Trinity River Restoration Program
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PROJECT DESCRIPTIONS

#	Project Name	Program Branch	Point of Contact
1	Personnel	Program Administration	Doug
2	Office Operations	Program Administration	Doug
3	RIC/OIC	Program Administration	Doug
4	Public Outreach Information	Program Administration	Doug
5	TMC Support	Program Administration	Doug
6	TAMWG	Program Administration	Doug
7	Science Advisory Board	Program Administration	Rod
8	Independent Review Panels	Program Administration	Rod
9	RIG AEAM (Personnel)	RIG	Ed
10	RIG - RIC/OIC	RIG	Ed
11	Floodplain Structures NEPA/CEQA	RIG	Brandt
12	D/P - Brown's Mountain Road Repair	RIG	Denise
13	D/P - Floodplain Structures Relocation	RIG	Denise
14	D/P - Hydrology Study	RIG	Joe
15	D/P - DWR HEC - RAS Model COMPLETE	RIG	Joe
16	Implement - Brown's Mountain Road Repair	RIG	Denise
17	Implement - Constr. Salt Flat/Biggers COMPLETE	RIG	Ed
18	Implement - Constr. PB/Bucktail Bridges COMPLETE	RIG	Ed
19	Implement - Poker Bar Road COMPLETE	RIG	Denise
20	Implement - Floodplain Structures Relocation	RIG	Denise
20a	Floodplain Structures Itemized Costs	RIG	Denise
21	Channel Rehab NEPA/CEQA	RIG	Brandt
22	Invasive/Non-native Plants/Animal Studies	RIG	Brandt
23	Channel Rehab Mercury Monitoring	RIG	Brandt
24	Cultural Resource Compliance	RIG	Brandt
25	D/P - Canyon Creek Complex (4) COMPLETE	RIG	Joe
26	D/P - Restoration Sites below Lewiston Dam (4)	RIG	Joe
27	D/P - Restoration Site Design Below Lewiston Dam (8)	RIG	Joe
28	D/P - Indian Creek Rehab Site (3) COMPLETE	RIG	Joe
29	D/P - Bucktail Rehab Site (Dark Gulch)(4)	RIG	Joe
30	D/P - Restoration Site Design (future implementation)	RIG	Joe
31	Hocker Flat Site Rehab Construction COMPLETE	RIG	Joe
32	Canyon Creek Complex Construction	RIG	Joe
33	Indian Creek Construction	RIG	Joe
34	Bucktail (Dark Gulch) Construction	RIG	Joe
35	Restoration Construction Below Lewiston Dam (4)	RIG	Joe
36	Restoration Construction Below Lewiston Dam (8)	RIG	Joe
37	Revegetation of Implementation Sites	RIG	Joe
38	Coarse Sediment Introductions NEPA/CEQA	RIG	Brandt
39	Delta Maintenance NEPA/CEQA	RIG	Brandt
40	D/P - Coarse Sediment Introductions	RIG	Joe
41	D/P - Delta Maintenance	RIG	Joe
42	GVC Watershed Monitoring, Hamilton Ponds O & M	RIG	Joe
43	Hamilton Ponds Upgrade	RIG	Andreas
44	Coarse Sediment Introductions	RIG	Joe
45	Fine Sediment Terrain Database	TMAG	Dave
46	USGS: Watershed Strategy and Technical Support	TMAG	Dave
47	Local Watershed Sediment Source Control Plans	TMAG	Dave
48	Watershed Restoration Project Implementation	RIG	Denise
49	RCD Watershed Coordinator	TMAG	Dave

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50	Trinity County Watershed Grants	TMAG	Dave
51	TMAG AEAM (Personnel)	TMAG	Rod
52	TMAG - RIC/OIC	TMAG	Rod
53	Integrated Information Management System	TMAG	Rod
54	Science Workshops	TMAG	Rod
55	TRRP Annual Science Symposium	TMAG	Rod
56	Integrated Monitoring Plan	TMAG	Rod
57	Expert Consultation (ESSA)	TMAG	Rod
58	Subprogram Reviews	TMAG	Rod
59	Stream Flow Gaging	TMAG	Andreas
60	USFWS Water Temperature Monitoring	TMAG	Andreas
61	USGS Water Temperature Monitoring	TMAG	Andreas
62	Water Temperature Monitoring	TMAG	Andreas
63	Water Temperature Modeling Upgrades	TMAG	Andreas
64	Expert Consultation - Temperature Models	TMAG	Andreas
65	Lewiston Lake Bathymetry	TMAG	Andreas
66	Lewiston/Trinity Lake Water Temperature Model	TMAG	Andreas
67	Sediment Monitoring	TMAG	Andreas
68	USGS Sediment Montoring QA	TMAG	Andreas
69	GSTARS Sediment Transport Model	TMAG	Andreas
70	Expert Consultation - Physical Models	TMAG	Dave
71	Bed Scour Model	TMAG	Dave
72	New Aerial Photos	TMAG	Andreas
73	Aerial Photo Ground Control	TMAG	Andreas
74	Orthorectify New Aerial	TMAG	Andreas
75	Acquire & Scan Historic Aerial Photos	TMAG	Dave
76	Photopoint Monitoring	TMAG	Andreas
77	Bathymetric Mapping	TMAG	Dave
78	Geomorphic Mapping	TMAG	Dave
79	Substrate Mapping (Pebble Counts/Facies Mapping)	TMAG	Dave
80	Geomorphic Monitoring	TMAG	Dave
81	LWD Mapping	TMAG	John
82	Riparian Intiation Monitoring	TMAG	Dave
83	Vegetation Mapping	TMAG	Dave
84	Riparian Recruitment Model	TMAG	Dave
85	Riverine and Riparian Associates Assessment	TMAG	Rod
86	2-D Fish Habitat Modeling	TMAG	Nina
87	Empirical/2-D Habitat Assessment - Aerial Photo	TMAG	Nina
88	Empirical Mapping Restoration Monitoring	TMAG	Nina
89	Habitat Design Review & Expert Consultation	TMAG	Nina
90	Fry Density	TMAG	Nina
91	Juvenile Salmon Health	TMAG	Nina
92	Developing Model Input for SALMOD	TMAG	Nina
93	Quick Response, Mortality Monitoring	TMAG	Nina
94	Emigration Estimates (rotary trapping)	TMAG	Nina
95	Adult Chinook Salmon Migration	TMAG	Nina
96	Fish Marking at Hatchery, Chinook-CWT	TMAG	Nina
97	Fall Flows; monitor	TMAG	Nina
98	Spring Bench	TMAG	Nina
99	Summer and Winter Base Flows	TMAG	Nina
100	Tribal Harvest Survey, Lower Klamath	TMAG	Nina
101	Angler Harvest	TMAG	Nina
102	Run Size/Harvest Estimates, incl. Reward Tags (Weirs)	TMAG	Nina
103	Carcass/Redd Surveys	TMAG	Nina

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104	Fall and Spring Run Scale Analysis, Age Composition	TMAG	Nina
105	Chinook Tag Decoding at Hatchery	TMAG	Nina

Trinity River Restoration Program
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PROJECT DESCRIPTIONS

#

Project Title: Personnel		
Program Branch: Program Administration		
Point of Contact: Doug		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 355,000	$ 355,000
Description: Salary and benefits of TRRP Program Administration staff (Weaverville office). Includes four FTEs: Executive Director, Secretary, Grants & Agreements Technician, and two Branch Chiefs at 50% (balance of Branch Chiefs shown under RIG and TMAG). No difference between FY2007 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 FY2007? 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.		
FY2008: $368,000		
FY2009: $375,000		
FY2010:		
Other important information:		

Trinity River Restoration Program
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PROJECT DESCRIPTIONS

