

**Trinity River Restoration Program
FY2006**

PROJECT DESCRIPTIONS

#	Project Name	Program Branch
1	Personnel	Program Administration
2	Office Operations	Program Administration
3	RIC/OIC	Program Administration
4	Public Outreach Information	Program Administration
5	TMC Support	Program Administration
6	TAMWG	Program Administration
7	Science Advisory Board	Program Administration
8	Science Workshops	TMAG
9	Integrated Information Management System	TMAG
10	Integrated Monitoring Plan	TMAG
11	Floodplain Structures NEPA/CEQA	RIG
12	D/P - Floodplain Structures Relocation	RIG
13	D/P - Hydrology Study	RIG
14	D/P - DWR HEC - RAS Model	RIG
15	Implementation - Constr. Salt Flat/Biggers	RIG
16	Implementation - Constr. Poker Bar/Bucktail Bridges	RIG
17	Implementation - Poker Bar Road	RIG
18	Implementation - Floodplain Structures Relocation	RIG
18A	Floodplain Structures Itemized Costs	RIG
19	Channel Rehab NEPA/CEQA	RIG
20	Invasive/Non-native Plants/Animal Studies	RIG
21	Channel Rehab Mercury Monitoring	RIG
22	D/P - Canyon Creek Complex (4)	RIG
23	D/P - Restoration Sites below Lewiston Dam (4)	RIG
24	D/P - Restoration Site Design Below Lewiston Dam (8)	RIG
25	D/P - Indian Creek Rehab Site (3)	RIG
26	D/P - Bucktail Rehab Site (4)	RIG
27	D/P - Restoration Site Design (future implementation)	RIG
28	Hocker Flat Site Rehab Construction	RIG
29	Canyon Creek Complex Construction	RIG
30	Indian Creek Construction	RIG
31	Bucktail Construction	RIG
32	Restoration Construction Below Lewiston Dam (4)	RIG
33	Restoration Construction Below Lewiston Dam (8)	RIG
34	Revegetation of Implementation Sites	RIG
35	Coarse Sediment Introductions NEPA/CEQA	RIG
36	Delta Maintenance NEPA/CEQA	RIG
37	D/P - Coarse Sediment Introductions	RIG
38	D/P - Delta Maintenance	RIG
39	GVC Watershed Monitoring, Hamilton Ponds O & M	RIG
40	Hamilton Ponds Efficiency Study	RIG
41	Hamilton Ponds Upgrade	RIG
42	Geomorphic Mapping - See Bathymetric LIDAR	RIG
43	Implementation - Coarse Sediment Introductions	RIG
44	Implementation - Delta Maintenance	RIG
45	USGS: Watershed Strategy and Technical Support	RIG
46	Watershed Sediment Source Control Plans	RIG
47	Watershed Restoration Project Implementation	RIG
48	RCD Watershed Coordinator	RIG
49	Trinity County Watershed Grants	RIG
50	RIG AEAM (Personnel)	RIG
51	RIG - RIC/OIC	RIG
52	TMAG AEAM (Personnel)	TMAG
53	TMAG - RIC/OIC	TMAG

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54	Stream Flow Gaging	TMAG
55	Stream Gage Upgrades	TMAG
56	SNTEMP Water Temperature Modeling	TMAG
57	USFWS Water Temperature Monitoring	TMAG
58	USGS Water Temperature Monitoring	TMAG
59	Expert Consultation - Temperature Models	TMAG
60	Lewiston Lake Bathymetry	TMAG
61	Reservoir Water Temperature Models	TMAG
62	Sediment Monitoring	TMAG
63	Stream Turbidity Gaging	TMAG
64	USGS Sediment Monitoring QA	TMAG
65	Sediment Budget Calculations	TMAG
66	Sediment Symposium	TMAG
67	GSTARS Sediment Transport Model	TMAG
68	Expert Consultation - Physical Models	TMAG
69	Nelson Model	TMAG
70	Topographic Photogrammetry	TMAG
71	Bathymetric LIDAR	TMAG
72	Riparian Recruitment Model	TMAG
73	Riparian/Aquatic Avian Species Monitoring	TMAG
74	Riparian/Aquatic Herpetological Monitoring	TMAG
75	2-D Fish Habitat Modeling	TMAG
76	Expert Habitat Mapping Restoration Monitoring	TMAG
77	Smolt Response to Thermal Conditions	TMAG
78	Smolt Health (otolith and muscle tissue)	TMAG
79	Developing Model Input for SALMOD	TMAG
80	Quick Response, Mortality Monitoring	TMAG
81	Emigration Estimates (rotary trapping)	TMAG
82	Adult Chinook Salmon Migration	TMAG
83	Review of Outmigration Methodologies and Needs	TMAG
84	Fish Marking at Hatchery, Chinook-CWT, Coho, Steelhead	TMAG
85	Fish Response to Flows: Fall Flows; monitor	TMAG
86	Fish Response to Flows: Spring Bench	TMAG
87	Fish Response to Flows: Summer/Winter Base Flows	TMAG
88	Tribal Harvest Survey, Lower Klamath	TMAG
89	Angler Harvest	TMAG
90	Run Size/Harvest Estimates, incl. Reward Tags (Weirs)	TMAG
91	Carcass/Redd Surveys	TMAG
92	Fall and Spring Run Scale Analysis, Age Composition	TMAG
93	Chinook Tague Decoding at Hatchery	TMAG
94	Review of Adult Migration /Run Size Estimate Components	

**Trinity River Restoration Program
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Project Title: Personnel		
Program Branch: Program Administration		
Point of Contact: Doug		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 336,592	\$ 336,592
Description: Salary and benefits of TRRP Program Administration staff (Weaverville office). Includes four FTEs: Executive Director, Secretary, Budget Assistant, and two Branch Chiefs at 50% (balance of Branch Chiefs shown under RIG and TMAG). No difference between FY2006 President's Budget level and Full Program level. Benefits are calculated at 19%. All other TRRP personnel costs shown under RIG and TMAG.		
How is this supported by the Flow Study, ROD, and /or Implementation Plan? Refer to Section 7.1.3 of the Implementation Plan for initial staffing recommendations.		
What critical Program goals does this project or task support? Executive Director and staff execute policy and management decisions of the TMC; provides focus for the program and oversees the AEAM staff, which provides expert support to the TMC for scientific and technical evaluation, implementation, and coordination of program partners.		
Why must this be completed in FY2006? Can it be delayed for future years? Staff is already in place, needed for continued operation of the program.		
Is this a multiyear or ongoing project? Ongoing.		
If so give estimated cost for future years.		
FY2007: \$340,600		
FY2008: \$354,224		
FY2009:		
Other important information:		

**Trinity River Restoration Program
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Project Title: Office Operations		
Program Branch: Program Administration		
Point of Contact: Doug		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 447,780	\$ 457,780
Description: Includes GSA office lease (5,000 sq.ft. with TMC-approved expansion), utilities, security and janitorial services, supplies, equipment, 7 vehicles, travel/training for 15 employees, and relocation expenses for 1-2 employees per year (attrition). Note: relocation expenses for 2 new TMAG employees are included in FY2005. No difference between FY2006 President's Budget level and Full Program level. Includes office support costs for RIG and TMAG.		
How is this supported by the Flow Study, ROD, and /or Implementation Plan? Office and associated support costs acknowledged in Sections 7.1.3.1; 7.1.3.2; and 7.3 of the Implementation Plan.		
What critical Program goals does this project or task support? Office Operation costs are needed for Executive Director and AEAM staff to execute policy and management decisions of the TMC; and provide administrative, scientific and technical support.		
Why must this be completed in FY2006? Can it be delayed for future years? Office and staff are already in place, needed for continued operation of the program.		
Is this a multiyear or ongoing project? Ongoing.		
If so give estimated cost for future years.		
FY2007: \$327,359		
FY2008: \$330,380		
FY2009:		
Other important information:		

**Trinity River Restoration Program
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#

Project Title: RIC/OIC		
Program Branch: Program Administration		
Point of Contact: Doug		
	FY2006 President's Budget	Full Program Budget
Funding Level:		
Funding Amount:	\$ 185,386	\$ 185,386
Description: Indirect costs established by Regional and Area Reclamation Offices. Initial rates are estimates, with adjustments made later in the fiscal year. Covers human resources, public affairs, and other jointly funded support service organizations within other Reclamation offices. Calculated as a percentage of personnel compensation (salary/benefits), not against other office operation costs. Apportioned by FTE against Program Administration, RIG, and TMAG. FY2006 budgeted at 28% for RIC/OIC		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Office and associated support costs acknowledged in Sections 7.1.3.1; 7.1.3.2; and 7.3 of the Implementation Plan.		
What critical Program goals does this project or task support? Weaverville is a field office of Reclamation's Northern California Area Office. Indirect costs are needed for Reclamation to support the AEAM staff, who are Reclamation employees.		
Why must this be completed in FY2006? Can it be delayed for future years? Office and staff are already in place, needed for continued operation of the program.		
Is this a multiyear or ongoing project? Ongoing.		
If so give estimated cost for future years.		
FY2007: \$204,360		
FY2008: \$212,534		
FY2009:		
Other important information:		

**Trinity River Restoration Program
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Project Title: Public Information Outreach		
Program Branch: Program Management		
Point of Contact: Doug		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$40,000	\$80,000
Description: Publications (program brochures, annual accomplishment reports), quarterly newsletter articles, graphics and audio-visual support, displays and exhibits (e.g. Trinity County Fair, Coleman Hatchery and Trinity County Salmon Festivals, hatchery kiosk), and other information and public contact activities.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Section 7 of the Implementation Plan references in several locations the need for collaboration, public information, public relations, interaction with stakeholder groups. Specifically, the Executive Director is identified as the point of contact for public relations.		
What critical Program goals does this project or task support? Several components of the program are highly visible and potentially controversial, including much higher peak flows, floodplain structure modifications, construction of channel rehab sites, and gravel introductions. It is critical to the success of the program that education and outreach efforts be conducted to inform local residents of project objectives, gain support, and minimize the potential for conflict. It is also important to publicize successful accomplishments, and provide public health and safety notices related to high flows.		
Why must this be completed in FY2006? Can it be delayed for future years? Amount of funding can be reduced or delayed to some degree, but as the program continues to implement more visible channel rehab projects, acquire or modify privately owned structures, and implement higher flows, it will be increasingly important to inform, educate, and work with the public to successfully achieve program objectives.		
Is this a multiyear or ongoing project? If so give estimated cost for future years. Ongoing.		
If so give estimated cost for future years.		
FY2007: \$80,000		
FY2008: \$80,000		
FY2009:		
Other important information:		

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Project Title: TMC Participation		
Program Branch: Program Mgmt.		
Point of Contact: Doug		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 700,759	\$ 913,095
Description: Four Main Categories: 1) Primary Members: Time, travel, and per diem costs for 8 principle TMC members to attend four 2-day Quarterly Meetings per year, plus one special 2-day called session, for purposes of directing TRRP activities. Time, travel, and per diem costs for 8 principle TMC members for program coordination. 2) Alternates and/or Technical Representatives (2 maximum, does not include project labor): Time, travel, and per diem costs for technical representatives to attend four 2-day Quarterly Meetings per year, plus one special 2-day called session, plus 12 technical team meetings for purposes of coordinating with TRRP staff. 3) Non-Project Specific Document Review and Coordination with TRRP Staff: Time, travel, and per diem. 4) Non-Project Specific Support (prorated based on % use for TRRP): Office supplies, computers, other equipment, vehicles, other items needed to conduct TRRP related activities, and indirect costs. Costs will vary by TMC member depending on specific types of assistance provided. Does not include technical and support costs for specific projects.	Only includes funding at FY05 level for Hoopa Valley and Yurok Tribes and Trinity County.	Estimated costs are based on figures provided by TMC members for the 9/30/04 budget proposal. Those amounts were reduced by 7% ATB by the TMC in the final approved budget.
How is this supported by the Flow Study ROD, and /or Implementation Plan? Trinity Management Council costs are acknowledged in Sections 7.1.1 and 7.3 of the Implementation Plan.		
What critical Program goals does this project or task support? Participation by Federal, Tribal, State, and local (county) agencies is critical for effective and credible implementation of the program. Members have decision-making authority for their organization; collectively interpret and recommend policy while staying out of day-to-day operations; coordinate and review management actions, including development of budgets and flow schedules.		
Why must this be completed in FY2006? Can it be delayed for future years? This group is fundamental to the program, and cannot be delayed. Participation costs are being reviewed by TMC members to clearly separate out administration costs from project-specific costs and improve consistency among members.		
Is this a multiyear or ongoing project? Ongoing.		
If so give estimated cost for future years.		
FY2007: \$914,753		
FY2008: \$915,431		
FY2009:		
Other important information:		

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Project Title: TAMWG		
Program Branch: Program Mgmt.		
Point of Contact: Doug		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 50,000	\$ 56,000
Description: Travel and per diem costs for approximately 15-20 TAMWG members to attend four 1-2 day meetings per year for purposes of reviewing and advising on TRRP activities and four 1-2 day subcommittee meetings per member per year; also includes administrative support costs of FWS designated federal official and staff (1 part-time employee). Full Program level includes additional \$6,000 per year for increased TAMWG member participation in technical and other meetings where considered appropriate by the designated federal official.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? TAMWG costs are acknowledged in Sections 7.1.2 and 7.3 of the Implementation Plan.		
What critical Program goals does this project or task support? Stakeholder participation is critical for effective and credible implementation of the program. Provides management recommendations, alternate hypotheses, and identifies areas of concern to TMC and Executive Director.		
Why must this be completed in FY2006? Can it be delayed for future years? The second TAMWG charter has been approved by the Secretary, new members have been nominated, and formal appointments are imminent. The group has already played an important role in the program, and needs to continue. It is essential to maintain and expand their role in FY2006 and beyond.		
Is this a multiyear or ongoing project? Ongoing.		
If so give estimated cost for future years.		
FY2007: \$56,000		
FY2008: \$56,000		
FY2009: \$56,000		
Other important information:		

