 acres) of diverse, self-sustaining riparian community in the San Joaquin Basin EMZ	ERP-99-F01	Sep-99	Mar-02	164,800		164,800	Turlock Irrigation District	Wilton Fryer		Tuolumne River Special Run Pool (SRP) 10 Restoration	Restoration of instream aquatic habitat and shaded riverine aquatic habitat and reduction of predatory fish habitat for the benefit of salmon. The full SRP 10 project will rebuild a portion of the Tuolumne River channel, at river mile 25.4. The project will remove mining pit ponds. ***This project is complete. This is part of the larger full SRP 10 Restoration Project to restore RM 25.4 on the Tuolumne River. This phase included levee breach repair and baseline monitoring. This project contributes to eventual full restoration which will reduce salmonid fish predator habitat, restore and increase habitat for salmon production, reconstruct natural channel geometry, and restore native riparian plant communities. Jeff McLain, USFWS.***
95	SJR	H			95 A. Status of restoring 12 stream miles (303 acres) of diverse, self-sustaining riparian community in the San Joaquin Basin EMZ	ERP-99-F02	Sep-99	Mar-02	3,332,050	3,145,000	10,263,233	Turlock Irrigation District	Wilton Fryer		Tuolumne River Mining Reach Restoration Project No. 2 - MJ Ruddy Segment	The MJ Ruddy Segment is Project No. 2 located between river mile 36.5 and 37.6 on the Tuolumne River. Objectives: 1) Restore and increase habitat for natural salmon production. 2) Reconstruct natural channel geometry scaled to current channel forming flows. 3) Restore native riparian plant communities. 4) Reduce salmonid fish predator habitat. (proposed 1.1 miles). ***Project not completed. This project is part of a larger restoration project to eventually restore the entire Mining Reach (6.1 miles@ RM 34.2 to 40.3) on the Tuolumne River. This project will eventually restore MJ Ruddy Reach (1.1 miles @ RM 36.5-37.6). No actual restoration has been accomplished to date; land has not been purchased. Jeff McLain, USFWS.***
95	SJR	H			95 A. Status of restoring 12 stream miles (303 acres) of diverse, self-sustaining riparian community in the San Joaquin Basin EMZ	AFRP-00-06						AFRP	Jeff McLain USFWS		Continue to restore the 7/11 segment of the mining reach on the Tuolumne River	***Objective: To restore and increase riparian and instream habitat to support natural production of the San Joaquin fall-run Chinook salmon; Reconstruct a natural channel geometry scaled to current channel forming flows; Restore native riparian plant communities within their predicted hydrological regime; and Reduce the occurrence of salmonid fish predator habitat.***

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
95	SJR	H			95 A. Status of restoring 12 stream miles (303 acres) of diverse, self-sustaining riparian community in the San Joaquin Basin EMZ	ERP-97-M08	Feb-98		2,353,100		2,353,100	Turlock Irrigation District	Tim Ford		Tuolumne River Special Run Pool 9 Restoration	Reconstructing channels by isolating or filling in channel gravel extraction areas.Will change warmwater predator species habitat resulting from gravel mining to a more natural, dynamic morphology that will improve habitat for chinook salmon. ***Jeff McLain, USFWS. Implementation. .2 miles of riparian and riverine aquatic habitat (credited for Milestone 94B). This project was completed. A final joint Environmental Assessment and Initial study for the restoration projects Special Run Pool (SRP) 9 and 10 (ERP 99 F01) and four project segments of the Gravel Mining Reach was completed in October 1999 with funding from this agreement. Pre-project monitoring that included habitat mapping, fish community evaluation, salmon smolt survival experiments, and geomorphic variables occurred during spring through fall of 1998. Instream work, floodplain construction, and revegetation was completed in 2001. Restored floodplain is currently being maintained to enhance survival of plantings.***
95	SJR	H			95 A. Status of restoring 12 stream miles (303 acres) of diverse, self-sustaining riparian community in the San Joaquin Basin EMZ	ERP-02D-P59			6,427,131		6,427,131	San Luis National Wildlife Refuge Complex	Kim Forrest, Refuge Manager		Recovery Implementation for Riparian Brush Rabbit and Riparian Woodrat on the lower Stanislaus River	***Project not begun yet. Proposing to establish for riparian brush rabbits a Lower Stanislaus River Riparian Preserve of 500-1,000 acres on the south bank of Stanislaus River in Stanislaus County, within an area defined by the confluence with the San Joaquin River up to river mile 9.5. Additionally, proposing expansion of the habitat at Caswell Memorial State Park, San Joaquin County, while monitoring the riparian brush rabbits response; and monitor the recently reintroduced rabbits at the San Joaquin River National Wildlife Refuge on the San Joaquin River in Stanislaus County to gain a better understanding of the reintroduction process. Kim Forrest, USFWS.***
95	SJR	H			95B. Status of protecting at least three of the currently existing but unprotected delta coyote thistle occurrences through purchase or conservation agreement, and ensure appropriate management.											
95	SJR	H			95 C. Status of increasing suitable habitat for delta coyote thistle by at least 20%											
95	SJR	H			95 D. Status of increasing the number of populations and individuals by at least 10% through habitat management and protection.											