#

Project Title: Office Operations		
Program Branch: Program Administration		
Point of Contact: Doug		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 458,000	$ 458,000
Description: Includes GSA office lease (5,000 sq.ft.), utilities, security and janitorial services, supplies, equipment, 7 vehicles, travel/training for 13 employees, and relocation expenses for 1-2 employees per year (attrition). No difference between FY2007 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 FY2007? 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.		
FY2008: $472,000		
FY2009: $486,000		
FY2010:		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: RIC/OIC		
Program Branch: Program Administration		
Point of Contact: Doug		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 213,000	$ 213,000
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. FY2007 budgeted at 30% 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 FY2007? 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.		
FY2008: $221,000		
FY2009: $227,000		
FY2010:		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Public Information Outreach		
Program Branch: Program Management		
Point of Contact: Doug		
Funding Level:	**FY2007 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 FY2007? 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? If so give estimated cost for future years. Ongoing.		
If so give estimated cost for future years.		
FY2008: $80,000		
FY2009: $80,000		
FY2010:		
Other important information:		

Trinity River Restoration Program
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PROJECT DESCRIPTIONS

#

Project Title: TMC Participation		
Program Branch: Program Mgmt.		
Point of Contact: Doug .		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 702,000	$ 722,000
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.		
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 FY2007? 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? If so give estimated cost for future years. Ongoing.		
If so give estimated cost for future years.		
FY2008: $755,000		
FY2009: $778,000		
FY2010:		
FY2010:		

Trinity River Restoration Program
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PROJECT DESCRIPTIONS

#

Project Title: TAMWG		
Program Branch: Program Mgmt.		
Point of Contact: Doug		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 20,000	$ 20,000
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 FY2007? 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.		
FY2008: $56,000		
FY2009: $58,000		
FY2010:		
Other important information:		

Trinity River Restoration Program
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PROJECT DESCRIPTIONS

#

Project Title: Science Advisory Board		
Program Branch: Program Mgmt.		
Point of Contact: Rod		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 100,000	$ 225,000
Description: Travel and per diem costs plus review time at current salary rates for 4 independent scientists to assist with TRRP science program activities, including annual assessments. FY2007 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 FY2007? Can it be delayed for future years? Scientific Advisiory 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 FY2007 and beyond.		
Is this a multiyear or ongoing project? Ongoing.		
If so give estimated cost for future years.		
FY2008: $225,000		
FY2009: $225,000		
FY2010: $225,000		
Other important information:		

Trinity River Restoration Program
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PROJECT DESCRIPTIONS

#

Project Title: Independent Review Panels		
Program Branch: Program Mgmt.		
Point of Contact: Rod		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 10,000	$ 25,000
Description: Panels of 2 or more subject experts with no ties to the program who serve to review draft SOW's and responses to RFP's. Panel service is confidential, names are not provided to TRRP partners.		
How is this supported by the Flow Study, ROD, and /or Implementation Plan? The 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 FY2007? Can it be delayed for future years? Phased implementation in FY2007.		
Is this a multiyear or ongoing project? Ongoing.		
If so give estimated cost for future years.		
FY2008: $25,000		
FY2009: $25,000		
FY2010: $25,000		
Other important information:		

Trinity River Restoration Program
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PROJECT DESCRIPTIONS

#

Project Title: Personnel - RIG		
Program Branch: RIG		
Point of Contact: Ed		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 405,000	$ 460,000
Description: Salary and benefits of TRRP RIG Branch(Weaverville office). Includes five FTEs: Environmental Specialist, Realty Specialist, two Civil Engineers, one Engineering Technician (vacant), and Branch Chief. 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 FY2007? Can it be delayed for future years? For the President's budget, staff is already in place with the exception of an Engineering Technician. 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.		
FY2008: $417,000		
FY2009: $430,000		
FY2010: $443,000		
Other important information:		

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#

Project Title: RIC/OIC - RIG		
Program Branch: RIG		
Point of Contact: Ed		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 239,000	$ 276,000
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. FY2007 budgeted at 30% 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 FY2007? 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.		
FY2008: $284,000		
FY2009: $293,000		
FY2010: $302,000		
Other important information:		

Trinity River Restoration Program
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PROJECT DESCRIPTIONS

#

Project Title: D/P Floodplain Structures NEPA/CEQA		
Program Branch: RIG		
Point of Contact: Brandt		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 50,000	$ 50,000
Description: NEPA/CEQA preparation with supplemental funding provided for permit fees, consultation with private NEPA/CEQA contractors, and support to CEQA leads. $20,000 allocated for construction-related compliance activities in support of the Indian Creek project and Browns Mountain Road Repair. $20,000 to address other structure issues depending on results of HEC-RAS inundation modeling. $10,000 for floodplain structure component of Master EA/EIR cumulative impact analysis.		
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 FY2007? 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? Ongoing.		
If so give estimated cost for future years.		
FY2008: $50,000		
FY2009:		
FY2010:		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: D/P Brown's Mountain Road Repair		
Program Branch: RIG		
Point of Contact: Denise		
Funding Level:	**FY2006 President's Budget**	**Full Program Budget**
Funding Amount:	$100,000	$100,000
Description:		
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 other		
What critical Program goals does this project or task support?		
Why must this be completed in FY2007? Can it be delayed for future years?		
Is this a multiyear or ongoing project? No.		
If so give estimated cost for future years.		
FY2008:		
FY2009:		
FY2010:		
Other important information:		

Trinity River Restoration Program
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PROJECT DESCRIPTIONS

#

Project Title: Design/Planning - Floodplain Structures Relocation		
Program Branch: RIG		
Point of Contact: Denise		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 20,000	$ 20,000
Description: Identify impacted structures along the river at 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 11,000 cfs.		
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 FY2007? Can it be delayed for future years? If the 2007 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.		
FY2008: $20,000		
FY2009:		
FY2010:		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

X

Project Title: Design/Planning - Hydrology Study		
Program Branch: RIG		
Point of Contact: Joe		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 70,000	$ 70,000
Description: Develop flood frequency curves for the mainstem Trinity River from Lewiston Dam to the North Fork Trinity River. This study is required for rehabilitation site design, hydraulic modeling, determining 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 FY2007? Can it be delayed for future years? This study is required by Trinity County for immediate planning and building permit purposes as it relates to infrastructure projects which may be constructed in the floodplain. This study can not be delayed.		
Is this a multiyear or ongoing project? No.		
If so give estimated cost for future years.		
FY2007:		
FY2008:		
FY2009:		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Design/Planning - DWR HEC-RAS Model - COMPLETE		
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
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Brown's Mountain Road Repair		
Program Branch: RIG		
Point of Contact: Denise		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$400,000	$400,000
Description: Includes full contract plus non-contract costs of reconstructing the arch-pipe side channel river crossing on Brown's Mountain Road that failed during the ROD dam releases in May 2006.		
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 11,000 cfs.		
What critical Program goals does this project or task support? Implementation of the ROD's variable flow regime, including 11,000 cfs extremely wet year flows.		
Why must this be completed in FY2007? Can it be delayed for future years? Dam releases of over 8,500 cfs cannot be implemented without instituting road closures. Current one lane restriction is reducing roadway safety.		
Is this a multiyear or ongoing project? No.		
If so give estimated cost for future years.		
FY2008:		
FY2009:		
FY2010:		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Construction Biggers/Salt Flat Bridges - COMPLETE		
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
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Construction Poker Bar/Bucktail Bridges - COMPLETE		
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
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Implementation - Poker Bar Road –COMPLETE		
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
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Implementation - Floodplain Structures Relocation		
Program Branch: RIG		
Point of Contact: Denise		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 400,000	$ 875,000
Description: Implementation of the floodplain structure modification program. Full program budget assumes 1 major property purchase and full funding of the Well and Septic Grant Program. The President's budget assumes no major property purchase and eliminates grant program funding. (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 FY2007? Can it be delayed for future years? If the 2007 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 complete the ability for the floodplain to accommodate 11,000 cfs + 100 year tributary accretions.		
If so give estimated cost for future years.		
FY2008: $475,000		
FY2009: $400,000		
FY2010: $200,000		
Other information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Implementation - Floodplain Structures Relocation - Itemized Costs		
Program Branch: RIG		
Point of Contact: Denise		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Itemized list of Floodplain Structure costs		
Pump Houses	$ 20,000	$ 20,000
Driveways	-	-
Well Emergencies	20,000	20,000
Indian Creek	75,000	75,000
Ann Jordan	10,000	10,000
Major Structure Modifications	100,000	100,000
Removing Tullis	-	-
Major Structure Purchases (0 vs. 1)	-	375,000
Realty Agreements	175,000	175,000
Well Grant Program	-	100,000
Total	$ 400,000	$ 875,000

Note: Amounts include any contracting & construction management costs.

