ATTACHMENT 6

Trinity River Restoration Program

P.O. Box 1300, 1313 South Main Street, Weaverville, California 96093
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NC-150

MEMORANDUM

TO: TMC Members and Alternates

FROM: Doug Schleusner, Executive Director
Trinity River Restoration Program

CC: TAMWG Members; Science Advisory Board; Staff

SUBJECT: Director's Report; December 9, 2003 – April 14, 2004

DATE: March 31, 2004

1. Summary: This report covers the major activities during the first quarter of 2004. Primary areas of emphasis have included: 1) continuation of realty and contract actions for bridges and other floodplain structures; 2) evaluation of last year's flow schedule monitoring and development of this year's flow schedule recommendations; 3) continued development of the Strategic Plan and Scientific Framework, 4) participation in the TMC/Program Review; 5) initiation of FY2004 financial assistance agreements; and 6) greater emphasis on project planning for implementing other elements of the ROD.

   Several documents related to Item 6 (above) are enclosed for your consideration as you review the Subcommittee's Final Report and prepare for the Program Review workshop on May 12. They include my March 15, 2004 evaluation of our progress on channel restoration sites and related policy issues; my November 12, 2003 memo to staff outlining the FY 2004 Program of Work and the process for developing team charters for seven key projects; and the resulting charters from those project teams.

2. General Program Administration:
   - TMC/Program Evaluation: The TMC subcommittee has completed their review of the Restoration Program's progress over the past three years, and recently distributed a final report. They have reviewed the Implementation Plan, contacted the authors of the Flow Study, and interviewed members of the TRRP staff, TMC, and TAMWG. The goal of the review has been to determine if the original vision intended for the program is being achieved, and if not, identify the differences and develop recommendations on how to resolve them. Presentations are scheduled for the April 2004 meetings of the TMC and TAMWG. A workshop involving members of the TMC, TAMWG, SAB, and TRRP staff is scheduled for May 12 in Weaverville.

- Status of SEIS/SEIR: A 60 day public review of the draft SEIS is scheduled to begin in mid-April. A completed document is expected by the end of 2004, with implementation in 2005. The four co-lead agencies include USBR, USFWS, Hoopa Valley Tribe and Trinity County.
- Budget: Initial meetings for development of the FY 2005 Program of Work and Budget are tentatively planned for early May. The FY 2005 President's Budget for the Restoration Program includes $6 million from appropriated funds and $1 million from the CVPIA Restoration Fund. Trinity County's proposal for $1.2 million from the Coastal Salmon Recovery Program to assist with construction of the Poker Bar and Bucktail bridges was recently approved by the State, and funding agreements are being prepared for use in construction contracts in 2004 and 2005.
- Strategic Plan: The strategic plan initiated in March 2003 continues to undergo review and revision. It now includes recent comments from TAMWG, TMC, and TRRP staff. This document incorporates preliminary subcommittee recommendations, and should be a useful discussion tool at the May 12 Program Review workshop. Ultimately, it will help outline a common vision for the Program, and provide intermediate direction between the ROD and annual work plans.
- Staffing: Scott Crawford has accepted the Grants and Agreements position and will report for work in mid-April. Jay Glase has accepted a 90-day detail as TRRP fishery biologist and reported on March 21. A selection and job offer has been made for the budget assistant, with a reporting date tentatively set for late April.
- FY02-03 Accomplishment Report: The program accomplishment report for the past two years is still under development, with a target completion date of May.

3. Rehabilitation and Implementation Branch:
   - Trinity River Bridges: Since last fall's single bid for Salt Flat/Biggers Road bridges came in unacceptably high, specifications were rewritten for spring/summer construction, and the contract was readvertised. On March 15, 2004, Reclamation awarded a $2,767,325 contract to Steelhead Constructors of Redding, California, to build the Biggers Road Bridge and Salt Flat Bridge across the Trinity River. Award of the construction contract for the other two bridges (Bucktail and Poker Bar) is planned for later in the spring. All four bridges should be open for traffic by December 2004. Actions are also ongoing to inventory and address other floodplain structures potentially impacted by fishery restoration flows. The next scheduled contract will address roads in the Poker Bar area that would be inundated by ROD flows (over one mile total length).
   - Channel Restoration Sites: Design and permitting actions for five sites downstream of Canyon Creek are underway. The largest site at Hocker Flat is on schedule for construction in early 2005. As critical tasks associated with bridge and floodplain structure modifications are completed in 2004, greater emphasis will be placed on channel restoration site design and construction. Given the current processes for environmental review, permit compliance, and realty actions, the remaining 23 channel restoration sites in Phase 1 are tentatively scheduled for completion by 2008 (refer to Restoration Site Design Charter and March 15 evaluation memo, attached).