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
95	SJR	H			95 E. Status of establishing two new riparian brush rabbit habitat preserves within the historical range of the species.	ERP-01-N08	Apr-02	Apr-05	7,646,233	1,885,000	9,531,233	USFWS San Luis Natl Wildlife Refuge Complex	Kim Forrest		San Joaquin River NWR Riparian Habitat Protection and Floodplain Restoration Project-Phase II	Task E. Reintroduction of Riparian Brush Rabbit. Re-establishment of riparian brush rabbit populations within San Joaquin Wildlife Refuge. Suitable riparian habitat restoration will take place as part of this project to support accomplishment of reintroduction. (Proposed goal is one new population) ***Acquisition and Implementation Project 80% complete. 3,166 acres acquired . Kim Forrest, USFWS.***
95	SJR	H			95 E. Status of establishing two new riparian brush rabbit habitat preserves within the historical range of the species.	ERP-01-N11	Sep-01	Jul-03	2,720,085		2,720,085	USFWS	Heather Bell		Habitat Acquisition for Riparian Brush Rabbit and Riparian Woodrat	Project will establish two new riparian brush habitat preserves within the historic range of the species; Protect riparian habitat as potential riparian brush reintroduction sites. This project acquires fee title/conservation easement for riparian brush rabbit reintroduction sites. Acquisition and monitoring project. ***Project 20% complete (acquisition in progress, survey 90% complete) Proposed acquisition of ~400 acres. Kim Forrest, USFWS.***
95	SJR	H			95 E. Status of establishing two new riparian brush rabbit habitat preserves within the historical range of the species.	ERP-02D-P59			6,427,131		6,427,131	San Luis National Wildlife Refuge Complex	Kim Forrest, Refuge Manager		Recovery Implementation for Riparian Brush Rabbit and Riparian Woodrat on the lower Stanislaus River	***Project not begun yet. Proposing to establish for riparian brush rabbits a Lower Stanislaus River Riparian Preserve of 500-1,000 acres on the south bank of Stanislaus River in Stanislaus County, within an area defined by the confluence with the San Joaquin River up to river mile 9.5. Additionally, proposing expansion of the habitat at Caswell Memorial State Park, San Joaquin County, while monitoring the riparian brush rabbits response; and monitor the recently reintroduced rabbits at the San Joaquin River National Wildlife Refuge on the San Joaquin River in Stanislaus County to gain a better understanding of the reintroduction process. Kim Forrest, USFWS.***
95	SJR	H			95 F. Status of protecting and enhancing a minimum of 150 contiguous acres of mature, shrub-rich riparian forest and associated high-water refugia on the San Joaquin River, between the Merced River confluence and Vernalis, and on each of the east-side tributaries (the Stanislaus, Tuolumne and Merced rivers) for habitat values and as potential riparian brush rabbit re-introduction sites.	ERP-01-N08	Apr-02	Apr-05	7,646,233	1,885,000	9,531,233	USFWS San Luis Natl Wildlife Refuge Complex	Kim Forrest		San Joaquin River NWR Riparian Habitat Protection and Floodplain Restoration Project-Phase II	Task E. Reintroduction of Riparian Brush Rabbit. Re-establishment of riparian brush rabbit populations within San Joaquin Wildlife Refuge. Suitable riparian habitat restoration will take place as part of this project to support accomplishment of reintroduction. (Proposed goal is one new population) ***Acquisition and Implementation Project 80% complete. 3,166 acres acquired . Kim Forrest, USFWS.***
95	SJR	H			95 F. Status of protecting and enhancing a minimum of 150 contiguous acres of mature, shrub-rich riparian forest and associated high-water refugia on the San Joaquin River, between the Merced River confluence and Vernalis, and on each of the east-side tributaries (the Stanislaus, Tuolumne and Merced rivers) for habitat values and as potential riparian brush rabbit re-introduction sites.	ERP-01-N11	Sep-01	Jul-03	2,720,085		2,720,085	USFWS	Heather Bell		Habitat Acquisition for Riparian Brush Rabbit and Riparian Woodrat	Project will establish two new riparian brush habitat preserves within the historic range of the species; Protect riparian habitat as potential riparian brush reintroduction sites. This project acquires fee title/conservation easement for riparian brush rabbit reintroduction sites. Acquisition and monitoring project. ***Project 20% complete (acquisition in progress, survey 90% complete) Proposed acquisition of ~400 acres. Kim Forrest, USFWS.***