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Project Title: Science Advisory Board/Independent Review Panels		
Program Branch: Program Mgmt.		
Point of Contact: Rod		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 125,000	\$ 250,000
Description: Travel and per diem costs plus review time at current salary rates for 5 independent scientists to assist with TRRP science program activities, including annual assessments. FY2006 President's Budget level only includes costs for SAB. Full Program level includes increased participation by SAB as well as active involvement of Independent Review Panels for expanded RFP process.		
How is this supported by the Flow Study, ROD, and /or Implementation Plan? SAB and Independent Review Committee costs are acknowledged in Sections 7.1.4.1; 7.1.4.2; and 7.3 of the Implementation Plan.		
What critical Program goals does this project or task support? Scientific and objective peer review is critical for effective and credible implementation of the adaptive environmental assessment and management component of the program.		
Why must this be completed in FY2006? Can it be delayed for future years? Scientific Advisory Board members have been selected and are just beginning to become an effective part of the TRRP process. It is essential to maintain and expand their role in FY2006 and beyond.		
Is this a multiyear or ongoing project? Ongoing.		
If so give estimated cost for future years.		
FY2007: \$250,000		
FY2008: \$250,000		
FY2009: \$250,000		
Other important information:		

**Trinity River Restoration Program
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Project Title: Science Workshops		
Program Branch: Program Mgmt.		
Point of Contact: Rod		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ -	\$ 50,000
Description: Planning and implementation costs, including travel/per diem for selected professional experts, for science workshops (fisheries, sediment, riparian).		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Facilitates coordination with program partners of assessments and analyses of monitoring data, planning of future analyses.		
What critical Program goals does this project or task support? AEAM execution		
Why must this be completed in FY2006? Can it be delayed for future years? Annual coordination and input from partners and external scientists.		
Is this a multiyear or ongoing project? On-going.		
If so give estimated cost for future years.		
FY2007: \$50,000		
FY2008: \$50,000		
FY2009:		
Other important information:		

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Project Title: Integrated Information Management System		
Program Branch: Program Mgmt.		
Point of Contact: Rod		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 50,000	\$ 75,000
Description: Design and develop prototype relational database consistent with conceptual models and monitoring plans. In out-years, acquire, format, and populate database with relevant and necessary information for adaptive management purposes.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? AEAM execution.		
What critical Program goals does this project or task support? Data management and decision support.		
Why must this be completed in FY2006? Can it be delayed for future years? Data management is crucial to annual decision making processes.		
Is this a multiyear or ongoing project? Multiyear		
If so give estimated cost for future years.		
FY2007: \$75,000		
FY2008: \$75,000		
FY2009: \$75,000		
Other important information:		

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Project Title: Integrated Monitoring Plan		
Program Branch: TMAG		
Point of Contact: Rod		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 15,000	\$ 25,000
Description: As part of the initial Science Framework contract (FY04), review past models and hypotheses, review/revise conceptual models developed by TRRP staff and partners, facilitate workshops to develop adaptive management protocol, finalize monitoring and modeling plans. For option year (FY05), initiate implementation of the relational database including loading of highest priority data, system documentation, test and refine database, and finalize database templates for use by partner agencies.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Plans the execution of the assessment portion of the AEAM program.		
What critical Program goals does this project or task support? Assessment, monitoring , modeling, and analysis		
Why must this be completed in FY2006? Can it be delayed for future years? Continuation towards completion, maintenance of assessment plans.		
Is this a multiyear or ongoing project? On-going		
If so give estimated cost for future years.		
FY2007: \$25,000		
FY2008: \$25,000		
FY2009:		
Other important information:		

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Project Title: Floodplain Structures NEPA/CEQA		
Program Branch: RIG		
Point of Contact: Brandt		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 200,000	\$ 200,000
Description: NEPA/CEQA preparation with supplemental funding provided for permit fees, consultation with private NEPA/CEQA contractors (e.g., for cumulative effects of Trinity ROD analyses), and support to CEQA leads. \$175,000 allocated for Indian Creek project (which includes 2 rehab sites and a side channel & potentially in-river channel work- depending on results of HEC-RAS inundation modeling for implementation of rehab sites and side channel). \$25,000 for other floodplain work (e.g., Poker Bar Roads).		
How is this supported by the Flow Study ROD, and /or Implementation Plan? To implement the ROD's variable flow regime (over 7,000 cfs), including 11,000 cfs extremely wet year flows, this work is required. The Implementation Plan (and environmental laws) require adherence to federal and state environmental laws and permitting. Mainstem EIS and Implementation Plan require negotiation, removal/relocation or fixing of floodplain problems caused by ROD implementation.		
What critical Program goals does this project or task support? This is critical path so there is no difference between the full program and president's budget.		
Why must this be completed in FY2006? Can it be delayed for future years? To have the option to release 11,000 cfs - this work is critical.		
Is this a multiyear or ongoing project?		
If so give estimated cost for future years.		
FY2007: \$100,000		
FY2008: \$50,000		
FY2009:		
Other important information:		

**Trinity River Restoration Program
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#

Project Title: Design/Planning - Floodplain Structures Relocation		
Program Branch: RIG		
Point of Contact: Denise		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 40,000	\$ 40,000
Description: Identify impacted structures along the river at 8,500 and 11,000 cfs with 10 and 100 year tributary flows. Prepare designs to mitigate impacts to structures in order to implement the ROD releases according to the water year determination.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? The ROD states "Reclamation will take appropriate steps in a timely manner to ensure that affected bridges, houses, and out-buildings are structurally improved or relocated or otherwise addressed before implementing recommended peak releases for Wet or Extremely Wet water years (8,500 and 11,000 cfs, respectively). "		
What critical Program goals does this project or task support? Implementation of the higher ROD flows cannot occur without addressing impacted structures.		
Why must this be completed in FY2006? Can it be delayed for future years? If the 2006 water year is determined to be an Extremely Wet water year, the floodplain will need to be able to pass 11,000 cfs + 10 year tributary accretions.		
Is this a multiyear or ongoing project? Yes, work will still be required in the outyears to accommodate 11,000 cfs + 100 year tributary accretions.		
If so give estimated cost for future years.		
FY2007: \$50,000		
FY2008: \$50,000		
FY2009:		
Other important information:		

**Trinity River Restoration Program
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#

Project Title: Design/Planning - Hydrology Study		
Program Branch: RIG		
Point of Contact: Joe		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 100,000	\$ 100,000
Description: Develop flood frequency curves for all major tributaries contributing to mainstem Trinity River flows upstream of the North Fork Trinity River. This study is required for rehabilitation site design, hydraulic modeling (see DWR HEC-RAS model), infrastructure impacts, and coordination with FEMA and Trinity County to revise the existing obsolete floodplain maps.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? This study provides further definition of tributary contributions to mainstem Trinity River flows, and will be used to develop design criteria for floodplain infrastructure improvements and rehabilitation projects.		
What critical Program goals does this project or task support? Infrastructure impacts and channel rehabilitation projects.		
Why must this be completed in FY2006? Can it be delayed for future years? This study is required for immediate planning purposes as it relates to infrastructure impacts and rehabilitation site designs. This study can not be delayed.		
Is this a multiyear or ongoing project? It is anticipated that this work will begin in FY05 with \$50,000 from the FY05 budget.		
If so give estimated cost for future years.		
FY2007:		
FY2008:		
FY2009:		
Other important information:		

**Trinity River Restoration Program
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#

Project Title: Design/Planning - DWR HEC-RAS Model		
Program Branch: RIG		
Point of Contact: Joe		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 30,000	\$ 30,000
Description: To maintain and develop additional site-specific information associated with the 1-dimensional hydraulic model prepared in FY05. This model will be for the upper 40 miles to determine infrastructure impacts, facilitate rehabilitation site design, and comply with FEMA requirements.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? This study provides information on water surface elevations resulting from various levels of Trinity River flows. This information will be used to determine infrastructure impacts and to develop design criteria for rehabilitation projects.		
What critical Program goals does this project or task support? Infrastructure impacts and channel rehabilitation projects.		
Why must this be completed in FY2006? Can it be delayed for future years? This work is required for immediate planning purposes as it relates to infrastructure impacts, rehabilitation site design, and habitat modeling.		
Is this a multiyear or ongoing project? Multiyear.		
If so give estimated cost for future years.		
FY2007: \$10,000		
FY2008: \$10,000		
FY2009: \$10,000		
Other important information:		

**Trinity River Restoration Program
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Project Title: Construction Biggers/Salt Flat Bridges		
Program Branch: RIG		
Point of Contact: Ed		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 200,000	\$ 200,000
Description: Construction activities under this contract are scheduled for completion by September 2005. This \$200,000 will fund the contract modification for construction impacts of ROD flows which were not anticipated at the time of award.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? The ROD identified modifying/replacing bridges as a component of the programs.		
What critical Program goals does this project or task support? Completing the bridges is required before high dam releases prescribed in the ROD can be implemented.		
Why must this be completed in FY2006? Can it be delayed for future years? Closeout activities are required to comply with realty agreements. Delays would violate the agreements.		
Is this a multiyear or ongoing project? Construction due to be completed 09/30/05		
If so give estimated cost for future years.		
FY2007:		
FY2008:		
FY2009:		
Other important information:		

**Trinity River Restoration Program
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#

Project Title: Construction Poker Bar/Bucktail Bridges		
Program Branch: RIG		
Point of Contact: Ed		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 10,000	\$ 10,000
Description: Construction activities under this contract are scheduled for completion by September 2005. This \$10,000 will fund contract closeout activities, including as-built drawings and transfer paperwork.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? The ROD identified modifying /replacing bridges as a component of the program.		
What critical Program goals does this project or task support? Completing the bridges is required before high dam releases prescribed in the ROD can be implemented.		
Why must this be completed in FY2006? Can it be delayed for future years? Closeout activities are required to comply with realty agreements. Delays would violate the agreements.		
Is this a multiyear or ongoing project? Construction due to be completed 09/30/05		
If so give estimated cost for future years.		
FY2007:		
FY2008:		
FY2009:		
Other important information:		

**Trinity River Restoration Program
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PROJECT DESCRIPTIONS**

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Project Title: Implementation - Poker Bar Road		
Program Branch: RIG		
Point of Contact: Denise		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 230,000	\$ 230,000
Description: Raising approximately 1.1 miles of roads within the subdivision which are inundated at high flows, includes construction contract and construction management costs.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? The ROD states "Reclamation will take appropriate steps in a timely manner to ensure that affected bridges, houses, and out-buildings are structurally improved or relocated or otherwise addressed before implementing recommended peak releases for Wet or Extremely Wet water years (8,500 and 11,000 cfs, respectively). "		
What critical Program goals does this project or task support? Implementation of the higher ROD flows cannot occur without addressing impacted structures.		
Why must this be completed in FY2006? Can it be delayed for future years? If the 2006 water year is determined to be a Wet or Extremely Wet water year, these roads will need to be able to pass 8,500 or 11,000 cfs respectively.		
Is this a multiyear or ongoing project? It is anticipated that this work will begin in FY05 with \$36,222 from the FY05 budget		
If so give estimated cost for future years.		
FY2007:		
FY2008:		
FY2009:		
Other important information:		

**Trinity River Restoration Program
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PROJECT DESCRIPTIONS**

#

Project Title: Implementation - Floodplain Structures Relocation		
Program Branch: RIG		
Point of Contact: Denise		
	FY2006 President's Budget	Full Program Budget
Funding Level:		
Funding Amount:	\$ 1,320,000	\$ 1,570,000
Description: Implementation of the floodplain structure modification program. Full program budget assumes 2 major property purchases. The President's budget assumes 1 major property purchase. (See itemized breakdown of costs on following page)		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Infrastructure improvements or modifications, including rebuilding or fortifying bridges and addressing other structures affected by the peak instream flows provided by this ROD.		
What critical Program goals does this project or task support? Reclamation will take appropriate steps in a timely manner to ensure that affected bridges, houses, and out-buildings are structurally improved or relocated or otherwise addressed before implementing recommended peak releases for Wet or Extremely Wet water years (8,500 and 11,000 cfs, respectively).		
Why must this be completed in FY2006? Can it be delayed for future years? If the 2006 water year is determined to be an Extremely Wet water year, the floodplain will need to be able to pass 11,000 cfs + 10 year tributary accretions.		
Is this a multiyear or ongoing project? Yes, work will still be required in the outyears to accommodate 11,000 cfs + 100 year tributary accretions.		
If so give estimated cost for future years.		
FY2007: \$1,400,000		
FY2008: \$1,000,000		
FY2009:		
Other information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Implementation - Floodplain Structures Relocation - Itemized Costs		
Program Branch: RIG		
Point of Contact: Denise		
	FY2006 President's Budget	Full Program Budget
Funding Level:		
Itemized list of Floodplain Structure costs		
Pump Houses	\$ 50,000	\$ 50,000
Driveways	50,000	50,000
Well Emergencies	30,000	30,000
Indian Creek	165,000	165,000
Ann Jordan	175,000	175,000
Major Structures above Rush Creek	75,000	75,000
Removing Tullis	50,000	50,000
Major Structure Purchases (1 vs. 2)	450,000	700,000
Realty Agreements	25,000	25,000
Well Grant Program	250,000	250,000
Total	\$ 1,320,000	\$ 1,570,000

Note: Amounts include any contracting & construction management costs.