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

X

Project Title: Channel Rehab NEPA/CEQA		
Program Branch: RIG		
Point of Contact: Brandt		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 200,000	$ 200,000
Description: NEPA/CEQA environmental documentation and permitting to prepare: 1) A Master EA/EIR programmatically covering the remaining 39 channel rehabilitation sites; and, 2) a site-specific EA/IS for 8 channel rehab projects at as yet undetermined locations. 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? Mechanical Channel Rehabilitation.		
Why must this be completed in FY2007? Can it be delayed for future years? Schedules approved by the TMC require construction completed on 24 sites by 2008 and the remaining 23 sites by 2012. Environmental compliance is required for implementation.		
Is this a multiyear or ongoing project? YES		
If so give estimated cost for future years.		
FY2008: $200,000		
FY2009: $200,000		
FY2010: $200,000		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Invasive/Non-native Plant/Animal Studies		
Program Branch: RIG		
Point of Contact: Brandt		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 25,000	$ 25,000
Description: Provide comprehensive species-specific mapping and modeling, and develop management recommendations for exotic plant species on proposed rehabilitation and infrastructure modification 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 commitments.		
What critical Program goals does this project or task support? Mechanical channel rehabilitation and floodplain structure modifications.		
Why must this be completed in FY2007? Can it be delayed for future years? No, it must be done in accordance with permit requirements and to anticipate budget needs for future 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.		
FY2008:		
FY2009:		
FY2010:		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Channel Rehab Mercury Monitoring - COMPLETED		
Program Branch: RIG		
Point of Contact: Brandt		
Funding Level:	**FY2006 President's Budget**	**Full Program Budget**
Funding Amount:	$ 80,445	$ 80,445
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:		
FY2008:		
FY2009:		
Other important information: This contract with USGS was completed in FY06 for a total of $80,445.		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Cultural Resource Compliance		
Program Branch: RIG		
Point of Contact: Brandt		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$25,000	$25,000
Description: Surveys and documentation of cultural resources associated with channel rehabilitation and floodplain infrastructure modification projects.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? The ROD and Implementation Plan require the construction of channel rehabilitation projects for habitat creation and floodplain structures impacted by the ROD dam releases to be addressed.		
What critical Program goals does this project or task support? Mechanical channel rehabilitation and floodplain structure modifications.		
Why must this be completed in FY2007? Can it be delayed for future years? No. This must be accomplished as implementation proceeds to comply with Section 106 of the National Historic Preservation Act and the Programmatic Agreement between USBR, BLM, FWS, HVT and California.		
Is this a multiyear or ongoing project? Yes.		
If so give estimated cost for future years.		
FY2008: $25,000		
FY2009: $25,000		
FY2010: $25,000		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Canyon Creek Complex Designs - COMPLETE		
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
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Design/Planning for Restoration Sites below Lewiston Dam (4)		
Program Branch: RIG		
Point of Contact: Joe		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 20,000	$ 20,000
Description: Preparation of contract drawings and specifications, preparing the bid package and awarding a contract for the construction of 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 FY2007? 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. Future funding requirements will be addressed within the Channel Rehabilitation Implementation line item.		
If so give estimated cost for future years.		
FY2008:		
FY2009:		
FY2010:		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Design/Planning - Restoration Sites Below Lewiston Dam (8)		
Program Branch: RIG		
Point of Contact: Joe		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 300,000	$ 300,000
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 FY2007? 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 FY07 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.		
FY2008: $40,000		
FY2009:		
FY2010:		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Design/Planning - Indian Creek Rehab Sites - COMPLETE		
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
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Design/Planning - Bucktail Rehab Site (Dark Gulch)		
Program Branch: RIG		
29a		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 20,000	$ 20,000
Description: Preparation of contract drawings and specifications, preparing the bid package and awarding a contract for the construction of three rehabilitation sites and a side channel upstream of the Bucktail bridge.		
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 FY2007? 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.		
FY2008:		
FY2009:		
FY2010:		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Design/Planning - Restoration Site Design (future Implementation)		
Program Branch: RIG		
Point of Contact: Joe		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ -	$ -
Description: Design and planning for the first 8 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 FY2008? 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? Yes.		
If so give estimated cost for future years.		
FY2008: $300,000		
FY2009: $40,000		
FY2010:		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Hocker Flat Site Rehab Construction - COMPLETED		
Program Branch: RIG		
Point of Contact: Joe		
Funding Level:	**FY2006 President's Budget**	**Full Program Budget**
Funding Amount:	$ 102,017	$ 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
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Canyon Creek Complex Construction		
Program Branch: RIG		
Point of Contact: Joe		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 100,000	$ 100,000
Description: Second year costs of constructing 4 channel rehabilitation sites below Canyon Creek. Includes construction management costs and 5% for potential contract modifications.		
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 FY2007? 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? No.		
If so give estimated cost for future years.		
FY2008:		
FY2009:		
FY2010:		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Indian Creek Rehab Site Construction		
Program Branch: RIG		
Point of Contact: Joe		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 1,400,000	$ 1,400,000
Description: Includes full contract plus non-contract costs of constructing 2 rehab sites and a side channel near Indian Creek. Utilizes $700,000 in Reclamation W&RR funding and $700,000 in grants from Cal. F&G and the EPA.		
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 FY2007? Can it be delayed for future years? No. Required to stay on schedule for the completion of 24 rehabilitation sites by the end of 2008. Delay of this project will also delay the implementation of ROD flows of 11,000 cfs plus 10-yr tributary accretions.		
Is this a multiyear or ongoing project? No.		
If so give estimated cost for future years.		
FY2008:		
FY2009:		
FY2010:		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Bucktail Rehab Site Construction (Dark Gulch)		
Program Branch: RIG		
Point of Contact: Joe		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ -	$ 1,035,000
Description: Includes full contract plus non-contract costs of constructing 3 rehab sites and a side channel upstream of the Bucktail bridge.		
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 FY2008? 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.		
FY2008: $1,035,000		
FY2009:		
FY2010:		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Restoration Construction Below Lewiston Dam (4)		
Program Branch: RIG		
Point of Contact: Joe		
Funding Level:	**FY2007 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 FY2008? 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.		
FY2008: $690,000		
FY2009:		
FY2010:		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Restoration Construction Below Lewiston Dam (8)		
Program Branch: RIG		
Point of Contact: Joe		
Funding Level:	**FY2007 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 FY2008? 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.		
FY2008: $1,400,000		
FY2009:		
FY2010:		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Revegetation of Implementation Sites		
Program Branch: RIG		
Point of Contact: Joe		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 80,000	$ 150,000
Description: Implementation of re-vegetation designs for bridge sites and proposed channel rehabilitation sites. Includes harvesting plant materials, planting, and irrigation as necessary.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Required to complete after each engineering implementation as stipulated in the TRFES and environmental compliance mitigation commitments.		
What critical Program goals does this project or task support? Mechanical channel rehabilitation and floodplain structure modifications.		
Why must this be completed in FY2007? Can it be delayed for future years? No. It must be done in accordance with permit requirements and landowner agreements.		
Is this a multiyear or ongoing project? Yes.		
If so give estimated cost for future years.		
FY2008: $150,000		
FY2009: $150,000		
FY2010: $150,000		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Coarse Sediment Introductions NEPA/CEQA		
Program Branch: RIG		
Point of Contact: Brandt		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 100,000	$ 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. The FY07 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 and will be included in a Master EA/EIR.		
What critical Program goals does this project or task support? To implement the Sediment Management Plan.		
Why must this be completed in FY2007? Can it be delayed for future years? The coarse sediment program has lagged and it is believed that the river is significantly gravel deficient. 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.		