4. Monitoring and Analysis Branch:
   - 2004 Flow Schedule: A planning meeting was held on March 11 in Weaverville to develop recommendations for the 2004 flow schedule. Trinity River releases are still capped by the court at dry year volumes (453,000 acre feet), but the preliminary water year determination (March 1, 2004) is for a wet water year. The proposed release schedule report has been prepared for TAMWG review and TMC approval.
   - Scientific Framework: In addition to agreements for long-term monitoring, a contract has been prepared for development of a Scientific Framework (conceptual and related subsystem models; integrated data base). The kickoff meeting will be held April 15, 2004 in Weaverville.
   - Science Advisory Board: As previously reported, the following individuals have been appointed to the Science Advisory Board: Ned Andrews, Josh Korman, Stuart Rood, Mike Sale, and Clair Stalnaker (bio sketches still available upon request). The SAB will participate in the May 12 program review workshop and meet with the AEAM staff.
   - Sediment Management Workshop and Symposium: A sediment management workshop was held on February 9-10 in Weaverville. Presentation abstracts and notes from the symposium and workshop will be sent to participants in mid-April.
   - Watershed Restoration: On December 9, 2003, the TMC approved a recommendation from the TAMWG to allow Trinity County fish and wildlife grant program funds be used to establish a Watershed Coordination function with the Resource Conservation District. Representatives from RCD, TC, USFS, NRCS, USGS and BLM have since met to establish basic roles and responsibilities and to set preliminary priorities, including to the process to complete a watershed analysis, including fine and coarse sediment source analysis, for the Rush Creek watershed during the spring and summer of 2004.
   - Monitoring Reports: Annual reports have been received from most program partners summarizing monitoring results on flows, water temperature, smolt outmigration, riparian encroachment, avian and herptofauna habitat use, and geomorphic change. Preliminary results have been provided to the AEAM office regarding objective specific research projects including spring run Chinook radio telemetry (lower river), spring run egg viability and radio telemetry (upper river), redd scour and "study design" development for sediment transport monitoring.

5. Recent Contacts and Meetings:
   - January 15-16 – Program Review subcommittee meeting with TRRP staff, Weaverville
   - January 20 – Contractors site visit, Salt Flat and Biggers Road bridges
   - January 26 – Coordination meeting, watershed restoration working group, Weaverville
   - February 3-6 - Upper Klamath Basin Science Workshop, Klamath Falls
   - February 9-10 – Sediment management workshop, Weaverville
   - February 13 - Bid opening, Salt Flat and Biggers Road bridges
   - February 18-19 – Klamath Fisheries Management Council meeting, Brookings
   - March 1 - Klamath Fisheries Management Council meeting, Klamath
   - March 5 – Contract award for Salt Flat and Biggers Road bridges
   - March 11 – Flow schedule planning meeting with TMC/TAMWG technical reps
   - March 27 – Public meeting, Poker Bar Property Owners Association, Douglas City

6. Upcoming Events:
   - April 1-2 – TAMWG meeting, Weaverville
   - April 10-11 – Whitewater Rodeo, Big Flat (TRRP sponsorship and exhibit)
   - April 12 – Bid opening, Poker Bar and Bucktail bridges
   - April 14 – TMC meeting, Redding (approval of 2004 flow schedule)
   - April 15 – Planning meeting with ESSA on Science Framework
   - April 15 – Notice to proceed for Salt Flat and Biggers Road bridge construction
   - April 21 – CVPIA quarterly meeting, Sacramento (contact Serge Birk for details)
   - May 12 – Program review workshop for all TMC, TAMWG, SAB, staff, Weaverville
   - May 13 – Science Advisory Board meeting with TRRP staff, Weaverville
   - May 15 – Begin ramp up for spring flows (tentative)
   - June 15-18 – Lower Klamath/Trinity Science Workshop, Arcata (tentative)
   - June 21-23 – Klamath Basin Fisheries Task Force meeting, Klamath Falls
   - June 29 – TMC meeting (FY 2005 budget), Weaverville (tentative)

Channel Restoration Sites: A Progress Report
Prepared by: Douglas Schleusner
March 15, 2004

PURPOSE: To describe current efforts, schedules, and issues related to channel restoration sites (habitat improvement) in support of the Trinity River Mainstem Fishery Restoration Program.

CURRENT STATUS: Planning, design and permitting actions for implementation of five channel restoration sites downstream of Canyon Creek are underway. The largest is on schedule for construction in early 2005. Environmental compliance and permitting actions for this part of the program are taking longer than originally envisioned. Peak releases from Lewiston Dam into the Trinity River are currently limited to 6,000 cubic feet per second (cfs) because of inadequate capacity of four existing bridges and other encroaching floodplain structures. For this reason, addressing these structures has been the primary focus of the Restoration Program. Construction will be initiated at the four bridge sites this summer, with completion expected by the end of the calendar year. Additional contracts scheduled later in 2004 will address other floodplain structure modifications that would allow release of 11,000 cfs beginning in the spring of 2005.

BACKGROUND: The Record of Decision (ROD) for the *Trinity River Mainstem Fishery Restoration Environmental Impact Statement* (EIS) was signed on December 19, 2000. The Trinity River Restoration Program (TRRP) Office opened in September 2002. Litigation and subsequent court requirements to complete a supplemental EIS have prevented full implementation of the prescribed ROD flow volumes (and associated peak flows) into the Trinity River. The court has allowed all other aspects of the program to proceed, but capped river flows at a maximum of 453,000 acre feet (AF). The ROD directs construction of 47 mechanical channel rehabilitation sites in conjunction with peak Lewiston Dam releases of up to 11,000 cfs, and other related restoration actions. Reasonable and prudent measures from the National Marine Fisheries Service (NMFS) biological opinion are incorporated in the ROD and state that replacement of bridges, increased flows, and the first phase of channel rehabilitation projects should be implemented "as soon as possible" or "in a timely fashion."