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Channel Rehab NEPA/CEQA		
Program Branch: RIG		
Point of Contact: Brandt		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 200,000	\$ 200,000
Description: NEPA/CEQA environmental documentation and permitting contract to cover 1) 4 channel rehab sites below Canyon Creek, 2) 4 rehab sites below Lewiston dam, and the Bucktail complex of 3 rehab projects and 1 side channel. Where possible TMAG surveys will be used to meet pre-project survey requirements.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? The ROD requires implementation of 24 rehab projects in the first 3 years. The Implementation plan (and environmental laws) require adherence to federal and state environmental laws and permitting.		
What critical Program goals does this project or task support? Channel Rehabilitation.		
Why must this be completed in FY2006? Can it be delayed for future years? Environmental compliance is required for implementation.		
Is this a multiyear or ongoing project? YES		
If so give estimated cost for future years.		
FY2007: \$200,000		
FY2008: \$200,000		
FY2009: \$200,000		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Invasive/Non-native Plant/Animal Studies		
Program Branch: RIG		
Point of Contact: Bob		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 25,000	\$ 25,000
Description: Provide comprehensive species-specific recommendations for mapping, modeling, and management recommendations for exotic plant species on proposed rehabilitation sites to meet the Science Framework and environmental compliance monitoring needs.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Required to complete after each engineering implementation as part of environmental compliance and riparian vegetation modeling and monitoring needs as stipulated in the TRFES and environmental compliance mitigation requirements for proposed rehabilitation sites, and to address any potential criticism from Trinity County regarding exotic weed control in association with projects.		
What critical Program goals does this project or task support? Required to complete after each engineering implementation as part of environmental compliance and riparian vegetation modeling and monitoring needs as stipulated in the TRFES and environmental compliance mitigation requirements for proposed rehabilitation sites, and to address any potential criticism from Trinity County regarding exotic weed control in association with projects.		
Why must this be completed in FY2006? Can it be delayed for future years? Required to complete after each engineering implementation as part of environmental compliance and riparian vegetation modeling and monitoring needs as stipulated in the TRFES and environmental compliance mitigation requirements for proposed rehabilitation sites, and to address any potential criticism from Trinity County regarding exotic weed control in association with projects. No, it must be done a head of time to meet any management needs and to anticipate budget needs for revegetation at proposed restoration sites.		
Is this a multiyear or ongoing project? NO, this would be the last year of anticipated funding.		
If so give estimated cost for future years.		
FY2007: N/A		
FY2008: N/A		
FY2009: N/A		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Channel Rehab Mercury Monitoring		
Program Branch: RIG		
Point of Contact: Brandt		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ -	\$ 25,000
Description: After permitting of Hocker Flat via the North Coast Region Water Quality Control Board (NCRWQCB), this project budget acknowledges potential need for site specific Hg information in areas where contamination may exceed Hocker Flat levels (e.g., where sluice sands are found). Samples will need to be tested and techniques verified (with NCRWQCB support) to ensure that rehab projects do not increase available Hg in the river.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? The ROD requires implementation of channel rehab projects. In order to legally implement these projects the NCRWQCB needs to be satisfied that projects will not degrade Trinity River water quality.		
What critical Program goals does this project or task support? Implementation of Channel Rehab Projects		
Why must this be completed in FY2006? Can it be delayed for future years? Site specific samples may be required to ensure that concentrations are no greater than those already addressed at Hocker Flat.		
Is this a multiyear or ongoing project? Multiyear		
If so give estimated cost for future years.		
FY2007: \$25,000		
FY2008:		
FY2009:		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Canyon Creek Complex Designs		
Program Branch: RIG		
Point of Contact: Joe		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 20,000	\$ 20,000
Description: Preparation of specifications for group of 4 rehabilitation sites downstream of Canyon Creek. Rehab sites are; Conner Creek, Valdor Gulch, Elkhorn, and Pear Tree Gulch.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Rehabilitation sites are required under the ROD.		
What critical Program goals does this project or task support? Construction of rehabilitation sites.		
Why must this be completed in FY2006? Can it be delayed for future years? To stay on schedule for the completion of 24 rehabilitation sites by the end of 2008. Delay of this project will have a corresponding delay in the schedule for rehab site implementation.		
Is this a multiyear or ongoing project? Ongoing.		
If so give estimated cost for future years.		
FY2007:		
FY2008:		
FY2009:		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Design/Planning for Restoration Sites below Lewiston Dam (4)		
Program Branch: RIG		
Point of Contact: Joe		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 160,000	\$ 160,000
Description: Design and planning for four rehabilitation sites from Lewiston Dam to near Cemetery Hole. It is anticipated that this work will be performed through a financial assistance agreement with the HVT.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Rehabilitation sites are required under the ROD.		
What critical Program goals does this project or task support? Construction of rehabilitation sites.		
Why must this be completed in FY2006? Can it be delayed for future years? To stay on schedule for the completion of 24 rehabilitation sites by the end of 2008. Delay of this project will have a corresponding delay in the schedule for rehab site implementation.		
Is this a multiyear or ongoing project? Ongoing.		
If so give estimated cost for future years.		
FY2007: \$20,000 *		
FY2008:		
FY2009:		
Other important information: * Preparation of specifications.		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Design/Planning - Restoration Sites Below Lewiston Dam (8)		
Program Branch: RIG		
Point of Contact: Joe		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ -	\$ 50,000
Description: Design and planning for eight rehabilitation sites below Lewiston Dam to complete Phase 1 of rehabilitation sites.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Rehabilitation sites are required under the ROD.		
What critical Program goals does this project or task support? Construction of rehabilitation sites.		
Why must this be completed in FY2006? Can it be delayed for future years? To stay on schedule for the completion of 24 rehabilitation sites by the end of 2008. Initiating these designs in FY06 will ensure that the implementation schedule will be accomplished.		
Is this a multiyear or ongoing project? Multiyear.		
If so give estimated cost for future years.		
FY2007: \$300,000		
FY2008:		
FY2009:		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Design/Planning - Indian Creek Rehab Sites		
Program Branch: RIG		
Point of Contact: Joe		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 100,000	\$ 100,000
Description: Design and planning for two rehabilitation sites and a side channel near Indian Creek. Includes special consideration for flood control consequences and the ability to implement the ROD flows.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Higher dam flows, rehabilitation sites and side channels are required under the ROD.		
What critical Program goals does this project or task support? Construction of rehabilitation sites and side channels and implementation of ROD flows.		
Why must this be completed in FY2006? Can it be delayed for future years? To stay on schedule for the completion of 24 rehabilitation sites by the end of 2008, and to ensure implementation of ROD flows as scheduled.		
Is this a multiyear or ongoing project? Ongoing. Design activities were initiated in FY05.		
If so give estimated cost for future years.		
FY2007:		
FY2008:		
FY2009:		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Design/Planning - Bucktail Rehab Site		
Program Branch: RIG		
Point of Contact: Joe		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 20,000	\$ 20,000
Description: Specifications preparation for three rehabilitation sites and a side channel upstream of Bucktail area.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Rehabilitation sites and side channels are required under the ROD.		
What critical Program goals does this project or task support? Construction of rehabilitation sites and side channels.		
Why must this be completed in FY2006? Can it be delayed for future years? To stay on schedule for the completion of 24 rehabilitation sites by the end of 2008. Delay of this project will have a corresponding delay in the schedule for rehab site implementation.		
Is this a multiyear or ongoing project? Ongoing. Design activities were initiated in FY05 by DWR.		
If so give estimated cost for future years.		
FY2007:		
FY2008:		
FY2009:		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Design/Planning - Restoration Site Design (future Implementation)		
Program Branch: RIG		
Point of Contact: Joe		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ -	\$ -
Description: Design and planning for rehabilitation sites in Phase 2 (remaining 23 rehab sites).		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Rehabilitation sites are required under the ROD.		
What critical Program goals does this project or task support? Construction of rehabilitation sites.		
Why must this be completed in FY2006? Can it be delayed for future years? To stay on schedule for the completion of 47 rehabilitation sites by the end of 2012. Delay of this project will have a corresponding delay in the schedule for rehab site implementation.		
Is this a multiyear or ongoing project?		
If so give estimated cost for future years.		
FY2007:		
FY2008: \$300,000		
FY2009:		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Hocker Flat Site Rehab Construction		
Program Branch: RIG		
Point of Contact: Joe		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 200,000	\$ 215,000
Description: Second-year costs of reconstructing approximately 1 mile of river below Canyon Creek. Includes \$145,000 in construction contract costs deferred from FY05 plus construction management costs and 10% for potential contract modifications. President's budget assumes TRRP manages construction in year FY06 versus management provided by Willows Construction office.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Rehabilitation sites are required under the ROD.		
What critical Program goals does this project or task support? Construction of rehabilitation sites.		
Why must this be completed in FY2006? Can it be delayed for future years? The remaining contract cost must be provided to the contractor or late charges will be assessed.		
Is this a multiyear or ongoing project? Ongoing. \$630,000 of the total \$775,000 construction contract was obligated from FY05 funds.		
If so give estimated cost for future years.		
FY2007:		
FY2008:		
FY2009:		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Canyon Creek Complex Construction		
Program Branch: RIG		
Point of Contact: Joe		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 600,000	\$ 1,035,000
Description: Includes full contract plus non-contract costs of constructing 4 rehab sites below Canyon Creek for a total of \$1,035,000. Estimated incurred contract costs in FY06 based on a March 06 award is \$600,000. The remaining \$435,000 is deferred in the President's budget to FY07.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Rehabilitation sites are required under the ROD.		
What critical Program goals does this project or task support? Construction of rehabilitation sites.		
Why must this be completed in FY2006? Can it be delayed for future years? To stay on schedule for the completion of 24 rehabilitation sites by the end of 2008. Delay of this project will have a corresponding delay in the schedule for rehab site implementation.		
Is this a multiyear or ongoing project? It is an ongoing project that could become multi-year based on availability of funds.		
If so give estimated cost for future years.		
FY2007: \$435,000 if President's budget is adopted.		
FY2008:		
FY2009:		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Indian Creek Construction		
Program Branch: RIG		
Point of Contact: Joe		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 285,000	\$ 1,725,000
Description: Includes full contract plus non-contract costs of constructing 2 rehab sites and a side channel near Indian Creek, for a total of \$1,725,000. Estimated incurred contract costs in FY06 based on a August 06 award is \$285,000. The remaining \$1,440,000 is deferred in the President's budget to FY07.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Higher dam flows, rehabilitation sites and side channels are required under the ROD.		
What critical Program goals does this project or task support? Construction of rehabilitation sites and side channels and implementation of ROD flows.		
Why must this be completed in FY2006? Can it be delayed for future years? To stay on schedule for the completion of 24 rehabilitation sites by the end of 2008. Delay of this project will have a corresponding delay in the schedule for rehab site implementation.		
Is this a multiyear or ongoing project? It is an ongoing project that could become multi-year based on availability of funds.		
If so give estimated cost for future years.		
FY2007: \$1,440,000 if President's budget is adopted.		
FY2008:		
FY2009:		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Bucktail Construction		
Program Branch: RIG		
Point of Contact: Joe		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ -	\$ -
Description: Includes full contract plus non-contract costs of constructing 3 rehab sites and a side channel near the Bucktail area.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Rehabilitation sites and side channels are required under the ROD.		
What critical Program goals does this project or task support? Construction of rehabilitation sites and side channels.		
Why must this be completed in FY2006? Can it be delayed for future years? To stay on schedule for the completion of 24 rehabilitation sites by the end of 2008. Delay of this project will have a corresponding delay in the schedule for rehab site implementation.		
Is this a multiyear or ongoing project? No.		
If so give estimated cost for future years.		
FY2007: \$1,035,000		
FY2008:		
FY2009:		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Restoration Construction Below Lewiston Dam (4)		
Program Branch: RIG		
Point of Contact: Joe		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ -	\$ -
Description: Includes full contract plus non-contract costs of constructing four rehabilitation sites from Lewiston Dam to near Cemetery Hole.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Rehabilitation sites are required under the ROD.		
What critical Program goals does this project or task support? Construction of rehabilitation sites.		
Why must this be completed in FY2006? Can it be delayed for future years? To stay on schedule for the completion of 24 rehabilitation sites by the end of 2008. Delay of this project will have a corresponding delay in the schedule for rehab site implementation.		
Is this a multiyear or ongoing project? No.		
If so give estimated cost for future years.		
FY2007: \$690,000		
FY2008:		
FY2009:		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Restoration Construction Below Lewiston Dam (8)		
Program Branch: RIG		
Point of Contact: Joe		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ -	\$ -
Description: Includes full contract plus non-contract costs of constructing the eight remaining rehabilitation sites in Phase 1 downstream of Lewiston Dam.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Rehabilitation sites are required under the ROD.		
What critical Program goals does this project or task support? Construction of rehabilitation sites.		
Why must this be completed in FY2006? Can it be delayed for future years? To stay on schedule for the completion of 24 rehabilitation sites by the end of 2008. Delay of this project will have a corresponding delay in the schedule for rehab site implementation.		
Is this a multiyear or ongoing project? No.		
If so give estimated cost for future years.		
FY2007:		
FY2008: \$1,500,000		
FY2009:		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Revegetation of Implementation Sites		
Program Branch: RIG		
Point of Contact: Bob		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 135,000	\$ 135,000
Description: Implementation of re-vegetation design for bridge sites and proposed rehabilitation sites. Includes clearing, harvesting, plant materials, planting, and irrigation.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Required to complete after each engineering implementation as part of environmental compliance and riparian vegetation modeling and monitoring needs as stipulated in the TRFES and ROD mandates for controlling and monitoring riparian vegetation.		