FY2008: $100,000		
FY2009: $100,000		
FY2010:		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Delta Maintenance NEPA/CEQA		
Program Branch: RIG		
Point of Contact: Brandt		
Funding Level:	**FY2007 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 FY2008? Can it be delayed for future years? This work may be delayed or determined to not be necessary. Further analysis may indicate that the high dam releases are adequately addressing delta issues. The Indian Creek delta will be addressed during the Indian Creek channel rehabilitation site construction. The Rush Creek delta is currently being monitored.		
Is this a multiyear or ongoing project? NO		
If so give estimated cost for future years.		
FY2008: $25,000		
FY2009:		
FY2010:		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Design/Planning - Coarse Sediment Introductions		
Program Branch: RIG		
Point of Contact: Joe		
Funding Level:	**FY2007 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 FY2007? Can it be delayed for future years? Planning and design efforts must be initiated if any coarse sediment introductions are expected to occur in FY07.		
Is this a multiyear or ongoing project? Multiyear.		
If so give estimated cost for future years.		
FY2008: $50,000		
FY2009: $50,000		
FY2010:		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Design/Planning - Delta Maintenance		
Program Branch: RIG		
Point of Contact: Joe		
Funding Level:	**FY2007 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 FY2008? Can it be delayed for future years? This work may be delayed or determined to not be necessary. Further analysis may indicate that the high dam releases are adequately addressing delta issues. The Indian Creek delta will be addressed during the Indian Creek channel rehabilitation site		
Is this a multiyear or ongoing project? No.		
If so give estimated cost for future years.		
FY2008: $75,000		
FY2009:		
FY2010:		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: GVC Watershed Monitoring, Hamilton Ponds O & M		
Program Branch: RIG		
Point of Contact: Joe		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 100,000	$ 120,000
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. The President's budget represents reduced Grass Valley Creek watershed activities and/or efficiencies obtained in Hamilton Ponds O&M.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? The control of fine sediment in the mainstem is addressed in the Sediment Management and Watershed Restoration elements of the ROD.		
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 FY2007? Can it be delayed for future years? No, Cannot be delayed for future years. Failure to maintain the Hamilton Ponds may yield the input of large quantities of harmful decomposed granite sediments to the Trintiy River. Eliminating watershed restoration and O&M activities upslope in Grass Valley Creek will increase costs and risks of operating the Hamilton Ponds.		
Is this a multiyear or ongoing project? Yes.		
If so give estimated cost for future years.		
FY2008: $120,000		
FY2009: $120,000		
FY2010: $120,000		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Hamilton Ponds Upgrade		
Program Branch: RIG		
Point of Contact: Andreas		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ -	$ -
Description: Implement any 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 FY2008? Can it be delayed for future years? Project may be delayed based on availability of funds, but implementation could yield long-term cost benefits to the program.		
Is this a multiyear or ongoing project? No.		
If so give estimated cost for future years.		
FY2008: $200,000		
FY2009:		
FY2010:		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Implementation - Coarse Sediment Introductions		
Program Branch: RIG		
Point of Contact: Joe		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 275,000	$ 500,000
Description: Full contract plus non-contract costs of processing and stockpiling coarse sediment for future introduction projects. Full program assumes stockpiling approximately 35,000 cy for introduction at a combination of Lewiston area channel rehabilitation sites and stand-alone gravel augmentation locations identified in the gravel management plan. The President's Budget represents approximately 20,000 cy stockpiled and introduced as part of the Lewiston 4 channel rehabilitation sites. Introductions would take place in the fall/winter of 2007/2008 prior to the high dam releases of spring 2008.		
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 FY2007? Can it be delayed for future years? The coarse sediment program has lagged and it is believed that the river is significantly gravel deficient. The President's Budget doubles the amount of coarse sediment introductions provided in 2006		
Is this a multiyear or ongoing project? Multiyear.		
If so give estimated cost for future years.		
FY2008: $500,000		
FY2009: $500,000		
FY2010: $500,000		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Fine Sediment Terrane Database		
Program Branch: TMAG		
Point of Contact: Dave		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 35,000	$ 35,000
Description: Identify subbasins with high potential to deliver fine sediment to the Trinity River through the development of a spatial database that inventories fine sediment source areas and their spatial relationship to the main stem and/or major tribut		
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 FY2007? Can it be delayed for future years? No, the present watershed strategy needs improvement.		
Is this a multiyear or ongoing project? No, limited database maintenance and improvements can be done in-house.		
If so give estimated cost for future years.		
FY2008:		
FY2009:		
FY2010:		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: USGS: Watershed Strategy and Technical Support		
Program Branch: TMAG		
Point of Contact: Dave		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 15,000	$ 15,000
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 coordi		
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 FY2007? Can it be delayed for future years? No, the present watershed strategy needs improvement.		
Is this a multiyear or ongoing project? No, future agreements with the USGS target the Fine Sediment Terrane Database.		
If so give estimated cost for future years.		
FY2008:		
FY2009:		
FY2010:		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Local Watershed Sediment Source Evaluation and Control Plans		
Program Branch: TMAG		
Point of Contact: Dave		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 40,000	$ 80,000
Description: Specific sediment source control plans need to be developed for the priority subbasins identified with the Fine Sediment Terrane Database. These plans take into account the site specific issues such as property ownership, access, cost effect		
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 FY2007? Can it be delayed for future years? No, the present watershed strategy needs improvement.		
Is this a multiyear or ongoing project? Yes, until project implementation cannot keep up with the list of treatment options.		
If so give estimated cost for future years.		
FY2008: $35,000		
FY2009: $35,000		
FY2010: $35,000		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Watershed Restoration Project Implementation		
Program Branch: TMAG		
Point of Contact: Denise		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ -	$ -
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 Pr		
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 FY2007? Can it be delayed for future years? No, the present watershed strategy needs improvement.		
Is this a multiyear or ongoing project? Yes		
If so give estimated cost for future years.		
FY2008: $200,000		
FY2009:		
FY2010:		
Other important information: This item is discontinued.		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: RCD Watershed Coordinator		
Program Branch: TMAG		
Point of Contact: Dave		
Funding Level:	**FY2007 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		
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. RCD Coordination allow augments Program w		
Why must this be completed in FY2007? Can it be delayed for future years? No, the present watershed strategy needs improvement.		
Is this a multiyear or ongoing project? On-going.		
If so give estimated cost for future years.		
FY2008: $50,000		
FY2009: $50,000		
FY2010: $50,000		
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		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Trinity County Watershed Grants		
Program Branch: TMAG		
Point of Contact: Dave		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 150,000	$ 200,000
Description: Watershed restoration project implementation administered through Trinity County.		
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 FY2007? Can it be delayed for future years? No, the present watershed strategy needs improvement.		
Is this a multiyear or ongoing project? On-going.		
If so give estimated cost for future years.		
FY2008: $100,000		
FY2009: $100,000		
FY2010: $100,000		
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		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Personnel		
Program Branch: TMAG		
Point of Contact: Rod		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 412,000	$ 542,000
Description: Salary and benefits of TRRP TMAG staff (Weaverville office). Includes five positions: Hydraulic Engineer, Fluvial Geomorphologist, Fishery Biologist, Restoration Ecologist, and Branch Chief. Full Program level includes Biologist and Data/GIS 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? Execution of Adaptive Environmental Assessment and Management Program.		
Why must this be completed in FY2007? 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.		
FY2008: $424,000		
FY2009: $436,000		
FY2010:		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: RIC/OIC		
Program Branch: TMAG		
Point of Contact: Rod		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 243,000	$ 325,000
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. FY2007 budgeted at 30% 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 FY2007? Can it be delayed for future years?		
Is this a multiyear or ongoing project? Ongoing.		
If so give estimated cost for future years.		
FY2008: $255,000		
FY2009: $262,000		
FY2010:		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