The associated non-discretionary terms and conditions (also contained in the ROD) call for bridges to be completed by December 2002, with higher flows (8,500 cfs and 11,000 cfs) implemented as soon as the infrastructure modifications are completed and wet or extremely wet water years occur. It further states that the first 24 channel rehabilitation projects (Phase 1) shall be completed within three years of issuance of the ROD (December 2003). The ROD also requires numerous mitigation measures for channel rehabilitation projects, including: 1) completion of site-specific environmental reviews prior to mechanical ground-disturbing activities; 2) surveys for federal and state endangered, threatened and proposed species; 3) development and implementation of revegetation plans with appropriate replacement ratios and monitoring, and associated permits from California Department of Fish and Game (CDFG); 4) acquisition of Regional Water Quality Control Board (RWQCB) 401 permits and meeting associated turbidity requirements; and 5) delineation and mitigation of impacted wetland resources and associated permits from the Army Corps of Engineers (ACOE).

Successful maintenance of channel restoration sites requires preventing reestablishment of encroaching riparian vegetation and is dependent on peak flows of at least 6,000 cfs (preferably higher) every other year. Construction of restoration sites upstream of Canyon Creek is being deferred until the higher volumes prescribed by the ROD are legally established and available. Some flexibility exists downstream of Canyon Creek (lowest reach of the 40 mile project area), where releases plus tributary accretion reliably exceed 6,000 cfs on an annual basis. At the same time, higher flows are much less effective for channel restoration and maintenance in the absence of a sizable increase in physical habitat, i.e., implementation of a significant number of mechanical restoration projects. For maximum value, these two aspects of restoration – higher flows and increased habitat – must work together.

POSITION OF INTERESTED PARTIES: Some program partners and stakeholders believe that channel restoration sites should be designed and implemented at a much faster rate than has been achieved to date. Others believe that implementation of any restoration sites prior to resolving flow issues should proceed on a very limited basis, and only where tributary accretion flows can ensure that a site will be self maintaining. There is also a difference of opinion among TMC members as well as stakeholders regarding the extent of environmental review, permit compliance and level of design needed to implement these sites.

NEXT STEPS: As critical tasks associated with bridge and floodplain structure modifications are completed in 2004, greater emphasis will be placed on restoration site design, permit compliance, and construction. Opportunities for details or special assignments with other TMC member agencies and Tribes to meet short-term staffing needs will be identified. Given the current processes for environmental review, permit compliance, and realty actions, the remaining 23 channel restoration sites in Phase 1 are scheduled for completion by 2008. Working within the current regulatory environment and its resultant design and construction constraints makes achieving a more accelerated schedule extremely difficult. Significant benefits could be realized, however, by the following:

1) The TMC and its individual members must exercise strong leadership to gain high levels of commitment for this part of the program from regulatory agencies and stakeholders.
2) The TMC and TRRP staff must work closely with ACOE, CDFG, RWQCB, and NOAA Fisheries to meet minimum legal requirements while developing a time-saving programmatic NEPA/CEQA process and a clear understanding of minimum mitigation requirements (including distinction between "development" and "restoration" actions, plus relief from strict numerical compliance criteria, e.g., RWCQB Basin Plan turbidity standards and ACOE wetland mitigation replacement ratios).
3) The State and County representatives of the TMC must identify CEQA lead agency(s) for restoration sites early in the planning process.
4) The TRRP staff must successfully negotiate with program partners to define the minimum level of detail (vs. "ideal") for site designs, develop standard restoration techniques that can be used repeatedly, and combine sites for planning and environmental compliance purposes when appropriate.
5) The TRRP staff must develop an aggressive landowner outreach program to explain program goals, obtain permission for initial access, and acquire subsequent construction easements.

6) The TRRP staff must negotiate a memorandum of understanding (MOU) with Trinity County and the Federal Emergency Management Agency (FEMA) to determine minimum hydraulic analysis and reporting requirements to comply with a simplified Conditional Letter of Map Revision (CLOMR) process.

To truly accelerate progress on mainstem restoration sites will require widespread support by all parties – TMC members, program staff, regulatory agencies and stakeholders alike, regarding level of design, environmental compliance, and permit requirements.

Trinity River Restoration Program

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MEMORANDUM

TO: Staff

FROM: Doug Schleusner

SUBJECT: FY 2004 Program of Work and Project Teams

DATE: November 12, 2003

As presented to and approved by the Trinity Management Council, our emphasis areas for fiscal year 2004 include:

Critical Elements

- Complete SEIS (assigned to co-lead agencies; support as requested)
- Construct all four bridges in time for Water Year 2005 releases
- Correct other floodplain infrastructure issues (also by 2005)
- Develop capacity of TRRP science program (Science Framework)

Important Elements

- Continue most monitoring tasks while developing Science Framework and improving study designs
- Improve process for annual flow schedules and develop recommendation for 2004
- Construct Hocker Flat channel restoration site
- Continue planning and design for other Canyon Creek sites (no other new restoration site construction in FY 2004)
- Complete sediment management plan (no gravel introductions in FY 2004)
- Evaluate Rush Creek watershed and delta; expand analysis to include watershed sediment sources (no delta construction until analysis is complete)
- Evaluate existing bank restoration site monitoring data; limit restoration site data collection in FY 2004 to new design needs (focus on analysis and evaluation of old sites)
- Complete inventory and evaluation of mercury (Hg) issues

Within this context, the Branch Chiefs and I have identified several projects that would benefit most from a project team structure. Each of us will obviously have other individual tasks to complete as well.

After reviewing recommendations made by Ed and Daryl, I have identified the following team members and leaders (shown in italics) based on expressed interests, known skills, and with consideration for overall workload. Identification of core teams does not mean that other staff will not have the opportunity to participate on an "as-needed" basis, but this will help prioritize and balance individual work schedules.