What critical Program goals does this project or task support? Required to complete after each engineering implementation as part of environmental compliance and riparian vegetation modeling and monitoring needs as stipulated in the TRFES and ROD mandates for controlling and monitoring riparian vegetation.		
Why must this be completed in FY2006? Can it be delayed for future years? Required to complete after each engineering implementation as part of environmental compliance and riparian vegetation modeling and monitoring needs as stipulated in the TRFES and ROD mandates for controlling and monitoring riparian vegetation. No, Can not be delayed for future years.		
Is this a multiyear or ongoing project? Yes, but needs to be supported by an open-and-competitive RFP process in order for the TRRP to get the best price and additional information on how this process should be conducted (i.e., via the RFP review process).		
If so give estimated cost for future years.		
FY2007: \$150,000		
FY2008: \$150,000		
FY2009: \$150,000		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Coarse Sediment Introductions NEPA/CEQA		
Program Branch: RIG		
Point of Contact: Brandt		
	FY2006 President's Budget	Full Program Budget
Funding Level:		
Funding Amount:	\$ 50,000	\$ 100,000
Description: NEPA/CEQA analyses will be required in order to allow coarse sediment additions in 2007. Portions of these analyses may be performed as part of the channel rehab site NEPA/CEQA work below Lewiston Dam. Specific concerns for flooding with addition of materials within the 100 year floodplain will need to be addressed in the long and short term. Full program implementation assumed gravel placement as separate contracts. The FY06 budget assumes that gravel augmentation work will primarily be included within NEPA/CEQA analyses for channel rehab sites. \$50,000 will be allocated to a cumulative effects analysis to quantify system wide implementation impacts of the Restoration Program.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? The ROD requires implementation of a fine and coarse sediment program. The Implementation Plan (and environmental laws) require adherence to federal and state environmental laws and permitting. A cumulative effects model was deemed necessary in a 12/04 meeting with TMC legal representatives.		
What critical Program goals does this project or task support? To implement the Sediment Management Plan		
Why must this be completed in FY2006? Can it be delayed for future years? Any coarse sediment introduction in FY07 will require some level of NEPA/CEQA and permitting.		
Is this a multiyear or ongoing project? YES		
If so give estimated cost for future years.		
FY2007: \$100,000		
FY2008: \$100,000		
FY2009:		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Delta Maintenance NEPA/CEQA		
Program Branch: RIG		
Point of Contact: Brandt		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ -	\$ -
Description: Initiate NEPA/CEQA environmental documentation and permitting to implement delta maintenance projects at Rush Creek or Indian Creek, as determined based on sediment management plan objectives. Where possible, TMAG and RIG staff, or their contractors will provide baseline information, surveys, and reports. Consultation with private NEPA/CEQA contractors (e.g., for cumulative effects of Trinity ROD analyses) and support to CEQA leads are likely. Options to include harvest and reuse of properly sized material and disposal of large coarse sediment.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Routing of sediment through the system is required in the sediment management plan.		
What critical Program goals does this project or task support? Sediment Management Plan		
Why must this be completed in FY2006? Can it be delayed for future years?		
Is this a multiyear or ongoing project? NO		
If so give estimated cost for future years.		
FY2007: \$25,000		
FY2008:		
FY2009:		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Design/Planning - Coarse Sediment Introductions		
Program Branch: RIG		
Point of Contact: Joe		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 25,000	\$ 50,000
Description: Design and planning for coarse sediment introductions. Full program assumes design activities leading to a major construction contract in FY07. The President's budget represents a smaller program implemented with the rehab sites between Lewiston Dam and Weaver Creek.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Coarse sediment introductions are recommended in the Flow Evaluation.		
What critical Program goals does this project or task support? Provides enhanced spawning and rearing habitat plus geomorphic benefits.		
Why must this be completed in FY2006? Can it be delayed for future years? Planning efforts must be initiated if any sediment introductions are expected to occur in FY07.		
Is this a multiyear or ongoing project? Multiyear.		
If so give estimated cost for future years.		
FY2007: \$50,000		
FY2008: \$50,000		
FY2009:		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Design/Planning - Delta Maintenance		
Program Branch: RIG		
Point of Contact: Joe		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ -	\$ -
Description: Perform modeling, design activities and specifications in preparation for the Rush Creek Delta Project		
How is this supported by the Flow Study ROD, and /or Implementation Plan? This project will assist coarse sediment introduction activities, which are required under the ROD and implementation plan.		
What critical Program goals does this project or task support? Routing of coarse sediment through the system for habitat and geomorphic purposes.		
Why must this be completed in FY2006? Can it be delayed for future years?		
Is this a multiyear or ongoing project?		
If so give estimated cost for future years.		
FY2007: \$75,000		
FY2008:		
FY2009:		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: GVC Watershed Monitoring, Hamilton Ponds O & M		
Program Branch: RIG		
Point of Contact: Bob		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 113,000	\$ 125,000
Description: Data collected under this agreement will facilitate evaluation of operation, implementation, and maintenance aspects of Grass Valley Creek and Hamilton Ponds; and facilitate implementation, operation, and maintenance of O&M projects.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Required to complete after each engineering implementation as part of environmental compliance and riparian vegetation modeling and monitoring needs as stipulated in the TRFES and ROD mandates for controlling and monitoring riparian vegetation.		
What critical Program goals does this project or task support? Required to complete after each engineering implementation as part of environmental compliance and riparian vegetation modeling and monitoring needs as stipulated in the TRFES and ROD mandates for controlling and monitoring riparian vegetation.		
Why must this be completed in FY2006? Can it be delayed for future years? Required to complete after each engineering implementation as part of environmental compliance and riparian vegetation modeling and monitoring needs as stipulated in the TRFES and ROD mandates for controlling and monitoring riparian vegetation. No, Can not be delayed for future years.		
Is this a multiyear or ongoing project? Yes, but needs to be supported by an open-and-competitive RFP process in order for the TRRP to get the best price and additional information on how this process should be conducted (i.e., via the RFP review process).		
If so give estimated cost for future years.		
FY2007: \$120,000		
FY2008: \$120,000		
FY2009: \$120,000		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Hamilton Ponds Efficiency Study		
Program Branch: RIG		
Point of Contact: Andreas		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ -	\$ -
<p>Description: The purpose of this study is to assure that the Hamilton Ponds are providing an adequate level of protection for the mainstem Trinity River from sediment delivery from Grass Valley Creek. This protection should be provided solely from Hamilton Ponds to allow fisheries habitat restoration of the downstream Wellock Pond area to occur. This study has been deferred since 2003. The efficiency study is to evaluate trap efficiency, total sediment storage, pond maintenance, and fish passage.</p>		
<p>How is this supported by the Flow Study ROD, and /or Implementation Plan? The ROD directs that watershed restoration be undertaken to reduce delivery of fine sediments from the tributaries to the mainstem Trinity River.</p>		
<p>What critical Program goals does this project or task support? Reduce fine sediment delivery to the mainstem.</p>		
<p>Why must this be completed in FY2006? Can it be delayed for future years? This study is tentatively scheduled for FY07.</p>		
<p>Is this a multiyear or ongoing project? No</p>		
<p>If so give estimated cost for future years.</p>		
<p>FY2007: \$75,000</p>		
<p>FY2008:</p>		
<p>FY2009:</p>		
<p>Other important information: Note, this study addresses several of the issues identified the Hamilton Ponds Technical Team in a memo to the TMC dated 9-25-02.</p>		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Hamilton Ponds Upgrade		
Program Branch: RIG		
Point of Contact: Andreas		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ -	\$ -
Description: Implement and structural improvements recommended by the Hamilton Ponds Efficiency Study.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? The ROD directs that watershed restoration be undertaken to reduce delivery of fine sediments from the tributaries to the mainstem Trinity River.		
What critical Program goals does this project or task support? Reduce fine sediment delivery to the mainstem		
Why must this be completed in FY2006? Can it be delayed for future years? Project tentatively scheduled for FY07		
Is this a multiyear or ongoing project? No		
If so give estimated cost for future years.		
FY2007: \$200,000		
FY2008:		
FY2009:		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Bathymetric LIDAR		
Program Branch: RIG		
Point of Contact: Joe		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ -	\$ -
Description: LIDAR bathymetric mapping of 40 miles of Trinity River to assess change in river channel as a result of increased flows, rehab sites, and sediment introductions.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Supports monitoring aspect of program, and will be useful in determine success of program actions in creating change within the river channel.		
What critical Program goals does this project or task support? Assessment portion of program.		
Why must this be completed in FY2006? Can it be delayed for future years? N/A.		
Is this a multiyear or ongoing project? No.		
If so give estimated cost for future years.		
FY2007:		
FY2008:		
FY2009: \$450,000		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Implementation - Coarse Sediment Introductions		
Program Branch: RIG		
Point of Contact: Joe		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ -	\$ -
Description: Full contract plus non-contract costs of implementing coarse sediment introduction projects.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Coarse sediment introductions are recommended in the Flow Evaluation.		
What critical Program goals does this project or task support? Provides enhanced spawning and rearing habitat plus geomorphic benefits.		
Why must this be completed in FY2006? Can it be delayed for future years? N/A.		
Is this a multiyear or ongoing project? Multiyear.		
If so give estimated cost for future years.		
FY2007: \$500,000		
FY2008: \$500,000		
FY2009:		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Implementation - Delta Maintenance		
Program Branch: RIG		
Point of Contact: Joe		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ -	\$ -
Description: Implementation of the Rush Creek Delta Project.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? This project will assist coarse sediment introduction activities, which are required under the ROD and implementation plan.		
What critical Program goals does this project or task support? Routing of coarse sediment through the system for habitat and geomorphic purposes.		
Why must this be completed in FY2006? Can it be delayed for future years?		
Is this a multiyear or ongoing project? No.		
If so give estimated cost for future years.		
FY2007:		
FY2008: \$500,000		
FY2009:		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: USGS: Watershed Strategy and Technical Support		
Program Branch: RIG		
Point of Contact: Andreas		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 19,500	\$ 19,500
Description: Develop comprehensive strategy and guidelines to develop sediment source control plans to prioritize watershed restoration projects for implementation. Strategy will be consistent with the Northwest Forest Plan and Sediment TMDL and be coordinated with TRRP watershed partners and stakeholders. Based in part on a technical review of past watershed restoration in the Grass Valley Creek watershed, it became apparent that a comprehensive, technically sound strategy for implementing watershed restoration was needed.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? The ROD directs that watershed restoration be undertaken to reduce delivery of fine sediments from the tributaries to the mainstem Trinity River.		
What critical Program goals does this project or task support? Reduce fine sediment delivery to the mainstem		
Why must this be completed in FY2006? Can it be delayed for future years? The watershed strategy provides the guidelines for implementing watershed restoration projects. Watershed restoration projects are tied to several high priority initiatives including Indian Creek infrastructure improvement and delta maintenance at Rush Creek and Indian Creek.		
Is this a multiyear or ongoing project? Yes, this is an on-going / multi year project. The existing agreement with the USGS ends after FY08.		
If so give estimated cost for future years.		
FY2007: \$19,500		
FY2008: \$19,500		
FY2009: \$0		
Other important information: The TAMWG recommended and the TMC approved a motion to defer any delta maintenance activities at Rush Creek Delta until potential tributary watershed restoration solutions had been investigated.		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Watershed Sediment Source Control Plans		
Program Branch: RIG		
Point of Contact: Denise		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 35,000	\$ 35,000
Description: Watershed specific sediment source control plans need to be developed for the priority tributaries. These plans take into account the site specific issues such as property ownership, access, cost effectiveness, treatment success probabilities, etc. These plans are basically a comprehensive blue print for restoring individual watersheds and are developed based on the guidelines set forth in the watershed strategy.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? The ROD directs that watershed restoration be undertaken to reduce delivery of fine sediments from the tributaries to the mainstem Trinity River.		
What critical Program goals does this project or task support? Reduce fine sediment delivery to the mainstem.		
Why must this be completed in FY2006? Can it be delayed for future years? A watershed sediment source plan for Indian Creek needs to be completed in conjunction with developing designs for the mainstem infrastructure improvement / bank rehab project at Indian Creek.		
Is this a multiyear or ongoing project? Yes. The intent is develop one watershed sediment source control plan every year, working down the list of prioritized tributary watersheds. Indian Creek is scheduled for FY06.		
If so give estimated cost for future years.		
FY2007: \$35,000		
FY2008: \$35,000		
FY2009: \$35,000		
Other important information: Coordinate with TMAG staff as necessary, especially Andreas.		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Watershed Restoration Project Implementation		
Program Branch: RIG		
Point of Contact: Denise		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ -	\$ 200,000
Description: Implement watershed restoration projects as recommended by the tributary specific sediment source control plans (see "Watershed Sediment Source Control Plans"). TRRP may allocate this funding to Trinity County through the Watershed Grant Program for implementation.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? The ROD directs that watershed restoration be undertaken to reduce delivery of fine sediments from the tributaries to the mainstem Trinity River.		
What critical Program goals does this project or task support? Reduce fine sediment delivery to the mainstem.		
Why must this be completed in FY2006? Can it be delayed for future years? FY06 funds are to be used to implement watershed restoration projects in the Rush Creek watershed. A pilot sediment source control plan for Rush Creek is currently under development as part of the watershed strategy.		
Is this a multiyear or ongoing project? Yes		
If so give estimated cost for future years.		
FY2007: \$400,000		
FY2008: \$400,000		
FY2009: \$400,000		
Other important information: The ROD envisioned total annual expenditures on watershed sediment source control of approximately \$2 million. Our understanding is that TRRP is to contribute a total of approximately \$500,000 annually and the other watershed related partner agencies are responsibility to raise the remaining funds. Outyear funding levels for project implementation are estimated at \$400,000 with an additional \$100,000 for Hamilton Ponds dredging for a total of approximately \$500,000.		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: RCD Watershed Coordinator		
Program Branch: RIG		
Point of Contact: Denise		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 50,000	\$ 50,000
Description: Coordinate watershed activities of all parties involved in developing a strategy for watershed management and acquisition of funds by Trinity County RCD on behalf of the TRRP and TCRCD project implementation for sediment control on behalf of the TRRP.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? The ROD directs that watershed restoration be undertaken to reduce delivery of fine sediments from the tributaries to the mainstem Trinity River.		