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
95	SJR	H			95 F. Status of protecting and enhancing a minimum of 150 contiguous acres of mature, shrub-rich riparian forest and associated high-water refugia on the San Joaquin River, between the Merced River confluence and Vernalis, and on each of the east-side tributaries (the Stanislaus, Tuolumne and Merced rivers) for habitat values and as potential riparian brush rabbit re-introduction sites.	ERP-02D-P59			6,427,131		6,427,131	San Luis National Wildlife Refuge Complex	Kim Forrest, Refuge Manager		Recovery Implementation for Riparian Brush Rabbit and Riparian Woodrat on the lower Stanislaus River	***Project not begun yet. Proposing to establish for riparian brush rabbits a Lower Stanislaus River Riparian Preserve of 500-1,000 acres on the south bank of Stanislaus River in Stanislaus County, within an area defined by the confluence with the San Joaquin River up to river mile 9.5. Additionally, proposing expansion of the habitat at Caswell Memorial State Park, San Joaquin County, while monitoring the riparian brush rabbits response; and monitor the recently reintroduced rabbits at the San Joaquin River National Wildlife Refuge on the San Joaquin River in Stanislaus County to gain a better understanding of the reintroduction process. Kim Forrest, USFWS.***

MULTI SPECIES CONSERVATION STRATEGY MILESTONE 96 -- ROLLED UP SUMMARY

MILESTONE 96 -- Develop and implement a program to address inadequate instream flows for steelhead and Chinook salmon on streams within San Joaquin River tributaries. Where appropriate provide adequate flows for Sacramento split tail and green sturgeon.		**PROJECTS REVIEWED -** ERP-99-B30		**SUMMARY --** One ERP contract was performed to develop and implement a program to address inadequate instream flows for steelhead and Chinook salmon on streams within San Joaquin River tributaries. An agreement for the acquisition of 50,000 acre feet of water per year between the United States and Oakdale and South San Joaquin Irrigation Districts resulted from this program to address the inadequate instream flows for steelhead and Chinook salmon on the Stanislaus River.			**AGENCY NOTES --**	**NOTES CONT'D --**

MULTI SPECIES CONSERVATION STRATEGY MILESTONE 96 -- EVALUATION OF INDIVIDUAL PROJECTS REVIEWED TO FORMULATE THE ROLLED UP SUMMARY

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
96	SJR	SR	Develop and implement a program to address inadequate instream flows for steelhead and Chinook salmon on streams within San Joaquin River tributaries. Where appropriate provide adequate flows for Sacramento split tail and green sturgeon.		96 A. Status of a program to address the inadequate instream flows for steelhead and Chinook salmon on the streams of the Cosumnes River											
96	SJR	SR			96 B. Status of a program to address the inadequate instream flows for steelhead and Chinook salmon on the streams of the Tuolumne River	ERP-99-B30	Jul-99	Sep-99	$60/acre foot, up to 50,000 acre feet ($3,000,000)			Oakdale Irrigation District, South San Joaquin Irrigation District		50,000 acre feet/one year	Agreement for the Acquisition of Water Between the United States and Oakdale and South San Joaquin Irrigation Districts	Program to address the inadequate instream flows for steelhead and Chinook salmon on the stream of the Stanislaus River. Reclamation and USFWS desire to increase supply of water available to meet fish and wildlife purposes. ***Georgiana Gregory, Project complete.***
96	SJR	R			96 C. Status of a program to address the inadequate instream flows for steelhead and Chinook salmon on the streams of the Merced River											