A brief description of each project is included to get the process started, but additional information will need to be developed by each team. The target completion date for each project, unless otherwise stated or subsequently adjusted based on input from the team, will be June 1, 2004. This has been selected so that relevant information from each project can be incorporated into the FY2005 budget process.

1. **Strategic Plan**. Core team: *Doug*, Ed, Daryl. Completion date: January 2004. Coordinate internal and external review; incorporate comments into a substantially completed TRRP Strategic Plan, sufficient to provide overarching goals and objectives for timely development of the Science Framework.
2. **Trinity River Bridges and Floodplain Infrastructure.** Core team: *Ed*, Rich, Brandt. Completion date: December 2004. Continue development and/or modification of engineering designs, contract specifications, permitting, realty actions, contract award and administration for all four bridges and other floodplain structures potentially subject to high flows prior to the 2005 water year.
3. **Annual Flow Reporting/Scheduling**. Core team: *Daryl*, Andreas. Completion date: January 2004. Develop the information needs, data management and data evaluations to be used in preparing the 2003 annual flow report for the TRRP. This "report card" will evaluate the program's progress towards the physical and biological objectives outlined in the Flow Study, and begin to create a template for future years.
4. **Sediment Management Program**. Core team: *Andreas*, Rich. Develop a coordinated sediment monitoring and management program to determine the necessary spatial and temporal monitoring and modeling needed to support the planning and assessment for coarse and fine sediment rehabilitation activities. This includes a comprehensive plan for control of fine sediments as well as introduction of coarse sediments.
5. **Canyon Creek Reach Restoration Site Designs**. Core team: *Rich*, Bob, Brandt, Noelyn. Completion date: June 2004 for overall process, including detailed milestones for out year site design and NEPA. Design and complete environmental compliance for all rehabilitation sites below Canyon Creek as a suite of sites. Develop an integrated approach to conceptual design, construction, revegetation and sediment rehabilitation activities for these sites.
6. **Watershed Assessment Strategy**. Core team: *Andreas*, Brandt, Bob, Noelyn. Develop a process and implement an assessment of select sub-watersheds within the Trinity River Basin (beginning with Rush Creek) to inform TRRP restoration and watershed management activities. Coordinate with and add value to other watershed assessments through collaboration with the on-going efforts of other state, federal and private organizations.

Each project team will have an initial meeting and develop a project "charter" by January 16. The charter will follow the attached format, and outline roles and responsibilities for the core team, needed participation by other staff and outside entities, include a timeline with milestones and a text description of the project's goals and objectives. Project goals and objectives should relate to the Strategic Plan, the Science Framework, and the ROD. Assistance from other staff members not on the core team should be identified in the charter as explicitly as possible with regard to tasks, products, length of and timing of involvement so each person in the office can plan their overall work schedules.

We will meet on Monday, January 19, and each team leader will give a short summary of their team's charter, with special emphasis on time schedules. Potential work load conflicts will be identified, discussed, and resolved. Each team will meet to revise their charter based on decisions made on January 19, and submit a final document for my approval by January 30. As the result of this process I expect to develop a project calendar that we will use to set overall priorities, measure progress, identify potential problems, and assign other as-yet-unknown tasks in the coming year.

The team leader will be the primary point of contact for a given project and be responsible for keeping the Director and Branch Chiefs appraised of the project's progress. Core team members will be extensively involved in development of their charter, identifying and completing individual work assignments, and actively participating in an interdisciplinary manner.

Note: The list of project teams was later amended to include a seventh item – "Development of Science Framework and Information Management System."

PROJECT TEAM CHARTER

Project Title:

Team Leader:

Core Team Members:

Primary Objectives:

Detailed Description/Scope of Work:

Policy Implications for Program:

Funding and Budget: (multiyear needs, financial assistance agreements, etc.)

Additional Support Needed: (specialized technical input, non-core team input, etc.)

Internal Coordination Requirements: (other project teams)

External Coordination Requirements: (TMC, TAMWG, etc.)

Target Completion Date and Major Milestones: (propose revisions to target date if appropriate)

Primary Deliverables:

TRRP STRATEGIC PLAN
Project Team Charter

Team Leader: Doug Schleusner

Core Team Members: Daryl Peterson, Ed Solbos

Primary Objectives: Develop a Strategic Plan for the Trinity River Restoration Program that accomplishes the following:

- Identifies a commonly accepted and legally sufficient purpose and mission
- Describes a shared vision of what we are trying to achieve through the Program
- Provides higher level context for Adaptive Environmental Assessment and Management process and the Scientific Framework that will be used to implement the Program
- Helps translate programmatic direction from the EIS/Implementation Plan into more specific operational priorities
- Provides basis for integrating annual programs of work and budget, including research study design, implementation, monitoring, and evaluation

Detailed Description/Scope of Work: Validate scope and level of detail desired for this document. Emphasis will be on mission statement, goals, and objectives. Background information on resource areas will be kept to a minimum. Operational budget appendix (3-5 year funding needs) will be developed as part of the FY 2005 B-Team process in June 2004. Supplement and edit existing text, especially goals and objectives. Coordinate internal and external review, and incorporate comments into a substantially completed TRRP Strategic Plan for TMC approval.