What critical Program goals does this project or task support? The TRRP is involved in this part of the program as it relates to sediment management and impacts to the mainstem as one of several partner agencies. While TRRP staff is focused primarily on mainstem activities; the RCD Coordinator will be able to focus more time on tributary watersheds.		
Why must this be completed in FY2006? Can it be delayed for future years? Base level of watershed coordination is needed to advance this part of the ROD, including source control planning.		
Is this a multiyear or ongoing project? On-going.		
If so give estimated cost for future years.		
FY2007: \$50,000		
FY2008: \$50,000		
FY2009: \$50,000		
Other important information: Coordinate with TMAG Branch Chief.		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Trinity County Watershed Grants		
Program Branch: RIG		
Point of Contact: Denise		
	FY2006 President's Budget	Full Program Budget
Funding Level:		
Funding Amount:	\$ 200,000	\$ 200,000
Description: Similar to watershed restoration project implementation but administered through Trinity County. Typically includes projects such as road decommissioning, erosion control, and other non-mainstem restoration work.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? The ROD directs that watershed restoration be undertaken to reduce delivery of fine sediments from the tributaries to the mainstem Trinity River.		
What critical Program goals does this project or task support? This grant program allows partners to address tributary watershed restoration actions not otherwise covered by mainstem rehab sites but which have potential impacts to the mainstem.		
Why must this be completed in FY2006? Can it be delayed for future years? Part of TMC's prior commitment to provide approximately \$500,000/year for tributary watersheds.		
Is this a multiyear or ongoing project? On-going.		
If so give estimated cost for future years.		
FY2007: \$200,000		
FY2008: \$200,000		
FY2009:		
Other important information: Coordinate with TMAG staff as necessary.		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Personnel - RIG		
Program Branch: RIG		
Point of Contact: Ed		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 530,128	\$ 639,798
Description: Salary and benefits of TRRP RIG Branch(Weaverville office). Includes five FTEs: Environmental Specialist, Realty Specialist, two Civil Engineers, one Engineering Technician, one Branch Chief. Full Program level includes two additional positions: Engineer & GIS/CADD Specialist. Benefits are calculated at 19%		
How is this supported by the Flow Study, ROD, and /or Implementation Plan? Refer to Section 7.1.3 of the Implementation Plan for initial staffing recommendations.		
What critical Program goals does this project or task support? Branch Chief and staff provide the NEPA/CEQA compliance, engineering, and construction management capability to implement the flood plain modification , channel rehabilitation, and sediment management components of the program		
Why must this be completed in FY2006? Can it be delayed for future years? For the President's budget, staff is already in place with the exception of a Realty Specialist . This position is critical to keeping the channel rehab and floodplain modification work on schedule.		
Is this a multiyear or ongoing project? Ongoing.		
If so give estimated cost for future years.		
FY2007: \$649,745		
FY2008: \$675,735		
FY2009:		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: RIC/OIC - RIG		
Program Branch: RIG		
Point of Contact: Ed		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 291,926	\$ 352,328
Description: Indirect costs established by Regional and Area Reclamation Offices. Initial rates are estimates, with adjustments made later in the fiscal year. Covers human resources, public affairs, and other jointly funded support service organizations within other Reclamation offices. Calculated as a percentage of personnel compensation (salary/benefits), not against other office operation costs. Apportioned by FTE against Program Administration, RIG, and TMAG. FY2006 budgeted at 28% for RIC/OIC		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Office and associated support costs acknowledged in Sections 7.1.3.1; 7.1.3.2; and 7.3 of the Implementation Plan.		
What critical Program goals does this project or task support? Weaverville is a field office of Reclamation's Northern California Area Office. Indirect costs are needed for Reclamation to support the AEAM staff, who are Reclamation employees.		
Why must this be completed in FY2006? Can it be delayed for future years? Mandatory cost of doing business.		
Is this a multiyear or ongoing project? Ongoing.		
If so give estimated cost for future years.		
FY2007: \$389,847		
FY2008: \$405,441		
FY2009:		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Personnel		
Program Branch: TMAG		
Point of Contact: Rod		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 368,586	\$ 445,146
Description: Salary and benefits of TRRP TMAG staff (Weaverville office). Includes six positions: Hydraulic Engineer, Physical Scientist, two Fishery Biologists, one Wildlife Biologist, and one Branch Chief. Full Program level includes one additional position (COTR). Benefits are calculated at 19%.		
How is this supported by the Flow Study, ROD, and /or Implementation Plan? Refer to Section 7.1.3 of the Implementation Plan for initial staffing recommendations.		
What critical Program goals does this project or task support? Execution of Adaptive Environmental Assessment and Management Program.		
Why must this be completed in FY2006? Can it be delayed for future years? It is a ROD mandated function.		
Is this a multiyear or ongoing project? Ongoing.		
If so give estimated cost for future years.		
FY2007: \$446,661		
FY2008: \$464,528		
FY2009:		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: RIC/OIC		
Program Branch: TMAG		
Point of Contact: Rod		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 203,006	\$ 245,174
Description: Indirect costs established by Regional and Area Reclamation Offices. Initial rates are estimates, with adjustments made later in the fiscal year. Covers human resources, public affairs, and other jointly funded support service organizations within other Reclamation offices. Calculated as a percentage of personnel compensation (salary/benefits), not against other office operation costs. Apportioned by FTE against Program Administration, RIG, and TMAG. FY2006 budgeted at 28% for RIC/OIC		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Office and associated support costs acknowledged in Sections 7.1.3.1; 7.1.3.2; and 7.3 of the Implementation Plan.		
What critical Program goals does this project or task support? Weaverville is a field office of Reclamation's Northern California Area Office. Indirect costs are needed for Reclamation to support the AEAM staff, who are Reclamation employees.		
Why must this be completed in FY2006? Can it be delayed for future years?		
Is this a multiyear or ongoing project? Ongoing.		
If so give estimated cost for future years.		
FY2007: \$267,997		
FY2008: \$278,717		
FY2009:		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Streamgage Flow Gaging		
Program Branch: TMAG		
Point of Contact: Andreas		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 196,770	\$ 254,200
Description: USGS operation and maintenance of the following stream flow gages: Grass Valley Creek, Indian Creek, Rush Creek, TR above North Fork, TR at Burnt Ranch, TR at Douglas City, TR at Junction City, TR at Lewiston, TR below Lime Kiln Gulch, North Fork, South Fork below Hyampom. Includes USGS publication of real-time and daily records. This line item also includes USGS operation of a total daily sediment record at Grass Valley Creek streamgage and a water temperature probe at Hoopa. The FY06 President's budget requires the following stream gages to be dropped: Browns Creek, Canyon Creek, Weaver Creek.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Stream gaging is required to manage dam operations, understand hydrology, and provide input to hydraulic, water temperature, sediment, habitat, and fish population models.		
What critical Program goals does this project or task support? Supports modeling and analysis to predict and verify achievement of restoration objectives.		
Why must this be completed in FY2006? Can it be delayed for future years? Flow information is required annually to conduct the modeling and analysis that is used to develop the high flow portion of the annual release hydrograph.		
Is this a multiyear or ongoing project? Yes.		
If so give estimated cost for future years.		
FY2007: \$261,800		
FY2008: \$269,700		
FY2009: \$277,800		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Stream Gage Upgrades		
Program Branch: TMAG		
Point of Contact: Andreas		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ -	\$ -
Description: The cable ways at Lime Kiln Gulch needs to be upgraded and a new cableway at North Fork streamgage needs to be constructed.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? See streamflow gaging		
What critical Program goals does this project or task support? See streamflow gaging		
Why must this be completed in FY2006? Can it be delayed for future years? Yes, deferred to FY2007		
Is this a multiyear or ongoing project? No		
If so give estimated cost for future years.		
FY2007: \$120,000		
FY2008: \$0		
FY2009: \$0		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: SNTEMP Water Temperature Modeling		
Program Branch: TMAG		
Point of Contact: Andreas		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ -	\$ 5,000
Description: Support for SNTEMP river temperature model used to comparison / cross calibration with the RMA-11 water temperature model under development.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Water temperature is identified in the TRFES as one of the most critical parameters for fisheries restoration.		
What critical Program goals does this project or task support? Assists with the development of the annual flow release schedule recommendations.		
Why must this be completed in FY2006? Can it be delayed for future years? The SNTEMP model is the only temperature model currently available and needs to be maintained until it can be replaced by the RMA-11 model.		
Is this a multiyear or ongoing project? No		
If so give estimated cost for future years.		
FY2007: \$0		
FY2008: \$0		
FY2009: \$0		
Other important information: SNTEMP is to be replaced by RMA-11 in 2007.		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: USFWS Water Temperature Monitoring		
Program Branch: TMAG		
Point of Contact: Andreas		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 9,000	\$ 9,000
Description: non real time water temperature data collected at various locations without a streamgage. This data needed for water temperature modeling.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Water temperature is identified in the TRFES as one of the most critical parameters for fisheries restoration.		
What critical Program goals does this project or task support? Water temperature data is needed for water temperature modeling.		
Why must this be completed in FY2006? Can it be delayed for future years? Data from 2006 is important for model development and regulatory compliance.		
Is this a multiyear or ongoing project? Yes		
If so give estimated cost for future years.		
FY2007: \$9,000		
FY2008: \$9,000		
FY2009: \$9,000		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: USGS Water Temperature Monitoring		
Program Branch: TMAG		
Point of Contact: Andreas		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ -	\$ 16,800
Description: Adding real-time temperature probes to all USGS mainstem streamgages would greatly enhance water temperature modeling and water temperature regulatory compliance.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Water temperature is identified in the TRFES as one of the most critical parameters for fisheries restoration.		
What critical Program goals does this project or task support? USGS temperature probe data would be used for water temperature modeling, monitoring regulatory temperature compliance, and could be used for real-time flow management to adjust releases for temperature exceedences during hot spells.		
Why must this be completed in FY2006? Can it be delayed for future years? Consideration deferred until 2007.		
Is this a multiyear or ongoing project? Yes		
If so give estimated cost for future years.		
FY2007: \$17,300		
FY2008: \$17,800		
FY2009: \$18,300		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Expert Consultation - Temperature Models		
Program Branch: TMAG		
Point of Contact: Andreas		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 15,000	\$ 25,000
Description: On-call technical support and peer review of suite of water temperature models (WQRSS, CEQUALW2, RMA-2), including integration with Klamath River temperature models. Deferred until 2007.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Water temperature is identified in the TRFES as one of the most critical parameters for fisheries restoration.		
What critical Program goals does this project or task support? Developing and maintaining the suite of water temperature models for the reservoirs and river requires on-going technical support from program developers, peer reviewers, and integration with other modeling efforts (SALMOD, Klamath temp model).		
Why must this be completed in FY2006? Can it be delayed for future years? The primary thrust of this task in FY06 is technology transfer to TRRP of the RMA-11 model being developed by Mike Deas. Insufficient funds in FY05 precluded the technology transfer to be part of the original scope.		
Is this a multiyear or ongoing project? Yes		
If so give estimated cost for future years.		
FY2007: \$25,000		
FY2008: \$25,000		
FY2009: \$25,000		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Lewiston Lake Bathymetry		
Program Branch: TMAG		
Point of Contact: Andreas		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ -	\$ 75,000
Description: Development of the CEQUALW2 reservoir temperature model for Lewiston Reservoir MAY require reservoir bathymetry. Collection of Lewiston bathymetry and model development are both deferred until 2007. Reservoir bathymetry for Trinity Lake may also be required in 2008.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? See new Lewiston temperature model		
What critical Program goals does this project or task support? See new Lewiston temperature model		
Why must this be completed in FY2006? Can it be delayed for future years? Defer to FY07		
Is this a multiyear or ongoing project? No		
If so give estimated cost for future years.		
FY2007: \$0		
FY2008: \$0		
FY2009: \$0		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Reservoir Water Temperature Models		
Program Branch: TMAG		
Point of Contact: Andreas		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ -	\$ 75,000
Description: The existing BETTER reservoir temperature model for Lewiston Reservoir does not meet the modeling and analysis needs of TRRP and needs to be replaced with a CEQUALW2 reservoir temperature model in 2007. The WQRSS reservoir water temperature model for Trinity Lake needs to be updated and is currently scheduled for 2008 to spread out the costs of the reservoir temperature models.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Water temperature is identified in the TRFES as one of the most critical parameters for fisheries restoration.		
What critical Program goals does this project or task support? The reservoir water temperature models are critical to manage the cold water pool during a drought. The models also provide the input data required to run the RMA-11 water temperature model for the Trinity River.		
Why must this be completed in FY2006? Can it be delayed for future years? Deferred until FY07		
Is this a multiyear or ongoing project? No		
If so give estimated cost for future years.		
FY2007: \$75,000		
FY2008:		
FY2009:		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Sediment Monitoring		
Program Branch: TMAG		
Point of Contact: Andreas		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 315,000	\$ 400,000
Description: The primary focus is on collecting suspended sediment and bedload data at the following locations: Rush Creek, Indian Creek, Trinity River at Lewiston, Trinity River at Salt Flat, Trinity River at Lime Kiln Gulch, and Trinity River at Douglas City. This sediment transport data meets USGS standards. Additional components of the sediment monitoring include bed scour monitoring (i.e. tracer rocks and scour cores) and substrate characterization. These added components are required to track program progress towards meeting several sediment, riparian, and salmonid habitat objectives. The 2006 requested budget reduces sampling intensity and deletes the topographic / bathymetric surveying tasks to determine changes in sediment storage.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Component C of the ROD - "Sediment Management" calls for a balanced sediment budget for both coarse and fine sediments. A balanced sediment budget is also attribute #5 of an alluvial river as listed in the TRFES.		
What critical Program goals does this project or task support? Computation of the sediment budget which drives the spring release high flow scheduling and the coarse sediment augmentation.		
Why must this be completed in FY2006? Can it be delayed for future years? Sediment transport information is required annually to help develop the high flow components of the spring release hydrograph, determine required volumes of coarse sediment augmentation, validate the sediment transport model, and track progress towards primary restoration goals.		