MULTI SPECIES CONSERVATION STRATEGY MILESTONE 97 -- ROLLED UP SUMMARY

MILESTONE 97 -- Provide unimpeded upstream and downstream passage for salmon and steelhead on San Joaquin River Basin tributaries.		**PROJECTS REVIEWED -** ERP-97-M08, ERP-97-M09, ERP-98-F11, ERP-98-N02, ERP-99-B04, ERP-99-B05, ERP-99-F01, ERP-99-F02, ERP-01-C03, ERP-02-P19-D, AFRP-00-06, AFRP-00-12, AFRP-01-02, AFRP-02-02, AFRP-03-02		**SUMMARY --** There are several ERP and AFRP contracts that contribute to achieving this milestone. Several channel restoration projects in the mining reach of the Tuolumne River and the Merced River Salmon Habitat Restoration Project improve passage for salmon and steelhead. One ERP contract provides for a landscape level, planning effort that examines expansion of anadromous fish habitat by identifying dams and diversions that could be altered or removed. One AFRP contract provide funds for a long range planning document to implement restoration and research on the Stanislaus River. Another AFRP project researches the vagaries of environmental factors and fall attraction flows as they affect up-migration and straying of Tuolumne River salmonids.			**AGENCY NOTES --**	**NOTES CONT'D --**

MULTI SPECIES CONSERVATION STRATEGY MILESTONE 97 -- EVALUATION OF INDIVIDUAL PROJECTS REVIEWED TO FORMULATE THE ROLLED UP SUMMARY

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
97	SJR	SR	Provide unimpeded upstream and downstream passage for salmon and steelhead on San Joaquin River Basin tributaries.		97 A. Number of additional miles of passage opened to salmon and steelhead on the Stanislaus River	AFRP-02-02						AFRP	JD Wikert USFWS		Develop a Consensus Based Plan to Direct the Long Term Implementation of Prioritized Restoration/Research in the Stanislaus River Below Goodwin Dam	Objective: Develop a consensus based plan to direct the long term implementation of prioritized restoration/research in the Stanislaus River below Goodwin Dam. ***The project is currently focused on finishing a summary of the existing fisheries data. The summary will be provided to the Stanislaus River Fish Group for review and comment in January 2004. Work continues on the Restoration Plan and conceptual model.***
97	SJR	SR			97 B. Number of passage impediments improved or removed for salmon and steelhead on the Stanislaus River	ERP-98-N02	Oct-98	Mar-00	49,000	71,000	120,000	Institute for Fisheries Resources (IFR)	Dr. Guy D. Phillips		Expanding California Salmon Habitat to Alter Dams and Diversions	The project has five basic features: 1) document the extent, timing, and financing of the opportunity for acquisition/modification of private dams from willing sellers, (2) identify candidate Central Valley sites, (3) develop a template for analysis and resolution of issues for use by the public and agencies for all potential sites, (4) develop a private sector mechanism to acquire dams from willing sellers, and (5) conduct community and peer review workshops. Contributes to fish passage in all EMZs. ***William F. "Zeke" Grader, Institute for Fisheries Resources. Planning***
97	SJR	SR			97 B. Number of passage impediments improved or removed for salmon and steelhead on the Stanislaus River	AFRP-03-02						AFRP	Jeff McLain USFWS		Up-Migration and Straying of Tuolumne River Salmonids in Response to Fall Attraction Flows and Environmental Factors	Objective: The proposed study will examine the relationship of environmental explanatory variables with: a) the annual variation in arrival timing of fall run Chinook salmon in the lower Tuolumne River, and b) the annual proportion of stray coded wire tag (CWT) from the San Joaquin basin that are recovered in Sac River tributaries. Environmental variables will include flow, water quality, and regional meteorology. Annual carcass surveys of the Tuolumne River will be used to indicate the upmigration timing of the San Joaquin basin at large. CWT recovery of Merced River Fish Facility (MRFF) tag codes released in the San Joaquin basin tributaries will be compared to the numbers recovered in the American, Feather and Mokelumne Rivers in the Sacramento River basin. ***The proposal was reviewed by AFRP staff, TRAC, and California Bay-Delta Progrram ERP staff in July 2003. The proposal was revised and later accepted by the AFRP in Sept. 2003.***