Policy Implications for Program: If the Strategic Plan is not completed within the coming 4-5 months, the following issues will continue to plague the Program:

- Lack of clarity on Program mission and priorities (i.e., relative importance of wildlife issues; scheduling of channel rehab sites and relative level of design detail)
- Absence of clearly defined desired future conditions envisioned by program
- Investment of time and money into Science Framework without adequate overall context
- Development of "piecemeal" annual work plans without longer-term considerations
- Unintended creation of potentially conflicting priorities within the program of work and
- Unclear or incomplete description of funding needs for multi-year tasks which limit partnerships and cost-sharing opportunities

Funding and Budget: (multiyear needs, financial assistance agreements, etc.)

- **Development and Review** (TRRP staff time) – covered

Doug:	3 days/pay period x 6 = 18 days
Daryl:	1 days/pay period x 4 = 4 days
Ed:	1 days/pay period x 4 = 4 days
Others (5):	1 days/pay period x 2 = 10 days

- **Review**
  TMC members and technical representatives: covered by TMC Administration funding; (1 day x 16 = 16 days)
  TAMWG members: contributed time (1 day x 19 = 19 days)
- **Printing costs** (through RCD or in-house): 100 copies (B&W) @ $10 = $1,000

Additional Support Needed: (Specialized technical input, non-core team input, etc.)

- Entire TRRP staff: Review and comment on interim documents; some specific requests for resource area objectives (to be determined)

Internal Coordination Requirements: (other project teams)

- Science Framework: Provide interim versions of Strategic Plan to Science Framework Core Team; complete Strategic Plan in time to use in initial Science Framework workshops (June 2004).
- FY 2005 Budget planning: Strategic Plan available as guidance for B-Team by June, use to develop 3-5 year funding needs appendix.

External Coordination Requirements: (TMC, TAMWG, etc.)

- Incorporate comments and provide feedback to reviewers.
- Present interim drafts in sufficient time to allow for review and comment (minimum of 1 to 2 weeks prior to April 1-2 TAMWG meeting = Friday, March 19).

Target Completion Date and Major Milestones:

- August, 2004: Printed version ready for distribution
- July, 2004: Final edits complete; camera-ready copy to printer
- May-June, 2004: Program Review Subcommittee comments due
- April 14, 2004: Discussion by TMC
- April 1, 2004: Final presentation to TAMWG (Q&A, recommendation)
- March 19, 2004: Final review copy provided to TAMWG and TMC
- March 12, 2004: Final TRRP staff review complete
- March 5, 2004: Comments incorporated by Doug
- February 23, 2004: TRRP staff review and work session
- February 13, 2004: Core team review and work session; follow up assignments
- February 6, 2004: Comments incorporated by Doug
- February 2, 2004: Comments due from TAMWG and TMC
- Winter 2003/2004: Second review by TAMWG and TMC
- December 8-9, 2003: Presentation of revised draft to TAMWG and TMC for review and comment
- Summer-Fall 2003: Continued development and refinement of mission, goals, and objectives
- April 22/29, 2003: Presentation of initial draft to TAMWG and TMC for review and comment
- March 18-19, 2003: Initial TRRP staff work session to develop draft outline, mission statement, and program goals

Primary Deliverables:

- Interim goals and objectives for use by Science Framework core team – March 19, 2004
- Completed Strategic Plan for approval by the TMC – April 14, 2004
- Printed Strategic Plan ready for mailing – May 21, 2004

Development of "Science Framework" and Information Management System
Project Team Charter

Core Team: Daryl Peterson, Andreas Krause, and Bob Sullivan

Primary Objective: Develop a Scientific Framework which will describe the conceptual models, monitoring strategies and an adaptive management plan for the Trinity River Restoration Program.

Statement of Work: The TRRP AEAM program staff will be tasked to implement the Science Framework. However, the process of *development* of the framework components (conceptual model, monitoring and modeling strategies, adaptive management plan) requires a unique set of specialized skills and interdisciplinary talents. ESSA Technologies will be contracted to assist TRRP staff in the development of the Science Framework.

This project is a 2-year effort involving approximately 15-20 local and invited subject specialist scientists in an iterative series of scientific workshops and tasks to develop scientific guidance documents and data management tools for the TRRP. This effort will culminate in a peer-reviewed Adaptive Management protocol and integrated monitoring / modeling plan which will guide the implementation of the TRPP over the next several years. A Contractor will act to lead the scientists through this process, help document outputs of the process, design a prototype relational database, and assist scientific teams with specific analyses.

Policy Implications for Program: Adaptive management and restoration of the Trinity River requires that reliable scientific information is collected, synthesized and provided to decision makers. The Record of Decision (ROD) recognized this need when it integrated an adaptive environmental assessment and management (AEAM) program into the Trinity River Restoration Program (TRRP). The Trinity River Flow Evaluation Study provided the historical perspective, initial science survey and recommendations that form the basis of the ROD. The TRRP Technical Modeling and Analysis Group is responsible for implementing the science component of the ROD. A solid scientific framework is essential for defensible science in support of the ROD and goals of the TRRP. The process of developing a Scientific Framework requires a very specialized set of knowledge, skills and abilities related to the restoration of river systems.

Funding and Budget:

Task	FY2004	FY2005
Science Framework	360,000	0
Integrated Information Management System	200,000	230,000
Study Design Developments	200,000	0

Additional Support Needed:

None

Internal Coordination Requirements: Primary coordination with Strategic Planning efforts. The science framework will build the basis for adaptive management program elements. The strategic plan will provide the Program priorities for the next 5 years and this will provide the sideboards and focus for science activities.

Coordination with Resource Workgroups. Sediment, fisheries and wildlife workgroups should align much of their content to discuss and provide input into the conceptual models and monitoring plans developed during completion of the science framework.