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Project Title: Integrated Information Management System		
Program Branch: Program Mgmt.		
Point of Contact: Andreas		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 50,000	$ 50,000
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.		
FY2008: $50,000		
FY2009: $50,000		
FY2010: $0		
Other important information: TRRP funds are leveraged 3 to 1 to accomplish this project.		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

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:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: TRRP Annual Science Symposium		
Program Branch: TMAG		
Point of Contact: Rod		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	0	$25,000
Description: Annual symposium for TRRP partners and invited guests. Review of previous year science accomplishments and iteration of of adaptive protion of AEAM process.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Flow study and ROD called for AEAM program. The symposium is a methold for accomplisheing a protion of the "Adaptive" mandate.		
What critical Program goals does this project or task support? Science accomplishments related to overall program metrics and annual decision making processes.		
Why must this be completed in FY2006? Can it be delayed for future years? This would be the first annual symposium.		
Is this a multiyear or ongoing project? Repeated annually in the December - January time frame.		
If so give estimated cost for future years.		
FY2007: $25,000		
FY2008: $25,000		
FY2009: $25,000		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Integrated Monitoring Plan		
Program Branch: TMAG		
Point of Contact: Rod		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 25,000	$ 25,000
Description: 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.		
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 FY2007? 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.		
FY2008: $25,000		
FY2009: $25,000		
FY2010: $25,000		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Expert Consultation (ESSA)		
Program Branch: TMAG		
Point of Contact: Rod		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	0	$25,000
Description: Extension to NSR contract and subcontractor ESSA Technologies for extraneous Science Framework effort and planning for next iteration of IAP, Supports IIMS peripherally.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Planning for AEAM process.		
What critical Program goals does this project or task support? AEAM process.		
Why must this be completed in FY2007? Can it be delayed for future years? This can be delayed.		
Is this a multiyear or ongoing project? Ongoing.		
If so give estimated cost for future years.		
FY2008: $25,000		
FY2009: $25,000		
FY2010: $25,000		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Subprogram Reviews		
Program Branch: TMAG		
Point of Contact: Rod		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	0	$25,000
Description: Funded $35k in FY06. Povides cost comparison information as well as sources of new/different technologies for TRRP science components. Complimentary to IRP's, provides higher level /integrated review of SOW's in relation to major subdivisions of TMAG program.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Part of peer review process applied to major subdivisions of TMAG program.		
What critical Program goals does this project or task support? Peer review.		
Why must this be completed in FY2007? Can it be delayed for future years? Several areas (RST, CWT, Harvest Mgmt.) await external peer review as part of science framework process.		
Is this a multiyear or ongoing project? Ongoing.		
If so give estimated cost for future years.		
FY2008: $25,000		
FY2009: $25,000		
FY2010: $25,000		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Streamgage Flow Gaging		
Program Branch: TMAG		
Point of Contact: Andreas		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 221,000	$ 221,000
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, South		
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 FY2007? Can it be delayed for future years? This data is needed annually.		
Is this a multiyear or ongoing project? Yes.		
If so give estimated cost for future years.		
FY2008: $221,000		
FY2009: $232,000		
FY2010: $243,000		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: USFWS Water Temperature Monitoring		
Program Branch: TMAG		
Point of Contact: Andreas		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ -	$ -
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 FY2007? Can it be delayed for future years? No, the present watershed strategy needs improvement.		
Is this a multiyear or ongoing project? Yes		
If so give estimated cost for future years.		
FY2008:		
FY2009:		
FY2010:		
Other important information: This item has been discontinued.		

Trinity River Restoration Program
FY2007
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: This item has been discontinued.		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Water Temperature Monitoring		
Program Branch: TMAG		
Point of Contact: Andreas		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 10,000	$ 10,000
Description: A network of water temperature monitoring stations will be maintained ($10,000) to provide data for compliance and temperature modeling calibration/validation. The temperature monitoring network will be updated in according to recommendations		
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? 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 temper		
Why must this be completed in FY2007? Can it be delayed for future years? Data is needed for annual decision making and regulatory compliance.		
Is this a multiyear or ongoing project? Yes		
If so give estimated cost for future years.		
FY2008: $0		
FY2009: $0		
FY2010: $0		
Other important information: By 2008, we hope to transition all water temperature monitoring to the Bureau of Reclamation who would maintain the temperture network with in-kind services. Consequently, all outyears costs have been zeroed out.		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Water Temperature Monitoring Network Upgrade		
Program Branch: TMAG		
Point of Contact: Andreas		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ -	$ 30,000
Description: The temperature monitoring network will be updated according to recommendations of consultant charged with developing a new mainstem temperature model.		
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? 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 temper		
Why must this be completed in FY2007? Can it be delayed for future years? No, the present watershed strategy needs improvement.		
Is this a multiyear or ongoing project? No		
If so give estimated cost for future years.		
FY2008:		
FY2009:		
FY2010:		
Other important information: This item has been incorporated into the Water Temperature Monitoring item.		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Expert Consultation - Temperature Models		
Program Branch: TMAG		
Point of Contact: Dave		
Funding Level:	**FY2006 President's Budget**	**Full Program Budget**
Funding Amount:	$ 20,000	$ -
Description: On-call technical support for water temperature model (RMA-2, CEQUALW2), including integration with Klamath River 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? 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? No, the present watershed strategy needs improvement.		
Is this a multiyear or ongoing project? Yes		
If so give estimated cost for future years.		
FY2008:		
FY2009:		
FY2010:		
Other important information: This item is finished.		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Lewiston Lake Bathymetry		
Program Branch: TMAG		
Point of Contact: Andreas		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ -	$ 50,000
Description: Development of the CEQUALW2 reservoir temperature model for Lewiston Reservoir requires reservoir bathymetry. Reservoir bathymetry for Trinity Lake may also be required in 2008.		
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? An updated Lewiston temperature model is needed for effective management of the cold water pool needed to attain temperature objectives in both the Trinity and Sacramento river basins during p		
Why must this be completed in FY2007? Can it be delayed for future years? This task can be delayed to 2008		
Is this a multiyear or ongoing project? No		
If so give estimated cost for future years.		
FY2008:		
FY2009:		
FY2010:		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Lewiston/Trinity Lake Water Temperature Models		
Program Branch: TMAG		
Point of Contact: Andreas		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ -	$ 120,000
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		
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 f		
Why must this be completed in FY2007? Can it be delayed for future years? Yes, this can be delayed to 2008.		
Is this a multiyear or ongoing project? No		
If so give estimated cost for future years.		
FY2008:		
FY2009:		
FY2010:		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Sediment Monitoring		
Program Branch: TMAG		
Point of Contact: Andreas		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 300,000	$ 400,000
Description: Sediment monitoring includes both suspended and bedoad and covers 1) tributary winter storm monioring at Rush Creek and Indian Creek, and 2) mainstem monitoring at Lewiston, above GVC confluence, Limekiln Gulch, and Douglas City during SOD an		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Sediment transport is primary driver for the alluvial river geomorphology called for by the ROD to create and maintain the fish habitat and prevent riparian encroachment. The manage		
What critical Program goals does this project or task support? Computation of the sediment transport and budget drives the spring release high flow scheduling and the coarse sediment augmentation.		
Why must this be completed in FY2007? Can it be delayed for future years? Sedient monitoring is required for annual management decisions. Additionally, sediment monitoring is a long term requirement as sediment transport will be changing significantly o		
Is this a multiyear or ongoing project? Yes		
If so give estimated cost for future years.		
FY2008: $400,000		
FY2009: $400,000		
FY2010: $400,000		
Other important information: The level of effort required for sediment monitoring changes the water year type. More winter storms and larger spring releases in wetter years requires more sediment monitoring than in dry years. The cost estimate for a norma		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

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Project Title: USGS Sediment Monitoring QA		
Program Branch: TMAG		
Point of Contact: Andreas		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 25,000	$ 46,000
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 sedime		
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 FY2007? Can it be delayed for future years? See sediment monitoring program		
Is this a multiyear or ongoing project? Yes		
If so give estimated cost for future years.		
FY2008: $42,100		
FY2009: $55,700		
FY2010: $56,800		
Other important information:		