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
97	SJR	SR			97 B. Number of passage impediments improved or removed for salmon and steelhead on the Stanislaus River	AFRP-02-02						AFRP	JD Wikert USFWS		Develop a Consensus Based Plan to Direct the Long Term Implementation of Prioritized Restoration/Research in the Stanislaus River Below Goodwin Dam	Objective: Develop a consensus based plan to direct the long term implementation of prioritized restoration/research in the Stanislaus River below Goodwin Dam. ***The project is currently focused on finishing a summary of the existing fisheries data. The summary will be provided to the Stanislaus River Fish Group for review and comment in January 2004. Work continues on the Restoration Plan and conceptual model.***
97	SJR	SR			97 C. Number of additional miles of passage opened to salmon and steelhead on the Tuolumne River	ERP-02-P19-D	3-Mar		10,839,000		10,839,000	Turlock Irrigation District	Wilton Fryer		Tuolumne River Mining Reach Restoration Project: Warner-Deardorff Segment No. 3 Construction	Number of additional miles of passage improved for salmon and steelhead on the Tuolumne River. Improve juvenile salmon survival by preventing future connection between the Tuolumne River and off-channel mining pits. (proposed 1.3 miles). ***Implementation project not complete. Jeff McLain, USFWS.***
97	SJR	SR			97 D. Number of passage impediments improved or removed for salmon and steelhead on the Tuolumne River	ERP-99-F01	Sep-99	Mar-02	164,800		164,800	Turlock Irrigation District	Wilton Fryer		Tuolumne River Run Pool 10 Restoration	Restoration of instream aquatic habitat and shaded riverine aquatic habitat and reduction of predatory fish habitat for the benefit of salmon. The full SRP 10 project will rebuild a portion of the Tuolumne River channel, at river mile 25.4. The project will remove mining pit ponds. ***This project is complete. This is part of the larger full SRP 10 Restoration Project to restore RM 25.4 on the Tuolumne River. This phase included levee breach repair and baseline monitoring. This project contributes to eventual full restoration which will reduce salmonid fish predator habitat, restore and increase habitat for salmon production, reconstruct natural channel geometry, and restore native riparian plant communities. Jeff McLain, USFWS.***
97	SJR	SR			97 D. Number of passage impediments improved or removed for salmon and steelhead on the Tuolumne River	ERP-99-F02	Sep-99	Mar-02	3,332,050	3,145,000	11,003,800	Turlock Irrigation District	Wilton Fryer		Tuolumne River Mining Reach Restoration Project No. 2 - MJ Ruddy Segment	The MJ Ruddy Segment is Project No. 2 located between river mile 36.5 and 37.6 on the Tuolumne River. Objectives: 1) Restore and increase habitat for natural salmon production. 2) Reconstruct natural channel geometry scaled to current channel forming flows. 3) Restore native riparian plant communities. 4) Reduce salmonid fish predator habitat. ***Jeff McLain, USFWS. Implementation. Project not completed. This project is part of a larger restoration project to eventually restore the entire Mining Reach (6.1 miles@ RM 34.2 to 40.3) on the Tuolumne River. This project will eventually restore MJ Ruddy Reach (1.1 miles @ RM 36.5-37.6). No actual restoration has been accomplished to date; land has not been purchased.***
97	SJR	SR			97 D. Number of passage impediments improved or removed for salmon and steelhead on the Tuolumne River	ERP-97-M08	Feb-98		2,353,100			Turlock Irrigation District	Tim Ford		Tuolumne River Special Run Pool 9 Restoration	Reconstructing channels by isolating or filling in channel gravel extraction areas.Will change warmwater predator species habitat resulting from gravel mining to a more natural, dynamic morphology that will improve habitat for chinook salmon. ***Jeff McLain, USFWS. Implementation. .2 miles of riparian and riverine aquatic habitat. This project was completed. A final joint Environmental Assessment and Initial study for the restoration projects Special Run Pool (SRP) 9 and 10 (ERP 99 F01) and four project segments of the Gravel Mining Reach was completed in October 1999 with funding from this agreement. Pre-project monitoring that included habitat mapping, fish community evaluation, salmon smolt survival experiments, and geomorphic variables occurred during spring through fall of 1998. Instream work, floodplain construction, and revegetation was completed in 2001. Restored floodplain is currently being maintained to enhance survival of plantings.***