TMAG and RIG will jointly develop an adaptive management experiment plan following completion of the science framework to test priority uncertainties derived during development of the framework.

External Coordination Requirements: Close involvement by TAMWG, and TMC technical representatives will be required throughout development of the Science Framework process.

Schedule and Milestones: (A specific schedule cannot be defined until after the contract for facilitation is complete).

- Task 1 – The Contractor shall coordinate initial planning activities including:
- Task 2 – The Contractor shall prepare the following items for Workshop 1:
- Task 3 – The Contractor shall facilitate Workshop 1 including:
- Task 4 – The Contractor shall provide Monitoring Support and Program Integration services including:
- Task 5 – The Contractor shall facilitate Workshop 2 including:
- Task 6 – The Contractor shall prepare a Framework Review and Summary Report including:
- Task 7 – The Contractor shall design and develop a prototype Relational Database Component of TRRP Integrated Information Management System (IIMS) in coordination with the science framework conceptual models and monitoring plans including:
- Task 8 – The Contractor shall initiate Implementation of Relational Database Component of IIMS:
- Task 9 – The Contractor shall provide facilities for workshops 1 & 2 in Weaverville and ensure the participation of up to 15 TRRP approved independent subject specialists to provide peer review during the workshops. This task will also include preparation and distribution of agendas, meeting summaries, draft and final documents.

Selected Deliverables:

1. Science Framework and AEAM Plan Document
2. Conceptual ecological models, and sub models
3. Overall Monitoring Plan
4. Various Monitoring Methods/design documents
5. Relational Database component of information Management System

Annual Flow Reporting and Scheduling
Project Team Charter

Core Team: Daryl and Andreas; other staff: Bob, Rich, Brandt.

Primary Objective: Implement the variable annual flow regime component of the Trinity River ROD. This project has two tasks: (1) Report results of objective specific and long-term monitoring projects to inform flow scheduling and (2) recommend to the TMC a daily flow schedule for releasing water to the Trinity River below Lewiston Dam within the available water volume that is supported by analysis of monitoring data and model predictions.

Statement of Work: Flow scheduling will include a meeting involving stakeholders and partner agency representatives to review progress towards Restoration Program goals, discuss annual objectives based on the TRFES, identify priority adaptive management experiments, detail objective specific monitoring needs and consider conflicting management needs, and provide specific recommendations to be considered by the TRRP in developing the annual flow recommendation. The TRRP will make the final recommended annual flow schedule to the TMC by memo and presentation at the April 15, 2004 meeting.

Policy Implications for Program: Flow scheduling is a primary component of the ROD and the focus of the TRFES. Annual water allocation remains the most controversial of all Program components. The policy implications of flow reporting and scheduling extend beyond the Weaverville office to include completion of the SEIS, litigation, tribal relations, California state recovery efforts, CVP operations and others. The Secretary of the Interior's office and Reclamation's Mid-Pacific Regional office have demonstrated strong interest in Trinity River flow scheduling.

Funding and Budget:

No additional funding required.

Additional Support Needed:

- Tom Morstein-Marx, Central Valley Operations, for reservoir and water supply forecast modeling and integration.
- Facilitation for stakeholder meetings.

Internal Coordination Requirements:

- Primary coordination between TMAG and RIG will be potential considerations for construction schedules and contract/bid requirements.

- Coordination with Sediment Workgroup

External Coordination Requirements: Close involvement by TAMWG, and TMC technical representatives will be required for the flow scheduling process (March 11, meeting).

Schedule and Milestones:

- February 6, 2004. Initial water year classification,
- March 11, 2004. Second water year classification, stakeholder/agency meeting for input on objectives and specific monitoring.
- March 26, 2004. Draft flow recommendation memo sent to TMC and TAMWG.
- April 1 & 2, 2004. TAMWG meeting, discussion of draft flow recommendation memo.
- April 14, 2004. Final water year classification, TMC evaluation and final flow recommendation to Bureau of Reclamation.
- April 15, 2004. Back up meeting, if necessary to refine/revise flow recommendation based on TMC direction

Deliverables:

1. Annual Flow Report and summary PowerPoint Presentation
2. WY2004 Spring Flow Recommendations memo to the TMC and summary PowerPoint Presentation.

FLOOD PLAIN INFRASTRUCTURE IMPROVEMENT
Project Team Charter

Team Leader: Ed Solbos

Core Team Members: Rich Miller, Brandt Gutermuth, Noelyn Habana

Primary Objectives: Take appropriate steps to ensure that affected bridges, houses, and out-buildings are structurally improved or relocated or otherwise addressed before implementing recommended peak releases.

Detailed Description/Scope of Work: Review impacts of high flows on manmade structures in the floodplain and determine on a case by case basis remedial actions to reduce adverse impacts. The floodplain of concern is defined as the Extremely Wet Year release from Lewiston Dam (11,000 cfs) plus 100-yr spring tributary accretions.

Policy Implications for Program: Addressing impacts to flood plain structures is a prerequisite to being able to implement the Wet and Extremely Wet flow release schedules specified in the ROD.

Funding and Budget: (funding and budget, financial assistance agreements, etc.)
The program will be implemented through Reclamation staff with substantial participation of outside entities (DWR, Trinity County, TCRCD). Federal appropriated funding needs will be approximately $5,000,000 in FY04 and $1,500,000 in FY05.

Additional Support Needed: (specialized technical input, non-core team input, etc.)
Hydrology and hydraulic modeling.