Is this a multiyear or ongoing project? Yes		
If so give estimated cost for future years.		
FY2007: \$412,000		
FY2008: \$424,000		
FY2009: \$437,100		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Stream Turbidity Gaging		
Program Branch: TMAG		
Point of Contact: Andreas		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ -	\$ 21,000
Description: Under this task, the USGS would add a turbidity probe to the 7 of their streamgages. Turbidity is useful to help construct the sediment transport records and track regulatory compliance. Turbidity may also impact salmonid behavior and physiology.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? See Sediment Monitoring		
What critical Program goals does this project or task support? See Sediment Monitoring		
Why must this be completed in FY2006? Can it be delayed for future years? This task is deferred until 2007.		
Is this a multiyear or ongoing project? Yes		
If so give estimated cost for future years.		
FY2007: \$21,600		
FY2008: \$22,200		
FY2009: \$22,800		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: USGS Sediment Monitoring QA		
Program Branch: TMAG		
Point of Contact: Andreas		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 35,000	\$ 35,000
Description: To ensure the sediment monitoring data is USGS compliant, the USGS inspects field data collections methodology, laboratory analysis, and sediment records computations performed under sediment monitoring task. Once the USGS approves the sediment data as USGS compliant, the USGS publishes and permanently archives the data in their national database.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? See Sediment Monitoring		
What critical Program goals does this project or task support? See Sediment Monitoring		
Why must this be completed in FY2006? Can it be delayed for future years? See Sediment Monitoring		
Is this a multiyear or ongoing project? Yes		
If so give estimated cost for future years.		
FY2007: \$35,000		
FY2008: \$38,000		
FY2009: \$35,000		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Sediment Budget Calculations		
Program Branch: TMAG		
Point of Contact: Andreas		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ -	\$ 60,000
Description: Results from the annual sediment monitoring and GSTARS modeling provide for a cursory sediment budget. TRRP would benefit from an in-depth sediment budget. Ideally, this would be done by funding a PhD dissertation (approximately \$60,000 per year for 3 years).		
How is this supported by the Flow Study ROD, and /or Implementation Plan? See Sediment Monitoring		
What critical Program goals does this project or task support? See Sediment Monitoring		
Why must this be completed in FY2006? Can it be delayed for future years? Deferred until FY2007		
Is this a multiyear or ongoing project? Yes		
If so give estimated cost for future years.		
FY2007: \$60,000		
FY2008: \$60,000		
FY2009: \$60,000		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Sediment Symposium		
Program Branch: TMAG		
Point of Contact: Andreas		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ -	\$ 15,000
Description: The 2004 sediment symposium was used to review and evaluate the overall sediment monitoring, modeling, and implementation strategy. Now that we have set the plan in motion and have 2 years of results from intensive sediment monitoring, it is time to reconvene and evaluate sediment monitoring, modeling, and implementation strategy. These funds will be used to cover travel expenses of several experts that participated in the 2004 sediment symposium.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? The sediment symposium is a formal meeting of the sediment work group which includes several TMC and TAMWG technical representatives. The SAB would also be invited to attend, but they are funded independently. The symposium is supported under the organizational structure of TRRP and fills an adaptive management function.		
What critical Program goals does this project or task support? See Sediment Management and Sediment Modeling		
Why must this be completed in FY2006? Can it be delayed for future years? The FY06 sediment symposium is intended to finalize the last 2 years of program development (sediment monitoring, sediment modeling, sediment budget, redd scour, etc.) and set the overall direction for the next 2 years.		
Is this a multiyear or ongoing project? Yes.		
If so give estimated cost for future years.		
FY2007: \$15,000		
FY2008: \$15,000		
FY2009: \$15,000		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: GSTARS Sediment Transport Model		
Program Branch: TMAG		
Point of Contact: Andreas		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ -	\$ 50,000
Description: The GSTARS model is currently incomplete and not fully calibrated. Finalizing the primary development of the GSTARS model includes: updating all topography based on the 2005 LIDAR bathymetry, overlapping several GSTARS model cross-sections with those in the HEC-RAS, SALMOD, and TARGETS models to ensure comparison of results, extending the model to Indian Creek, and updating the model calibration with the 2004 and 2005 sediment monitoring results.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? The primary utility of the GSTARS sediment transport model is to develop a high flow portion of spring flow release hydrograph to transport the targeted amount of sediment to meet restoration objectives.		
What critical Program goals does this project or task support? Modeling and analysis to develop annual flow release recommendations. The GSTARS model can also be used to help design bank rehabilitation and coarse sediment augmentation projects.		
Why must this be completed in FY2006? Can it be delayed for future years? To get ready for developing a release hydrograph in a wet or extremely wet year.		
Is this a multiyear or ongoing project? No. It is envisioned that the TMAG will take over primary GSTARS modeling responsibility starting in FY07.		
If so give estimated cost for future years.		
FY2007: \$25,000		
FY2008: \$0		
FY2009: \$0		
Other important information: Continued involvement of the USBR Technical Service Center in the GSTARS modeling will be handled under the Expert Consultation - Physical models task in out years.		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Expert Consultation - Physical Models		
Program Branch: TMAG		
Point of Contact: Andreas		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 25,000	\$ 25,000
Description: On-call technical support and/or peer review from the Denver Technical Service Center for the suite of physical models (GSTARS, HEC-RAS, Hardy 2-D hydraulics, etc.)		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Technical modeling and analysis		
What critical Program goals does this project or task support? Various		
Why must this be completed in FY2006? Can it be delayed for future years? Much of the model development is tasks are scheduled to occur in FY06 so the funding can not be deferred.		
Is this a multiyear or ongoing project? Yes		
If so give estimated cost for future years.		
FY2007: \$25,000		
FY2008: \$25,000		
FY2009: \$25,000		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Nelson Model		
Program Branch: TMAG		
Point of Contact: Andreas		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ -	\$ 25,000
Description: Jon Nelson (USGS) has developed a 2-D sediment transport and scour model for the Platte River that is used to develop dam release schedules to maximize bar formation. This model goes one step beyond GSTARS (which only predicts total sediment transport) and might be used to predict the area extent of new cobble bar habitat developed by our annual spring high flow releases. TRRP would like to investigate the utility and applicability of this model to the Trinity River.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Modeling and Analysis in support of sediment management and developing flow release recommendations		
What critical Program goals does this project or task support? Various		
Why must this be completed in FY2006? Can it be delayed for future years? Consideration deferred until 2007		
Is this a multiyear or ongoing project? Maybe		
If so give estimated cost for future years.		
FY2007: \$25,000		
FY2008: \$25,000		
FY2009:		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Topographic Photogrammetry		
Program Branch: TMAG		
Point of Contact: Andreas		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ -	\$ -
Description: Obtain ortho-rectified aerial photography of the Trinity River between Lewiston and the North Fork every 5 years or after major flow events. Topography and bathymetry will also be required and may be obtained either through aerial photography or LIDAR.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Used for modeling and analysis.		
What critical Program goals does this project or task support? Used to track geomorphic and riparian changes.		
Why must this be completed in FY2006? Can it be delayed for future years? Defer until 2008.		
Is this a multiyear or ongoing project? No		
If so give estimated cost for future years.		
FY2007: \$0		
FY2008: \$200,000		
FY2009: \$0		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Bathymetric LIDAR		
Program Branch: RIG		
Point of Contact: Joe		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ -	\$ -
Description: LIDAR bathymetric mapping of 40 miles of Trinity River to assess change in river channel as a result of increased flows, rehab sites, and sediment introductions.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Supports monitoring aspect of program, and will be useful in determine success of program actions in creating change within the river channel.		
What critical Program goals does this project or task support? Assessment portion of program.		
Why must this be completed in FY2006? Can it be delayed for future years? N/A.		
Is this a multiyear or ongoing project? No.		
If so give estimated cost for future years.		
FY2007:		
FY2008: \$300,000		
FY2009:		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Riparian Recruitment Model		
Program Branch: TMAG		
Point of Contact: Bob		
	FY2006 President's Budget	Full Program Budget
Funding Level:		
Funding Amount:	\$ 110,000	\$ 211,000
<p>Description: Objectives: • Task 1. Document riparian vegetation pre- construction at Canyon Creek Sites (Priority high). Objective: To collect baseline riparian vegetation data at the Connor Creek, Valdor Gulch, Elkhorn, Peartree sites, including species composition, location riparian hardwood location, and vegetation layering at proposed bank rehabilitation site where implementation is scheduled by 2007. • Task 2. Groundwater Monitoring (Priority high). Objective: Collect groundwater data and analyze the response to changes in mainstem discharge in installed piezometers at Hocker Flat, Valdor Gulch, and Pear Tree. • Task 3. Compare empirical WY Results to model output from the Tool for Achieving Riparian Germination and Establishment of Target Species (TARGETS) (Priority (high). Objective: Apply field data collected at the Sheridan Creek site where the TARGETS model was developed to assess the predictive accuracy of the TARGETS model and apply the TARGETS model to the Hocker Flat site after construction is completed in fall 2005. TARGETS is a software based model used for predicting the outcome of managed spring streamflows on initiating and establish</p>		
<p>How is this supported by the Flow Study ROD, and /or Implementation Plan? Modeling and monitoring of riparian vegetation is required in order to make sure that flows scour out encroaching riparian vegetation on newly constructed restoration sites, otherwise these sites will revert to an encroached state and restoration efforts will have been for nothing.</p>		
<p>What critical Program goals does this project or task support? Modeling and monitoring of riparian vegetation is required in order to make sure that flows scour out encroaching riparian vegetation on newly constructed restoration sites, otherwise these sites will revert to an encroached state and restoration efforts will have been for nothing.</p>		
<p>Why must this be completed in FY2006? Can it be delayed for future years? Calibrate the model and obtain required data to begin assessing impact of flows on Hocker Flat and Canyon Creek suite of restoration sites. Required at least a year a head of time to setup the process and procedure for monitoring and then providing the necessary information to manage the hydrograph. No it cannot be delayed to future years.</p>		
<p>Is this a multiyear or ongoing project? Yes</p>		
<p>If so give estimated cost for future years.</p>		
<p>FY2007: \$211,000</p>		
<p>FY2008: \$275,000</p>		
<p>FY2009:</p>		
<p>Other important information:</p>		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Riparian/Aquatic Avian Species Monitoring		
Program Branch: TMAG		
Point of Contact: Bob		
	FY2006 President's Budget	Full Program Budget
Funding Level:		
Funding Amount:	\$ 155,000	\$ 175,000
Description:		
<p>How is this supported by the Flow Study ROD, and /or Implementation Plan? Current conditions in the basin have simplified previous complex river channels needed for quality salmon and steelhead habitat, and reduced diversity of riparian habitat used by birds and other native wildlife species. The ROD and the Trinity River Flow Evaluation Final Report (TRFE) recognized these potential, significant effects of loss of habitat diversity and identified sensitive bird species that require special consideration and protection. Tasks outlined in this proposal will extend current data collection and monitoring of at-risk species and assist the TRRP in meeting its riparian wildlife habitat objectives, as well as environmental compliance mitigation obligations.</p>		
<p>What critical Program goals does this project or task support? Data collected by this study constitutes the ONLY science baseline and monitoring in formation that currently being collected by the TRRP that will allow testing various cause-effect hypotheses developed during the Science Framework process, required by the IMAP monitoring plan, as also required by environmental documentations (i.e., EA's) for each restoration site or series of restoration sites to meet environmental compliance needs and mitigation of project impacts for the TRRP. This study is also consistent with the priority criteria developed in the Science Framework Monitoring Plan.</p>		
<p>Why must this be completed in FY2006? Can it be delayed for future years? Data collected by this study constitutes the ONLY science baseline and monitoring in formation that currently being collected by the TRRP that will allow testing various cause-effect hypotheses developed during the Science Framework process, required by the IMAP monitoring plan, as also required by environmental documentations (i.e., EA's) for each restoration site or series of restoration sites to meet environmental compliance needs and mitigation of project impacts for the TRRP. A detailed list of specific tasks can be found in the FY05 multiyear Agreement. No, it cannot be delayed for future years.</p>		
Is this a multiyear or ongoing project? Yes		
If so give estimated cost for future years.		
FY2007: \$175,000		
FY2008: \$175,000		
FY2009: \$175,000		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Riparian /Aquatic Herpetological Monitoring		
Program Branch: TMAG		
Point of Contact: Bob		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 100,000	\$ 150,000
Description: Conduct pre-construction monitoring of herpetofauna at a third set of proposed restoration sites; and monitor spring and fall hydrographs to measure response of herps and overall effect of the managed annual flow regime.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Current conditions in the basin have simplified previous complex river channels needed for quality salmon and steelhead habitat, and reduced diversity of riparian habitat used by amphibians and reptiles, and other native wildlife species. The Trinity River Flow Evaluation Final Report (TRFE) recognized these potential, significant effects of loss of habitat diversity and identified sensitive animal species that require special consideration and protection. Tasks outlined in this proposal will extend current data collection and monitoring of at-risk species and assist the TRRP in meeting its riparian wildlife habitat objectives, as well as environmental compliance mitigation obligations.		
What critical Program goals does this project or task support? Data collected by this study constitutes the ONLY science baseline and monitoring in formation that currently being collected by the TRRP that will allow testing various cause-effect hypotheses developed during the Science Framework process, required by the IMAP monitoring plan, as also required by environmental documentations (i.e., EA's) for each restoration site or series of restoration sites to meet environmental compliance needs and mitigation of project impacts for the TRRP. This study is also consistent with the priority criteria developed in the Science Framework Monitoring Plan.		
Why must this be completed in FY2006? Can it be delayed for future years? Data collected by this study constitutes the ONLY science baseline and monitoring in formation that currently being collected by the TRRP that will allow testing various cause-effect hypotheses developed during the Science Framework process, required by the IMAP monitoring plan, as also required by environmental documentations (i.e., EA's) for each restoration site or series of restoration sites to meet environmental compliance needs and mitigation of project impacts for the TRRP. A detailed list of specific tasks can be found in the FY05 multiyear Agreement. No, it cannot be delayed until future years.		
Is this a multiyear or ongoing project? Yes		
If so give estimated cost for future years.		
FY2007: \$150,000		
FY2008: \$150,000		
FY2009: \$150,000		