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
97	SJR	SR			97 D. Number of passage impediments improved or removed for salmon and steelhead on the Tuolumne River	ERP-97-M09	Jul-00	Dec-01	2,801,000	4,384,060	7,185,060	Turlock Irrigation District	Wilton Fryer		Tuolumne River Setback Levees and Channel Restoration	Channel reconstruction in deep pit areas created by past gravel mining. ***Jeff McLain, USFWS. Implementation. .6 river miles of riparian and riverine aquatic habitat. Project completed. This project is part of a larger restoration project to eventually restore the entire Mining Reach (6.1 miles@ RM 34.2 to 40.3) on the Tuolumne River. This specific project will eventually restore the 7/11 segment (.6 miles @ RM 37.7-40.3). This project filled-in mining pits for instream habitat and floodplain enhancement.***
97	SJR	SR			97 D. Number of passage impediments improved or removed for salmon and steelhead on the Tuolumne River	AFRP-00-12						AFRP	Jeff McLain USFWS		Tuolumne River: Special Run Pool 10 Dike Repair and Pre-Project Monitoring	Objective: A levee separating a gravel extraction pit from the Tuolumne River was damaged during the 1997 floods connecting the deepwater habitat with the Tuolumne River. This project will reduce juvenile salmonid fish predator habitat by repairing the levee and isolating the mining pit from the Tuolumne River. This project will also collect a second year of pre-project monitoring to better establish base line conditions for the full SRP 10 restoration project. ***The levee breach repair was completed in 2001 and the pre-project monitoring was completed in early 2002.***
97	SJR	SR			97 D. Number of passage impediments improved or removed for salmon and steelhead on the Tuolumne River	AFRP-00-06						AFRP	Jeff McLain USFWS		Continue to restore the 7/11 segment of the mining reach on the Tuolumne River	***Objective: To restore and increase riparian and instream habitat to support natural production of the San Joaquin fall-run Chinook salmon; Reconstruct a natural channel geometry scaled to current channel forming flows; Restore native riparian plant communities within their predicted hydrological regime; and Reduce the occurrence of salmonid fish predator habitat.***
97	SJR	SR			97 D. Number of passage impediments improved or removed for salmon and steelhead on the Tuolumne River	AFRP-01-02	na	na	3,501,000	3,376,000	6,877,000	Turlock Irrigation District	Wilton Fryer		Tuolumne River Mining Reach Restoration No. 3, Warner-Deardorff Segment	This project is 1 of 4 phases of the overall Mining Reach Project to restore floodplain and riparian habitat to 6.1 miles of the Tuolumne River. This project ties into the permanent floodplain channel reconstruction at the downstream end of a set back dike constructed during a previous project phase. Deep pit areas created by past gravel mining will be filled in to re-create a riffle and run pattern that follows the restored meander channel of the river. ***Jeff McLain, Planning and pre-project monitoring; in planning phase. To date necessary cooperative agreements have been obtained; some engineering work has been done to facilitate hydraulic and fluvial models, environmental permits, monitoring, and right-of-way footprints. Design and monitoring work is continuing. When finished, the preliminary design will be distributed for technical review which will be used to finalize the design plans. Restoration will eventually cover 1.3 miles: river mile 35.2 to 36.5. References to 6.1 miles includes the entire river reach covered by four phased projects.***
97	SJR	SR			97 D. Number of passage impediments improved or removed for salmon and steelhead on the Tuolumne River	ERP-98-N02	Oct-98	Mar-00	49,000	71,000	120,000	Institute for Fisheries Resources (IFR)	Dr. Guy D. Phillips		Expanding California Salmon Habitat to Alter Dams and Diversions	The project has five basic features: 1) document the extent, timing, and financing of the opportunity for acquisition/modification of private dams from willing sellers, (2) identify candidate Central Valley sites, (3) develop a template for analysis and resolution of issues for use by the public and agencies for all potential sites, (4) develop a private sector mechanism to acquire dams from willing sellers, and (5) conduct community and peer review workshops. Contributes to fish passage in all EMZs. ***William F. "Zeke" Grader, Institute for Fisheries Resources. Planning***
97	SJR	SR			97 E. Number of additional miles of passage opened to salmon and steelhead on the Merced River											