Internal Coordination Requirements: (other project teams)
Sediment Management

External Coordination Requirements: (TMC, TAMWG, etc.)
Consultation for policy issues.

Target Completion Date and Major Milestones: Actions associated with the bridges are ongoing with construction being initiated in FY04 and all four crossings open to traffic by 12/04. Milestones for addressing other flood plain structures are:

- Obtain hydrology from Lewiston Dam to Reading Creek for 11,000 cfs plus 100-yr tributary accretions
- Clarify SOW for existing Trinity County agreement and initiate work on known problem areas (Poker Bar, Indian Creek)
- Develop HEC-RAS model Lewiston Dam to Reading Creek (relate to FEMA, determine survey data requirements relative to number of cross-sections)
- Make decision on bathymetry (need, type, contracting)

- Run model with bathymetry, updated cross-sections
- List structures within ROD flow inundation zones
- Prioritize remedial actions based on level of impact (structural damage, number of people impacted, etc.)
- Determine 100-yr flood plain through Service Agreement with TSC
- Meet with solicitor on legal strategy
- Develop alternatives at individual sites
- Identify permit and environmental compliance implications of alternatives
- Verify property lines
- Initiate designs (investigate Caltrans material stockpile for road work)
- Perform realty actions
- Implement alternative (construction, fee title purchase, flowage easement)

Primary Deliverables: Accomplish high priority actions by spring 2005. Develop strategy for other areas impacted but not addressed should the possibility of high flow releases materialize.

CANYON CREEK REACH RESTORATION SITE DESIGNS
PROJECT TEAM CHARTER

Team Leader: Rich Miller

Core TRRP Team Members: Brandt Gutermuth, Noelyn Habana, and Bob Sullivan

Primary Objectives: Design and implement restoration at 5 priority sites below Canyon Creek. Develop restoration implementation schedule through FY 2006. Implement pilot restoration project at Hocker Flat prior to summer, 2005.

Detailed Description of Tasks:

- Project scheduling for design, environmental compliance, permitting and construction through 2006.
- Develop GENERAL priority project components (e.g., low velocity area, wetland, landform contouring, etc.) for each site below Hocker Flat through limited stakeholder scoping and landowner contact.
- Fully use current restoration revegetation contractor (TC-RCD) to extent contracted (3 years, $800k).
- Consolidate restoration design information in TRRP office (examples include design drawings, biological survey information, GIS overlays of vegetation and land types, etc.). Continue to develop internal capability for technical engineering design and revegetation designs. Avoid duplicative effort through coordination (e.g. Hocker Flat ESL delineation). Institute TRRP leadership for all restoration planning.
- Determination of FEMA hydraulic analysis and reporting requirements. Complete MOU with Trinity County and FEMA.
- Develop MOU and task description for Hocker Flat CEQA lead.
- NEPA/CEQA documentation. EA/EIR for pilot project "Hocker Flat" to provide platform from which other sites will tier. Develop standard techniques, descriptions, and environmental compliance strategies which will be repeatedly used in the restoration process. Work with regulators to meet their needs and support a programmatic compliance effort. Combine four remaining sites in "programmatic" environmental compliance document. Combine relevant information from RSL with those data gathered by North State so that all natural resource issues are covered as part of NEPA/CEQA and pre-construction inventory processes.
- Clarify (based on recent meeting of the TMC sub committee) and standardize restoration design criteria as to the level of detail required.
- Coordinate and schedule landowner contact with project scoping. Determine and facilitate techniques to secure long-term protection of restoration projects on private lands (e.g., easements, agreements, etc
- Pre- and post-project assessment. Implementation in early 2005 will provide minimum 2-years pre-project baseline assessment.

- Development and implementation of wetland mitigation guidelines (ACOE and CDFG participation). Negotiation with permitting agencies to codify required mitigation practices for "river restoration."
- Identify, and if necessary, re-define EXISTING contractor responsibilities to effectively dovetail with USBR contract solicitation effort. Review existing contracts, contractor tasks, and contractor funding for engineering and restoration design and implementation.
- Complete ROD hydrologic analysis from Lewiston Dam to the North Fork Trinity River.
- Obtain bathymetry of the river channel from Lewiston Dam to the North Fork Trinity River. Topographic information shall be suitable for FEMA reporting standards.

Policy Implications for Program:

The pilot Hocker Flat project will be the first implemented under the MOU with FEMA to provide an "interim" Conditional Letter of Map Revision (CLOMR) hydrologic/hydraulic model and report. After the pilot project, it is anticipated that the remaining restoration sites below Canyon Creek will be included in one CLOMR analysis. Subsequent to that, the remaining restoration sites will be grouped into manageable "bundles" for CLOMR reporting. Upon the completion of restoration activities at all ROD identified sites, a final LOMR (Letter of Map Revision) will be submitted to Trinity County/FEMA for potential update of the FEMA Flood Insurance Rate Maps (FIRMs) and the Flood Insurance Program administered by Trinity County.

The Hocker Flat pilot project CEQA lead agency is DWR. Their representatives have expressed an interest in "assuring" that the restoration activities on private lands be protected from future development by private landowners. The TRRP may facilitate agreements with private landowners that will protect implemented restoration activities. Facilitation may include providing information to landowners and contracting with an existing institution more familiar with easements to negotiate/create any necessary documents or agreements.