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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: This item is now covered under Expert Consultation - Physical models.		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Expert Consultation - Physical Models		
Program Branch: TMAG		
Point of Contact: Dave		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:		$ 30,000
Description: Technical support and/or peer review from experts with USBR, USGS, or USU for maintenance and development of several physical models (HEC-RAS, MD-SWMS, 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? Physical modeling will be used evaluate the hydraulic performance of restoration designs, simulate physical habitat availability, and evaluate the potential of ROD flow to meet a variety of ph		
Why must this be completed in FY2007? Can it be delayed for future years? Not required in 2007		
Is this a multiyear or ongoing project? yes		
If so give estimated cost for future years.		
FY2008: $20,000		
FY2009: $20,000		
FY2010: $20,000		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Bed Scour Model		
Program Branch: TMAG		
Point of Contact: Dave		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:		$ 91,000
Description: Develop model for predicting the ability of ROD flow for mobilizing coarse sediment and scouring stream side vegetation.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Targets for coarse sediment entrainment are specified in the Program's foundational documents in terms of scour depths and the sizes of entrained cobbles. Control of riparian vege		
What critical Program goals does this project or task support? Develop a method to predict whether ROD flows will meeting Program targets in support flow scheduling and other Program management decisions.		
Why must this be completed in FY2007? Can it be delayed for future years? With the recent completion of our first bank rehab project, crafting flow schedules to induce bed scour to prevent riparian re-encroachment is important. The bed scour model is tim		
Is this a multiyear or ongoing project? Yes.		
If so give estimated cost for future years.		
FY2008: $89,000		
FY2009:		
FY2010:		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: New Aerial Photos		
Program Branch: TMAG		
Point of Contact: Andreas		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 15,000	$ 35,000
Description: Recent aerial photos allow riparian development and geomorphic change to be directly evaluated, and are necessary for all field mapping efforts, quantitative comparison of change through time, and restoration design.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Air photos are among the most direct and cost-effective types of data available for assessing program success, identifying trends, and integrating a wide range of information.		
What critical Program goals does this project or task support? Air photos support virtually all other program activities.		
Why must this be completed in FY2007? Can it be delayed for future years? Aerial photos are required in 2007 to capture the changes from the extremely wet year storms and spring releases.		
Is this a multiyear or ongoing project? No		
If so give estimated cost for future years.		
FY2008:		
FY2009:		
FY2010:		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Aerial Photo Ground Control		
Program Branch: TMAG		
Point of Contact: Andreas		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 35,000	$ 50,000
Description: Place ground control needed to orthorectify aerial photography.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? See "Orthorectify New Aerial Photos."		
What critical Program goals does this project or task support? See "Orthorectify New Aerial Photos."		
Why must this be completed in FY2007? Can it be delayed for future years? See "Orthorectify New Aerial Photos."		
Is this a multiyear or ongoing project? No		
If so give estimated cost for future years.		
FY2008:		
FY2009:		
FY2010:		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Orthorectify New Aerial Photos		
Program Branch: TMAG		
Point of Contact: Andreas		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 70,000	$ 100,000
Description: Orthorectify aerial photography and create a new digital terrain model of the Trinity River corridor between Lewiston and the North Fork after major flow events.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? These data provide the basis for direct and indirect assessment of the alluvial and riparian management objectives specified in the Program's foundational documents.		
What critical Program goals does this project or task support? The ortho-photos improve the accuracy of direct assessment of landscape-scape scale changes resulting from management, and periodic updates of topographic data improve the accuracy of physical		
Why must this be completed in FY2007? Can it be delayed for future years? See "New Aerial Photos"		
Is this a multiyear or ongoing project? No		
If so give estimated cost for future years.		
FY2008:		
FY2009:		
FY2010:		
Other important information:		

#

Project Title: Acquire and Scan Historical Aerial Photos		
Program Branch: TMAG		
Point of Contact: Dave		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:		30,000
Description: Obtain historical air photos of subsequent geomorphic analysis in a GIS		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Provides historical context for future channel design and target rates of fluvial dynamics.		
What critical Program goals does this project or task support? Restoration design, gravel augmentation.		
Why must this be completed in FY2007? Can it be delayed for future years? This item can be delayed		
Is this a multiyear or ongoing project? No.		
If so give estimated cost for future years.		
FY2008:		
FY2009:		
FY2010:		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Photopoint Monitoring		
Program Branch: TMAG		
Point of Contact: Andreas		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:		11,000
Description: Obtain repeat ground photos at designated sites		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Documents trends in geomorphic and vegetative changes.		
What critical Program goals does this project or task support? Monitoring.		
Why must this be completed in FY2007? Can it be delayed for future years? Nthis item can be delayed		
Is this a multiyear or ongoing project? Yes.		
If so give estimated cost for future years.		
FY2008:		
FY2009:		
FY2010:		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Bathymetric Mapping		
Program Branch: TMAG		
Point of Contact: Dave		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 300,000	$ 300,000
Description: 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? **Bathymetry** supports monitoring aspect of program by quantifying the success of program actions in creating change within the river channel, and it supports analysis and decision eff		
What critical Program goals does this project or task support? Periodic updates of in-channel topography are used to quantify long-term sediment budgets, and are required as input to virtually all physical modeling efforts.		
Why must this be completed in FY2007? Can it be delayed for future years? Bathymetric mapping is needed in 2007 to caputure the channel changes that occurred in 2006 from the extremely wet year winter storms and spring releases.		
Is this a multiyear or ongoing project? No.		
If so give estimated cost for future years.		
FY2008:		
FY2009:		
FY2010:		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Geomorphic Mapping		
Program Branch: TMAG		
Point of Contact: Dave		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:		20,000
Description: Field mapping of geomorphic features on air photos		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Documents trends in geomorphic change, useful for assessing present condition of physical habitat.		
What critical Program goals does this project or task support? Monitoring.		
Why must this be completed in FY2007? Can it be delayed for future years? This should be completed annually		
Is this a multiyear or ongoing project? Yes.		
If so give estimated cost for future years.		
FY2008:		
FY2009:		
FY2010:		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Substrate Mapping		
Program Branch: TMAG		
Point of Contact: Dave		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:		20,000
Description: Field mapping of percent sand and the gravel grain size distrubtion withing the active channel. Uses recent air photos.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? TRRP is directed to reduce fine sediment storage in the active channel by transporting more fine sediment than is delivered to the main stem on an annual basis. This mapping is nee		
What critical Program goals does this project or task support? Manage and monitor substrate quality.		
Why must this be completed in FY2007? Can it be delayed for future years? Attention to fine sediment management targets are required annually. Mapping is required twice annually to separate winter storm impacts from spring release effects.		
Is this a multiyear or ongoing project? Yes.		
If so give estimated cost for future years.		
FY2008:		
FY2009:		
FY2010:		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Geomorphic Monitoring		
Program Branch: TMAG		
Point of Contact: Dave		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:		$ 65,600
Description: Monitor the success of ROD flow for mobilizing coarse sediment through the use of scour chains, scour cores, tracer rocks, or similar methods. May include the quantificaiton and monitoring of changes in substrate quality through bulk subsurf		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Targets for coarse sediment entrainment are specified in the Program's foundational documents in terms of scour depths and the sizes of entrained cobbles.		
What critical Program goals does this project or task support? Direct empirical assessment of whether ROD flows are meeting Program targets, and validation of entrainment/scour models.		
Why must this be completed in FY2007? Can it be delayed for future years? The importance of conducting these studies is related to the water year and magnitude of the spirng flow releases.		
Is this a multiyear or ongoing project? Yes		
If so give estimated cost for future years.		
FY2008:		
FY2009:		
FY2010:		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: LWD Mapping		
Program Branch: TMAG		
Point of Contact: John		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	4,000	25,000
Description: Field mapping of large woody debris		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Increase salmonid habitat.		
What critical Program goals does this project or task support? Documents trends in habitat quality related to woody debris, the availability of potential wood recruitment, recruitment rates, and the structure of woody habitat patches in the river. Useful		
Why must this be completed in FY2007? Can it be delayed for future years? This needs to completed annually		
Is this a multiyear or ongoing project? Yes.		
If so give estimated cost for future years.		
FY2008:		
FY2009:		
FY2010:		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Riparian Initiation Monitoring		
Program Branch: TMAG		
Point of Contact: Dave		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 4,000	$ 40,000
Description: Detailed monitoring of the germination and initiation success of various riparian species at specific locations along the channel margins.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? A process-based understanding of riparian initiation is helpful for designing release hydrographs that help establish desirable species and control undesirable species.		
What critical Program goals does this project or task support? Establishing desirable riparian forests, while preventing excessive channel encroachment through management of the magnitudes, timing and draw-down rates of ROD hydrographs.		
Why must this be completed in FY2007? Can it be delayed for future years? Yes, process based riparian initiation is not required every year. It is most easily conducted at newly constructed restoration sites with large areas of bare bar surface, such as		
Is this a multiyear or ongoing project? Yes		
If so give estimated cost for future years.		
FY2008: $40,000		
FY2009: $40,000		
FY2010: $40,000		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Vegetation Mapping		
Program Branch: TMAG		
Point of Contact: Dave		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:		$ 36,000
Description: Field- and remote sensing-based mapping of riparian and floodplain vegetation		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Monitoring of riparian vegetation is required to assess the success of ROD flows for controlling channel encroachment, and provides an action trigger for responding to conditions o		
What critical Program goals does this project or task support? Control and prevention of riparian encroachment is identified as a management goal in the Program's foundational documents.		
Why must this be completed in FY2007? Can it be delayed for future years? No, ongoing monitoring of riparian initiation is needed to ensure that action is taken before riparian vegetation is well established.		
Is this a multiyear or ongoing project? No		
If so give estimated cost for future years.		
FY2008:		
FY2009:		
FY2010:		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Riparian Recruitment Model Integration with Bed Scour		
Program Branch: TMAG		
Point of Contact: Dave		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 20,000	$ 20,000
Description: Improvement of physical models by incorporating the effects of riparian vegetation on the potential for bed and bank scour and subsequent riparian mortality.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? A process-based understanding of riparian mortality is helpful for designing release hydrographs that help control undesirable species.		
What critical Program goals does this project or task support? Better manage ROD flows to prevent excessive channel encroachment through a better understanding of the conditions under which established riparian is vunerable to mortality.		
Why must this be completed in FY2007? Can it be delayed for future years? Yes, this project can be delayed.		
Is this a multiyear or ongoing project? No		
If so give estimated cost for future years.		
FY2008:		
FY2009:		
FY2010:		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Riverine and Riparian Associates Assessment		
Program Branch: TMAG		
Point of Contact: Rod		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount: (Partner's direct contribution ~$150,000 annually)	$ 155,000	$ 309,200
Description: Assess the response of animals associated with riverine and riparian to channel rehabilitation, gravel augmentation, and revegetation to help measure, evaluate, and inform the overall benefits of the fisheries restoration.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? -- Effectiveness monitoring of riverine and riparian associates will help substantiate the Program's success in restoring the Trinity River and its populations of salmon, steelhead, and other riverine associated species. -- Evaluating effects of ROD flows and adjustments on riverine and riparian associates is essential component of the ROD and the Plan. -- Data collected over the past 2 decades provides insights into how the river system has responded to downstream effects of the dam and continuation of this work will be essential to documenting the recovery of the system and ultimately to the success of the Program. -- Riverine and riparian associates provide a direct measure of river conditions, because they are not complicated by exposure to influences from outside the 40-mile study area, for example, connected watersheds and the marine environment. -- River health is measured by the vigor of various system components; riverine and riparian associates provide a critical measure of a healthy river system.		
What critical Program goals does this project or task support? — Measure the response of riverine and riparian associated species, e.g. birds, amphibians, reptiles, and mammals to rehabilitation actions: flow changes, bank rehabilitation, and gravel augmentation. — Assessing riverine and riparian species that are co-adapted with fish to the Trinity River system, will help evaluate the effectiveness of fisheries restoration and assess and update physical, fish, and riparian hypotheses as part of the adaptive management required by the ROD. — Providing long-term datasets for assessment of ecosystem trends and Program effectiveness.		
Why must this be completed in FY2007? Can it be delayed for future years? -- Continuity of a long-term monitoring plan is a key component of adaptive management in river restoration. -- Data should be gathered now during early implementation to help inform the program during the design phase of upcoming projects. For example; it is important to gather post-construction information on the Hocker Flat project to inform design and implementation future projects. Likely to show immediate, positive response of riverine and riparian associates to completed projects (e.g. Foothill Yellow-legged Frog and Willow Flycatcher). -- Sampling in 2007 is needed to complete the third year of a three year Western Pond Turtle demography study, replicating a study from the 1990s and allowing trend analysis. -- Data is needed following the 2006 extremely wet water year conditions to help evaluate the response across the range of water-year types.		
Is this a multiyear or ongoing project? Yes. Additionally, we have ongoing research in other parts of the watershed (outside the 40-mile study area) funded by other sources that contribute landscape-scale knowledge/data to the Program.		
If so give estimated cost for future years.		
FY2008: $155,000	Partner's Contribution: ~$150,000	
FY2009: $155,000	$150,000	
FY2010: $155,000	$150,000	