MS Number	REGION	Project Type	Milestone	ERP Targets taken from ERPP Vol 2	MS Components or Questions for field personnel	ERP PROJECT NUMBERS	CONTRACT START DATE	CONTRACT END DATE	CALFED Award	Cost Share	Total Project Cost	Applicant	Principal Investigator	Quantifiable Units	Project Name	Comments
97	SJR	SR			97 F. Number of passage impediments improved or removed for salmon and steelhead on the Merced River	ERP-01-C03	Jul-01	Jun-04	1,699,101	6,176,800	7,875,901	Department of Water Resources	Stephani Spaar		Merced River Salmon Enhancement River Mile 42-44 Phase II	The Merced River Salmon Enhancement project will scale the channel between River miles 42 and 44 to fit the post-dam flow regime. Over the entire reach, the channel will be reshaped to include spawning riffles, runs and pools, with a meander that fits the approximate\e slope and bankfull flow of 1,700 cfs. The floodplains will be replanted with native riparian\vegetation. (Proposed 2 miles; 45 acres of pond area removed; 10 acres of pond area isolated). ***Implementation project not completed. (Proposed restoration of 2.0 miles of instream and riparian habitat). Fred Jurick, CDFG.***
97	SJR	SR			97 F. Number of passage impediments improved or removed for salmon and steelhead on the Merced River	ERP-98-F11	March, 1999	Sept, 2002	2,433,759		2,433,759	Department of Water Resources	Stephani Spaar		Phase 3: Merced River Salmon Habitat Enhancement	Reduce erosion and maintain gravel recruitment on the Merced River. Reconfigure the channel to improve river and floodplain dynamics and sediment transport. ***Fred Jurick, CDFG. Implementation. 2.0 miles of instream and riparian habitat. This project was merged into ERP-01-C03. Project not completed. Non-CALFED funded project contribution: 360 acres of CE along the Merced River of riparian and floodplain habitat. Created new river channel, bought gravel rights, and did restored instream habitat***
97	SJR	SR			97 F. Number of passage impediments improved or removed for salmon and steelhead on the Merced River	ERP-99-B04		Dec, 2002	762,000		762,000		Rhonda Reed		Preliminary Design and Engineering of Lower Western Stone Restoration Site, Merced River Ratzlaff/Robinson Channel Restoration Project	development of a cooperative program to restore salmonid spawning and rearing habitat to the Merced River. DWR shall prepare preliminary design and engineering plans for the restoration of a 3/4 mile long lower Western Stone reach restoration site. DWR will coordinate with USACOE and Merced Irrigation District. ***Fred Jurick, CDFG.Planning project not completed. Public scoping is still being conducted.***
97	SJR	SR			97 F. Number of passage impediments improved or removed for salmon and steelhead on the Merced River	ERP-99-B05	Sep-99	Mar-00	1,584,002		1,584,002	DFG	Fred Jurick		Partial funding for Phase I Construction of the Robinson/Gallo Salmon Restoration Project: Ratzlaff Reach Site	Restore natural channel configurations on the Merced River to reduce salmonid predator habitat and improve the migration corridor. ***Fred Jurick, CDFG. Implementation project completed. Restored .5 miles of instream habitat, and created 10 acres of riparian habitat.***
97	SJR	SR			97 F. Number of passage impediments improved or removed for salmon and steelhead on the Merced River	ERP-98-N02	Oct-98	Mar-00	49,000	71,000	120,000	Institute for Fisheries Resources (IFR)	Dr. Guy D. Phillips		Expanding California Salmon Habitat to Alter Dams and Diversions	The project has five basic features: 1) document the extent, timing, and financing of the opportunity for acquisition/modification of private dams from willing sellers, (2) identify candidate Central Valley sites, (3) develop a template for analysis and resolution of issues for use by the public and agencies for all potential sites, (4) develop a private sector mechanism to acquire dams from willing sellers, and (5) conduct community and peer review workshops. Contributes to fish passage in all EMZs. ***William F. "Zeke" Grader, Institute for Fisheries Resources. Planning***