Trinity River Restoration Program

FY2006

PROJECT DESCRIPTIONS

Other important information:

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**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

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Project Title: 2-D Fish Habitat Modeling and Validation		
Program Branch: TMAG		
Point of Contact: Nina		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 160,000	\$ 260,000
Description: Pre-restoration fish habitat assessment and predictive 2-D model application integrates habitat and fish distribution consistent with the Science Framework. Calibration and validation of the model will include coho, steelhead and chinook habitat utilization and refinement of habitat suitability criteria for these species. Prediction and verification of available habitat for specific species and life stages will be conducted in all delineated physiographic reaches in the 40 mile stretch below Trinity River. Use of side channels, areas behind berms and other potential habitat by coho and other fry will be included in the investigations.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Creating salmonid habitat in the river is a major goal of TRRP set by the Flow Evaluation Study and ROD. Quantifying available habitat over time is essential to evaluate the success of the program.		
What critical Program goals does this project or task support? This project supports the creation of salmonid habitat by evaluating progress towards program goals.		
Why must this be completed in FY2006? Can it be delayed for future years? Quantifying existing salmonid habitat prior to substantive restoration activities (8500 cfs flows and bank rehab) is essential to evaluate success of the TRRP. No delays are acceptable scientifically.		
Is this a multiyear or ongoing project? This project will be ongoing in nature due to the projected changes in habitat associated with restoration. However, major effort will be required only when substantive changes in habitat are postulated to occur.		
If so give estimated cost for future years.		
FY2007: \$100,000		
FY2008: \$120,000		
FY2009: \$350,000		
Other important information: This is a multi-partner project. Discussions among agency/tribal biologists are on-going. Initial allocation of funds will be presented in the near future.		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Expert Habitat Mapping Restoration Monitoring		
Program Branch: TMAG		
Point of Contact: Nina		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 80,000	\$ 90,000
Description: Quantification of available habitat for 0+ chinook and 1+ steelhead will be conducted at all 44 proposed restoration sites as a first cut and the entire river if time allows this year. Coordination and standardization with the riparian vegetation and geomorphic mapping will be part of this project. This project fulfills 1.compliance monitoring 2. preconstruction and post construction database needs and 4. database development.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Creating salmonid habitat is a major goal of TRRP set by the Flow Evaluation Study and ROD. Quantifying available habitat is essential to evaluate the success of specific rehab designs.		
What critical Program goals does this project or task support? Evaluating rehab designs.		
Why must this be completed in FY2006? Can it be delayed for future years? This would be used for compliance monitoring. The program has not clearly defined the role of compliance monitoring.		
Is this a multiyear or ongoing project? Yes		
If so give estimated cost for future years.		
FY2007: \$50,000		
FY2008: \$80,000		
FY2009: \$120,000		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Smolt Response to Thermal Conditions		
Program Branch: TMAG		
Point of Contact: Nina		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ -	\$ 25,000
Description: Trinity-specific temperature thresholds poorly understood. Develop a "healthy smolt index" based on literature review and evaluation of Trinity River smolts. Will contribute to evaluation of temperature modifications and associated flow regimes.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? The information will be valuable for evaluating effects of ROD hydrographs on smolt condition.		
What critical Program goals does this project or task support? This project supports the enumeration and evaluation of condition of presmolts and smolts.		
Why must this be completed in FY2006? Can it be delayed for future years? This can be deferred to a later year. However the information will be crucial for evaluation of restoration activities on smolts.		
Is this a multiyear or ongoing project?		
If so give estimated cost for future years.		
FY2007: \$185,000		
FY2008: \$100,000		
FY2009:		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Smolt Health (otolith and muscle tissue)		
Program Branch: TMAG		
Point of Contact: Nina		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ -	\$ 160,000
<p>Description: Health and fitness of juvenile salmon out-migrants are major determinates of their performance and survival. The California-Nevada Fish Health Center (CANVFHC) would assess fish health and physiological condition of natural juvenile chinook (<i>Oncorhynchus tshawytscha</i>) and steelhead (<i>Oncorhynchus mykiss</i>) collected by Rotary Screw Trap (RST) and at the hatchery prior to release. Fish will be examined for disease, smolt development, energy reserves, immunodefences, and organosomatic parameters. Studies using growth rings in otoliths of juvenile salmonids to determine growth rates will contribute to evaluation of temperature modifications and associated flow regimes. Muscle structure and composition, and lipid content can be affected by growing conditions. For example poor conditions would result in loss of lipids, thinner muscle fiber and higher connective tissue content. Lastly, this study would also assess the prevalence of major fish pathogens in native salmonid species in the Trinity River by conducting monthly monitoring.</p>		
<p>How is this supported by the Flow Study ROD, and /or Implementation Plan? This project would provide direct information on response of juvenile salmonids to conditions in the Trinity River. As restorations occur and rearing habitat is created juvenile health and survivability is predicted to increase.</p>		
<p>What critical Program goals does this project or task support? This project supports evaluation of fry and presmolts rearing habitat quality.</p>		
<p>Why must this be completed in FY2006? Can it be delayed for future years? This can be deferred to a later year . However the information will be crucial for evaluation of restoration activities on smolts.</p>		
<p>Is this a multiyear or ongoing project? Once started this will be a 2 year project due to sequential nature of data collection. Total cost for the entire period is estimated at \$160000.</p>		
<p>If so give estimated cost for future years.</p>		
FY2007: \$160,000		
FY2008:		
FY2009:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Developing Model Input for SALMOD		
Program Branch: TMAG		
Point of Contact: Nina		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 20,000	\$ 50,000
Description: SALMOD will enable TMAG to move forward in its role of modeling the Trinity River. In river investigations of fry and juvenile salmonid habitat use to update and improve SALMOD. This initial funding is meant to reengage SALMOD experts in the Trinity River. The in river habitat has changed, temperature regimes are different and many more Trinity specific studies on chinook, coho and steelhead have been conducted since the model was run for the Flow Evaluation Study. The TRRP needs the predictive capability of an up-to-date SALMOD to evaluate effects of flow, temperature, and habitat creation on Trinity salmonids. SALMOD can integrate many parts of the fisheries program including habitat, carcass surveys, smolt outmigration, and fish utilization.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? SALMOD was developed originally for the Trinity and used for the Flow Study. It is a powerful model for predicting effects of temperature modifications and habitat creation on salmonids.		
What critical Program goals does this project or task support? Linking habitat creation with salmonid population responses.		
Why must this be completed in FY2006? Can it be delayed for future years? This has been delayed for too many years already.		
Is this a multiyear or ongoing project? Yes, once the model has been updated we expect a transfer to the TMAG. Workshops will be conducted annually after model is updated.		
If so give estimated cost for future years.		
FY2007: \$65,000		
FY2008: \$40,000		
FY2009: \$150,000		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Quick Response, Mortality Monitoring		
Program Branch: TMAG		
Point of Contact: Nina		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 20,000	\$ 25,000
Description: Fish pathology monitoring (Lower Trinity and Lower Klamath). Correlate habitat condition (e.g. flow and temperature) to pathogen distribution and fish health. Pre-spawning mortality can be heavily influenced by disease. These funds are not sufficient to extensively monitor.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? AEAM allows for development of parts of the program not anticipated when the EIS and ROD were written. Disease is an issue that has deservedly received a great deal of attention in the last 4 years on the Klamath and Trinity Rivers.		
What critical Program goals does this project or task support? Spawner escapement; pre-spawning mortality		
Why must this be completed in FY2006? Can it be delayed for future years? We need to keep background monitoring to keep track of conditions as they develop.		
Is this a multiyear or ongoing project? Yes		
If so give estimated cost for future years.		
FY2007: \$30,000		
FY2008: \$30,000		
FY2009:		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Emigration Estimates (rotary trapping)		
Program Branch: TMAG		
Point of Contact: Nina		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 450,000	\$ 600,000
Description: Develop population and migration statistics for juvenile salmonid emigration(Condition of smolts, timing, numbers). Efficiency-based population estimates will provide critical information for use in determining the response of natural smolt production to Trinity River restoration activities and be used to update and calibrate SALMOD. Will help determine if rehab projects improve survival of juveniles and provides information on smolts per adult produced in river. Evaluation of temperature and flow modifications on migration rates and smolt condition. A metric for comparison among years is the adult to smolt ratio.This project provides data on number of outmigrating presmolt and smolt.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? The flow study and ROD call for a doubling of smolts. This project can provide the data to evaluate this goal.		
What critical Program goals does this project or task support? A major goal of the TRRP is to double outmigrating smolts.This project provides data on number of outmigrating presmolt and smolt.		
Why must this be completed in FY2006? Can it be delayed for future years? Sources of variation in population levels extrinsic to the Trinity River can influence achievement of restoration goals. Annual measurements contribute to a long term data set that will enable separation of long term climatic influence from restoration activities.		
Is this a multiyear or ongoing project? Yes, this is a multiyear project.		
If so give estimated cost for future years.		
FY2007: \$600,000		
FY2008: \$600,000		
FY2009: \$600,000		
Other important information: This is a multi-partner project. Based upon discussions with biologists from each agency/tribe, the estimated allocation of funds at this time is expected to be: Hoopa Valley Tribe (\$205,000), Yurok Tribe (\$115,000), USFWS (\$130,000). This is subject to change based on actions taken by the TMC and further development of the scope of work.		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Adult Chinook Salmon Migration		
Program Branch: TMAG		
Point of Contact: Nina		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 25,000	\$ 30,000
Description: Evaluation of adult chinook salmon migration response to AEAM Flow management actions (spring flows/fall pulse flows). Radio tracking of adult Chinook salmon in the lower river to determine migration rates, movement patterns and holding areas. Allows the tracking use of thermal refugia and influence of fall flows.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? This project assists in evaluation of non - ROD flows.		
What critical Program goals does this project or task support? This projects provides information on the impact of fall flows on Trinity River fishes.		
Why must this be completed in FY2006? Can it be delayed for future years? No, In any year of potential fall flow it is important to track Trinity fishes.		
Is this a multiyear or ongoing project? Yes		
If so give estimated cost for future years.		
FY2007: \$30,000		
FY2008: \$35,000		
FY2009:		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Review of Outmigration Methodologies and Needs (FY05 project)		
Program Branch: TMAG		
Point of Contact: Nina		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:		
Description: Determine best methods to determine statistics for outmigrating juvenile salmonids. Determine information necessary for juvenile outmigrants.		
How is this supported by the Flow Study ROD, and /or Implementation Plan?		
What critical Program goals does this project or task support?		
Why must this be completed in FY2006? Can it be delayed for future years?		
Is this a multiyear or ongoing project?		
If so give estimated cost for future years.		
FY2007:		
FY2008:		
FY2009:		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Fish Marking at Hatchery, Chinook-CWT		
Program Branch: TMAG		
Point of Contact: Nina		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 300,000	\$ 353,000
Description: Maintenance of constant fractional marking (CFM) at TRH provides an instant measure of hatchery/natural composition, and a direct measure of restored mainstem productivity (i.e. proportion of natural origin fish though time). Population, in-river distribution and return statistics for hatchery produced salmon.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? This project is the product of AEAM, the data produced support quantification of adult returns to the Trinity River.		
What critical Program goals does this project or task support? This project provides support to the evaluation of restoration of natural production in the river.		
Why must this be completed in FY2006? Can it be delayed for future years? No, constant fractional marking needs to be sustained to be effective.		
Is this a multiyear or ongoing project? Yes		
If so give estimated cost for future years.		
FY2007: \$360,000		
FY2008: \$370,000		
FY2009: \$348,000		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Fish Response to Flows: Fall Flows; monitoring		
Program Branch: TMAG		
Point of Contact: Nina		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ -	\$ 40,000
Description: Track potential impacts to coho, chinook and steelhead of fall flows. Actual projects should vary as information comes in and as the river changes. Known stranding areas and additional survey areas will be monitored for coho and other species. Provide partial support for tracking degree of genetic crossing of fall and spring runs.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? AEAM response to fall flows has been to evaluate effects on Trinity River salmonids.		
What critical Program goals does this project or task support? The restoration of the fishery and protecting coho.		
Why must this be completed in FY2006? Can it be delayed for future years? No, In any year of potential fall flows it is important to track impacts to Trinity fishes.		
Is this a multiyear or ongoing project?		
If so give estimated cost for future years.		
FY2007: \$90,000		
FY2008: \$85,000		
FY2009:		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Fish Response to Flows: Spring Bench		
Program Branch: TMAG		
Point of Contact: Nina		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ -	\$ 20,000
Description: Initial study to examine steelhead use of mainstem habitat during spring bench and summer flows.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? A goal of the program as set by Flow Study, EIS and ROD is to assess effects of restoration activities on steelhead as well as other salmonids.		
What critical Program goals does this project or task support? Evaluation of effects of ROD flows.		
Why must this be completed in FY2006? Can it be delayed for future years? This can be indefinitely delayed. We need data on these issues and will need to address in FY 06 or FY 07.		
Is this a multiyear or ongoing project? This should be a two year study. Pilot study and full study.		
If so give estimated cost for future years.		
FY2007: \$85,000		
FY2008: \$85,000		
FY2009:		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Fish Response to Flows: Summer and Winter Base Flows (descending limb hydrograph)		
Program Branch: TMAG		
Point of Contact: Nina		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ -	\$ 40,000
Description: Evaluation of effects of descending limb of the hydrograph on salmonid fry especially coho. Stranding may or may not be an issue but we do not have the information we need to evaluate this. A study was done on the effects of stranding with the descending limb of 2000 cfs. The program now has the potential to send down 11000 cfs. These flows may leave stranded fish in unknown areas. Predicting where the backwaters may form associated with specific high flows will enable the program to manage the system to lower the risk for coho and other salmonids.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? This project evaluates the effects of ROD flows on coho and other salmonids		
What critical Program goals does this project or task support? This project supports modifications of flow and assesses possible impacts of high flows.		
Why must this be completed in FY2006? Can it be delayed for future years? No, this project should not be delayed further.		
Is this a multiyear or ongoing project? Yes, field verification may require an additional year.		
If so give estimated cost for future years.		
FY2007: \$70,000		
FY2008: \$70,000		
FY2009:		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Tribal Harvest Survey, Lower Klamath		
Program Branch: TMAG		
Point of Contact: Nina		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 130,000	\$ 150,000
Description: Estimate number of adults harvested by tribal members. Added to mega table statistics for total in-river returns. Aids in validation of run size estimates. Assess the success/recruits of smolts produced during various flow regimes through cohort reconstruction. Integrates with the Klamath Basin management. Measures the success of the program at producing adults for Fall and spring Chinook, steelhead, coho salmon, and green sturgeon. Allows analysis of stock/recruitment relationship to assess productivity and/or carrying capacity over time. Prudent harvest management relies on accurate assessment of run size and age composition. Assessment of hatchery/natural composition for coho, chinook and steelhead.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Meeting the goals of the ROD regarding viable/healthy fisheries		
What critical Program goals does this project or task support? Tribal trust obligations		
Why must this be completed in FY2006? Can it be delayed for future years? This project contributes annually to the calculation of run size.		
Is this a multiyear or ongoing project? Yes		
If so give estimated cost for future years.		
FY2007: \$155,000		
FY2008: \$155,000		
FY2009: \$160,000		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