#

Project Title: 2-D Fish Habitat Modeling and Validation		
Program Branch: TMAG		
Point of Contact: Nina		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 50,000	$ 100,000
Description: Predictive 2-D model integrates habitat and fish distribution consistent with the Science Framework. Habitat simulation can predict the differential fish habitat created in the context of variable flow and construction alternatives. In 2007 additional modeling of the original sites and limited field work will occur.		
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. 2-D modeling is recommended specifically as the predictive tool for analysis of fish habitat, by the Flow Study. 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 provides a baseline from which to evaluate progress towards creating fry rearing habitat. 2-D habitat assessment helps to guide the construction program and flow releases.		
Why must this be completed in FY2007? Can it be delayed for future years? No, 2007 is the approximate mid-point of the multi-year construction program. The need for habitat simulation is immediate to schedule flows and to design the construction projects on a programmatic level.		
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, since this simulation is to be run by the TMAG within the next year, major effort will be required only when substantive		
If so give estimated cost for future years.		
FY2008: $200,000		
FY2008: $120,000		
FY2010: $100000		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Empirical/2-d Habitat assessment -aerial photography		
Program Branch: TMAG		
Point of Contact: Rod		
Funding Level:	**FY2006 President's Budget**	**Full Program Budget**
Funding Amount:	26,145	
Description:		
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
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Empirical Habitat Mapping Restoration Monitoring		
Program Branch: TMAG		
Point of Contact: Nina		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 20,000	$ 35,000
Description: Quantification of extant anadromous salmonid habitat using Expert Habitat Mapping (EHM) along the mainstem Trinity River from Lewiston Dam (RM 112.0) to the confluence of the North Fork Trinity River (RM 72.4) at one flow will be completed in 2006. This comparitive project is focused on Chinook fry rearing habitat (which currently limits smolt production). These limited funds would permit additional comparisons among methods.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Creating habitat is a major goal of TRRP set by the Flow Evaluation Study and ROD.		
What critical Program goals does this project or task support? Evaluating rehab designs. Restoration of habitat to support pre-dam levels of native anadromous fish.		
Why must this be completed in FY2007?		
Is this a multiyear or ongoing project? Possible for future years		
If so give estimated cost for future years.		
FY2007: $20000		
FY2008: $100,000		
FY2009: $0		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Habitat Design Review & Expert Consultation		
Program Branch: TMAG		
Point of Contact: John		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	0	$30,000
Description: Review and input from experts on large river restoration of proposed restoration sites, project objectives, and preliminary designs.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Evaluation of designs for rehabilitation sites supports the development of fry rearing habitat.		
What critical Program goals does this project or task support? Creation of fry rearing habitat and other limiting habitat. Design and implementation of rehabilitation projects.		
Why must this be completed in FY2006? Can it be delayed for future years? This should not be delayed because we are in the middle of implementation of Phase I sites and need to have substantive input and evaluation of the remaining sites.		
Is this a multiyear or ongoing project? Yes		
If so give estimated cost for future years.		
FY2007: 20,000		
FY2008: 21000		
FY2009: 20000		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Fry Density		
Program Branch: TMAG		
Point of Contact: Nina		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	90,000	$100,000
Description: Fry movement and quantification of density in the 6 reaches of the upper 42 miles of the river is an important baseline for the evaluation of the effectiveness of fry habitat production on survivorship and movement of fry. Rotary Screw Traps in their current placement do not address fry survivorship as they move down river from the prime spawning sites. In addition these data are essential to bring SALMOD up to date for the Trinity River.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? Fry density and survivorship are an important component in the evaluation of the success of the program in creating fry rearing habitat.		
What critical Program goals does this project or task support? Evaluation of the success of the program at creating fry rearing habitat.		
Why must this be completed in FY2007? Can it be delayed for future years? The estimation of fry density and movement has not been done since the early 1990s. The river has changes and experiences very different flows. We therefore expect that fry will have changed their movement patterns in temporally and spatially since the 1990s. This is an important baseline we have not updated yet.		
Is this a multiyear or ongoing project? Yes, we will need to update this at regular intervals.		
If so give estimated cost for future years.		
FY2007: 90000		
FY2008:		
FY2009: 100000		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Juvenile Salmonid Health		
Program Branch: TMAG		
Point of Contact: Nina		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 38,000	$ 38,000
Description: Health and fitness of juvenile salmon out-migrants are major determinates of their performance and survival. The California-Nevada Fish Health Center (CANVFHC) will assess fish health and physiological condition of natural juvenile chinook (*Oncorhynchus tshawytscha*) collected by Rotary Screw Trap (RST) and at the Blue Creek and the Klamath Estuary prior to release of hatchery fish and during the peak time for hatchery fish. This is part of a larger study funded by other entities. Fish will be examined for clinical signs of disease, and QPCR of tissues to check for infection rate and degree.		
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.		
What critical Program goals does this project or task support? This project supports evaluation of fry and presmolts rearing habitat quality.		
Why must this be completed in FY2007? Can it be delayed for future years? This should not be deferred to a later year. The information will be crucial for evaluation of restoration activities on smolts.		
Is this a multiyear or ongoing project? Yes, this is an ongoing area of concern.		
If so give estimated cost for future years.		
FY2008: $160,000		
FY2009:		
FY2010:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Developing Model Input for SALMOD		
Program Branch: TMAG		
Point of Contact: Nina		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ -	$ 15,000
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 FY2007? 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.		
FY2008: $65,000		
FY2009:		
FY2010:		
Other important information:		