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Project Title: Angler Harvest		
Program Branch: TMAG		
Point of Contact: Nina		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 45,000	\$ 100,000
Description: Sport harvest in the Trinity River represents 17% of the harvest in the Klamath Basin. Numbers are added to mega table statistics for total in-river returns. Most of these numbers come from monitoring at river inputs. Contributes to Trinity annual run-size estimation, historic fishery data indirectly related to abundance (i.e. steelhead), provides ancillary public relation benefit; monitor fish harvest in the lower Trinity where indirect estimates by weir are not attainable (below weir locality), however fishing in this area is sparse.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? These projects contribute to evaluation of condition of fishery.		
What critical Program goals does this project or task support? Evaluation of fishery.		
Why must this be completed in FY2006? Can it be delayed for future years? Run size evaluated every year.		
Is this a multiyear or ongoing project? Yes		
If so give estimated cost for future years.		
FY2007: \$100,000		
FY2008: \$60,000		
FY2009:		
Other important information: This is a multi-partner project. Based upon discussions with biologists from each agency/tribe, the estimated allocation of funds at this time is expected to be: Hoopa Valley Tribe (\$25,000), CDFG (\$20,000). This is subject to change based on actions taken by the TMC and further development of the scope of work.		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Run Size/Harvest Estimates, incl. Reward Tags		
Program Branch: TMAG		
Point of Contact: Nina		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 530,000	\$ 560,000
Description: Weir recovery of returning adults for population statistics in river above Willow Creek. Data for mega table; aids in validation of run size estimates. Primary source of data on adult escapement for adult salmonids entering the Trinity River and moving into the upper Trinity above Junction City. Also provides information on disease in adults. The weirs represent a long term data set useful for analyzing population response to short term fluctuation in ocean conditions, climate or other factors.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Flow Study, EIS and ROD support monitoring adult escapement.		
What critical Program goals does this project or task support? This provides one half of the primary metric for delineating response of the salmonid populations to restoration activities (smolt to adult ratios).		
Why must this be completed in FY2006? Can it be delayed for future years? This project produces data that are part of a long term data set . These types of data are extremely valuable in assessing populations response to their environment over time.		
Is this a multiyear or ongoing project? Yes, this project is a top priority for the fisheries program and a large part of its strength is the long term data set.		
If so give estimated cost for future years.		
FY2007: \$570,000		
FY2008: \$575,000		
FY2009: \$580,000		
Other important information: This is a multi-partner project. Based upon discussions with biologists from each agency/tribe, the estimated allocation of funds at this time is expected to be: Hoopa Valley Tribe (\$65,000), CDFG (\$465,000). This is subject to change based on actions taken by the TMC and further development of the scope of work.		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Carcass/Redd Surveys		
Program Branch: TMAG		
Point of Contact: Nina		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 175,000	\$ 200,000
Description: Determine hatchery vs. natural produced fish spawning in-river. Determine pre-spawning mortality rate in upper river. Annual redd abundance and distribution information is critical to assess the effectiveness of ROD flows and other flow management actions on adult salmon and steelhead spawning in the Trinity River. Specific data on salmonid redd distribution will also provide insights into where salmon spawn relative to channel geomorphology and how redd distribution changes with discharge within discrete river reaches. The effects of coarse sediment management actions (e.g. gravel introductions) and channel rehabilitation projects on salmon redd distribution and abundance in the Trinity River can also be evaluated. Vast areas within the restoration reach are largely underutilized--will changes in the river redistribute present pattern?		
How is this supported by the Flow Study ROD, and /or Implementation Plan? In-river spawner and redd distributions are a metric to evaluate whether the fishery is sustainable.		
What critical Program goals does this project or task support? In-river spawner and redd distributions and their relationship to flow management actions are a critical part of the fisheries program.		
Why must this be completed in FY2006? Can it be delayed for future years? This project produces data that will contribute to a long term data set . These types of data are extremely valuable in assessing populations response to TRRP management actions over time. The scope of this project may change amongst years however.		
Is this a multiyear or ongoing project? Yes		
If so give estimated cost for future years.		
FY2007: \$280,000		
FY2008: \$200,000		
FY2009: \$180,000		
Other important information: This is a multi-partner project. Based upon discussions with biologists from each agency/tribe, the estimated allocation of funds at this time is expected to be: Hoopa Valley Tribe (\$35,000), Yurok Tribe (\$40,000) CDFG (\$30,000), USFWS (\$70,000). This is subject to change based on actions taken by the TMC and further development of the scope of work.		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Fall and Spring Run Scale Analysis, Age Composition		
Program Branch: TMAG		
Point of Contact: Nina		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 35,000	\$ 54,000
Description: Age structure determination of returning adult salmon. Age structured run-size estimate provides data for mega table data and permits calculation of survival rate of specific cohorts. Cohort analyses informs as to brood survival and interannual natural production. Differential cohort survival can be correlated with differential flow and temperature. In later years this will also allow for evaluation of effects of flow , temperature and increases in rearing habitat, all factors that can influence survival of a year class.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? This project is supported by the Flow Study and EIS in that it permits evaluation of restoration activities on cohort survival.		
What critical Program goals does this project or task support? Evaluation of effects of restoration activities on salmonid population.		
Why must this be completed in FY2006? Can it be delayed for future years? The scales must be collected and preserved every year. Analyses can be postponed if necessary to future years.		
Is this a multiyear or ongoing project? yes		
If so give estimated cost for future years.		
FY2007: \$100,000		
FY2008: \$60,000		
FY2009: \$60,000		
Other important information: This is a multi-partner project. Based upon discussions with biologists from each agency/tribe, the estimated allocations of funds at this time is expected to be: Hoopa Valley Tribe (\$8,000), Yurok Tribe (\$15,000), USFWS (\$12,000). This is subject to change based on actions taken by the TMC and further development of the scope of work.		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#

Project Title: Chinook Tag Decoding at Hatchery		
Program Branch: TMAG		
Point of Contact: Nina		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 23,000	\$ 23,000
Description: Essential for evaluation of coded wire tags in hatchery fish. Hatchery return success, used in combination with weir recoveries and other recovery components for population structure, hatchery vs. natural production. Data for mega-table.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? AEAM process called for constant fractional marking. This is an essential element of the that project.		
What critical Program goals does this project or task support? Constant Fractional Marking of hatchery chinook.		
Why must this be completed in FY2006? Can it be delayed for future years? This is annual as is the constant fractional marking of chinook.		
Is this a multiyear or ongoing project? Yes		
If so give estimated cost for future years.		
FY2007: \$25,000		
FY2008: \$27,000		
FY2009: \$30000		
Other important information:		

**Trinity River Restoration Program
FY2006
PROJECT DESCRIPTIONS**

#61

Project Title: Vegetation Response Mapping		
Program Branch: TMAG		
Point of Contact: Bob		
Funding Level:	FY2006 President's Budget	Full Program Budget
Funding Amount:	\$ 18,500	N/A
Description: Produce a high quality, high definition, map of the riparian and adjacent upland stands growing along the Trinity River mainstem between Lewiston Dam and the North Fork of the Trinity River with accompanying metadata . . .		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Provides baseline data for monitoring of riparian vegetation in relationship to TRRP restoration site implementation. Also provides an index to the overall impacts to riparian habitat for riparian-dependent (obligate) species of both fish (edge habitat, 2-3D habitat assessments) and riparian wildlife. Will also provide an index as to environmental compliance monitoring of jurisdictional wetland habitat once restoration sites have been implemented and follow-on 3 year assessments are performed.		
What critical Program goals does this project or task support? Provides baseline data for monitoring of riparian vegetation in relationship to TRRP restoration site implementation. Also provides an index to the overall impacts to riparian habitat for riparian-dependent (obligate) species of both fish (edge habitat, 2-3D habitat assessments) and riparian wildlife. Will also provide an index as to environmental compliance monitoring of jurisdictional wetland habitat once restoration sites have been implemented and follow-on 3 year assessments are performed.		
Why must this be completed in FY2006? Can it be delayed for future years? This work finishes the FY03-FY04 series of tasks required for developing the riparian vegetation map. No it can not be delayed for future years.		
Is this a multiyear or ongoing project? No		
If so give estimated cost for future years.		
FY2007: N/A		
FY2008: N/A		
FY2009: N/A		
Other important information:		