#

Project Title: Quick Response, Mortality Monitoring		
Program Branch: TMAG		
Point of Contact: Nina		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 20,000	$ 20,000
Description: Fish pathology monitoring during peak period for migration of spring and fall chinook through the Klamath from Pecwan riffle to the confluence with the Trinity.		
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; prespawning mortality		
Why must this be completed in FY2007? 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.		
FY2008: $16,000		
FY2009:		
FY2010:		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Emigration Estimates (rotary trapping)		
Program Branch: TMAG		
Point of Contact: Nina		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 350,000	$ 321,000
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. Several years in the future 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 commonly used metric for comparison among years is the smolt to adult ratio (SAR). 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 interim goal.		
What critical Program goals does this project or task support? A major interim 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 FY2007? 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.		
FY2008:		
FY2009:		
FY2010:		
Other important information: This project has been recommended for an RFP process this year as recommended by the ROD and subcommittee report.		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

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Project Title: Adult Chinook Salmon Migration		
Program Branch: TMAG		
Point of Contact: Nina		
Funding Level:	**FY2006 President's Budget**	**Full Program Budget**
Funding Amount:	$ -	$ 40,000
Description: Evaluation of adult coho salmon migration response to AEAM Flow management actions (spring flows/fall pulse flows). Sonic tracking of adult coho 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 ROD flows on adult migration and habitat.		
What critical Program goals does this project or task support? This project provides information on escapement.		
Why must this be completed in FY2007? Can it be delayed for future years?		
Is this a multiyear or ongoing project? Yes		
If so give estimated cost for future years.		
FY2008:		
FY2009:		
FY2010:		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Fish Marking at Hatchery, Chinook-CWT		
Program Branch: TMAG		
Point of Contact: Nina		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$313,000	$313,000
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). Non-invasive sampling, (e.g. visual inspection for presence of aipose fin at weirs), provides an immediate estimate of the proportion of natural/hatchery produced. At present a sixth successive brood of hatchery produced fall and spring chinook have been marked at this rate. 100% of coho and steelhead production have been marked at TRH for nine years.		
How is this supported by the Flow Study ROD, and /or Implementation Plan? The ROD mandates restoration of natural fish production to pre-dam levels. Hatchery production may mask natural productivity in response to dedicated efforts to restore natural habitat. An effective method for separating naturally produced from hatchery produced fish is to identify the hatchery component through specific marking protocols.		
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 FY2007? Can it be delayed for future years? Missing a single year of marking or reduction in the rate of marking would disable estimates of hatchery contributions to fish populations through non-invasive sampling.		
Is this a multiyear or ongoing project? Yes		
If so give estimated cost for future years.		
FY2008:		
FY2009:		
FY2010:		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Fish Response to Flows: Fall Flows; monitoring		
Program Branch: TMAG		
Point of Contact: Nina		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ -	$ -
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 FY2007? 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.		
FY2008: 90,000		
FY2009:		
FY2010:		
Other important information:		

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Project Title: Fish Response to Flows: Spring Bench		
Program Branch: TMAG		
Point of Contact: Nina		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ -	$ -
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 FY2007? Can it be delayed for future years? This should not be indefinitely delayed. We need data on these issues and will need to address in FY 07 or FY 08.		
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.		
FY2008: $85,000		
FY2009:		
FY2010:		
Other important information:		

Trinity River Restoration Program
FY2007
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:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ -	$ 15,000
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 FY2007? 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.		
FY2008:		
FY2009:		
FY2010:		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Tribal Harvest Survey, Lower Klamath		
Program Branch: TMAG		
Point of Contact: Nina		
Funding Level:	**FY2007 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? Assessment of escapement and harvest for chinook and steelhead neccesary for CVPIA analysis of effectiveness of program.		
Why must this be completed in FY2007? 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.		
FY2008:		
FY2009:		
FY2010:		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

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Project Title: Angler Harvest		
Program Branch: TMAG		
Point of Contact: Nina		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 40,000	$ 80,000
Description: Sport harvest in the Trinity River represents 17% of the harvest in the Klamath Basin. Greater numbers in years with harvest are collected in the Klamath making this section a higher priority. 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. The objective of the ROD is to restore natural fish populations to pre-dam levels. An historic record on run-size (including contribution to fisheries) is a metric to demonstrate progress toward this objective.		
What critical Program goals does this project or task support? Evaluation of fishery.		
Why must this be completed in FY2007? Can it be delayed for future years? No, but the level of funding reflects the amount of data pertinent to the evaluation of restoration efforts obtained with this project.		
Is this a multiyear or ongoing project? Yes		
If so give estimated cost for future years.		
FY2008:		
FY2009:		
FY2010:		
Other important information:		

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Project Title: Run Size/Harvest Estimates, incl. Reward Tags		
Program Branch: TMAG		
Point of Contact: Nina		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 550,000	$ 550,000
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.Complete census of all salmonids retuning to Trinity River Hatchery. Provides data to evaluate hatchery/wild compositions of all runs of chinook salmon, coho salmon and fall steelhead. Census point for biolgically important parameters such as age composition and run-timing. Funding for this project is also used for technical participation and analysis.		
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 FY2007? 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. These data may only be collected in the year that the fish are present, and so project may not be delayed.		
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.		
FY2008:		
FY2009:		
FY2010:		
Other important information:		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Carcass/Redd Surveys		
Program Branch: TMAG		
Point of Contact: Nina		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 150,000	$ 150,000
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 FY2007? 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 through SALMOD and statistical trend analyses. 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.		
FY2008:		
FY2009:		
FY2010:		
Other important information: This is a multi-partner project.		

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Project Title: Fall and Spring Run Scale Analysis, Age Composition		
Program Branch: TMAG		
Point of Contact: Nina		
Funding Level:	**FY2007 President's Budget**	**Full Program Budget**
Funding Amount:	$ 30,000	$ 50,000
Description: Age structure determination of returning adult chinook. 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 can permit 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 FY2007? Can it be delayed for future years? The scales must be collected and preserved every year. However the scope of the project can be reduced without substantive loss of data. Analyses can be postponed to future years.		
Is this a multiyear or ongoing project? yes		
If so give estimated cost for future years.		
FY2008:		
FY2009:		
FY2010:		
Other important information: This is a multi-partner project.		

Trinity River Restoration Program
FY2007
PROJECT DESCRIPTIONS

#

Project Title: Chinook Tag Decoding at Hatchery		
Program Branch: TMAG		
Point of Contact: Nina		
Funding Level:	**FY2007 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 FY2007? 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.		
FY2008:		
FY2009:		
FY2010:		
Other important information:		