River restoration activities that will clearly benefit the system cumulatively are expected to be slowed/impacted by adherence to standard and site specific permit requirements. With TMC taking a lead role, the TRRP will develop recommendations and assist with negotiation of agreements with ACOE, CDFG, RWQCB/SWRCB, and NOAA Fisheries to enable lawful restoration implementation with streamlined environmental compliance.

Funding and Budget:

Hocker Flat Design: Hocker Flat is currently being designed by DWR and funded by existing "in-kind" services agreement funds from 2002 and 2003. Current engineering design costs are approaching $150K. Production of restoration construction specifications will likely require $25K to $50K.

Hocker Flat IS/EIR: North State Resources has a current ID/IQ contract to provide NEPA/CEQA guidance and environmental compliance (permit production). Anticipated additional costs are $100 K..

Hocker Flat Construction: The project had a preliminary construction schedule of Summer 2004, with a budget of $0.5M. Budget for construction in 2005 should approach $0.7M due to expanded scope of project. It is likely that the 2004 funding will be shifted to cover the Bridges project construction costs in 2004.

Remaining 4 Sites Below Canyon Creek: The remaining sites below Canyon Creek will be designed using existing funding agreements with DWR and McBain and Trush. Design costs will likely require funding of $50K per site. Sites will be covered under a single environmental document within the existing North State Resources ID/IQ contract. Budget should be approximately $100K using the platform of the Hocker Flat environmental documents. Implementation budget should be in the $2.0M range ($0.5M per site). Construction specifications (to convert design documents into a biddable construction specification) should receive a budget allocation of $25K per site.

Clearing and Revegetation Implementation: TCRCD funded through 2006 for nursery, clearing and revegetation activities; $0.8M. It is anticipated that this budget allocation will be sufficient for the all restoration revegetation activities below Canyon Creek.

Additional Support Needed:

Additional TRRP engineering staff member.

Identify CEQA lead agency for restoration sites below Hocker Flat.

Cooperation between BOR, DWR and Trinity County to facilitate FEMA reporting requirements for each site will be required. Cooperation of the affected landowners will be required and may impact the physical design based on participation.

TCRCD support and coordination will be key to implementation of revegetation design and remaining on implementation schedule.

TMC involvement to secure "high level" permitting agency participation and support of programmatic environmental compliance and to issue guidance documents to allow flexibility in restoration with respect to existing standard permit requirements and relief from existing numerical compliance criteria (e.g., adherence to the NCRWQCB Basin Plan and ACE wetland mitigation, permitting, etc.). This coordination effort will be critical to the overall success of the program schedule.

TAMWG and TMC guidance to define "gross anatomy" approach toward restoration site landform design.

Internal Coordination Requirements:

Hydrology from Lewiston Dam to North Fork Trinity River – Denver TSC;

LIDAR bathymetry from Lewiston Dam to North Fork Trinity River – contracted by Sacramento.

Restoration site "boilerplate" construction specifications – assistance from TSC/Sacramento/Willows.

External Coordination Requirements:
Contractors, permit agencies, TMC, TAMWG, landowners, FEMA

Target Completion Date and Major Milestones:

Milestone	Hocker Flat Project	Remaining Below CC Projects
Initiate 50% (concept) Designs	03/10/03	06/14/04
Complete 50% Design	03/25/04	12/10/04
Complete 50% Revegetation Design	04/25/04	02/11/05
Begin Agency Review Admin Draft EA/EIR	07/15/04	05/09/05
REVIEWC (Review of draft Drawings and Specifications)	08/01/04	06/20/05
Begin Public Review Draft EA/EIR	08/15/04	07/11/05
Complete Reveg. Design and Specification	09/01/04	08/05/05
SPECB (Drawings and Specifications sent to MP-200)	09/01/04	08/15/05
Final EA/EIR	10/22/04	11/04/05
CEQA Lead Certifies EIR	11/05/04	11/18/05
FONSI	11/05/04	11/18/05
All Permits Signed	01/15/05	12/03/05
Solicitation	12/16/04	12/17/05
NTP	02/11/05	02/10/06
Begin Construction	03/26/05	03/27/06
Complete Work	09/15/05	09/15/06

SEDIMENT MANAGEMENT PROGRAM
Project Team Charter

Team Leader: Andreas Krause

Core Team Members: Rich Miller, Brandt Gutermuth

Primary Objectives:

Develop and implement an integrated sediment management program to support and assess sediment and flow related restoration activities. Program elements include: (1) a comprehensive management plan (coarse sediment management, fine sediment management, and watershed sediment source control); (2) sediment transport modeling; and (3) sediment monitoring and assessment.

Scope of Work:

Develop a comprehensive sediment management program that integrates all monitoring, modeling, and assessment with on-going and planned restoration activities. Due to program priorities, the coarse sediment management component of the comprehensive plan will be developed first (by Oct. 2004) to allow coarse sediment augmentation to begin in the summer of 2005. In the interim, the Preliminary Coarse Sediment Management Plan (dated Jan 2003) will be used for planning purposes. The remaining components of the comprehensive plan will be developed in 2005 and 2006.

Sediment transport modeling will be conducted by the USBR Denver Service Center. The model will be used to develop a better understanding of sediment transport dynamics, assist in restoration project design, and provide sediment transport analysis and predictions for use in developing the annual flow recommendations.

Calculation of an annual sediment budget for various river sections will be used to assess system trends and verify model results. The annual sediment monitoring program will provide sufficient information to calculate the annual sediment budget and provide data required for modeling. Sediment monitoring will be conducted to meet USGS standards with USGS review. Approved data will be published by the USGS.

Policy Implications for Program:

The sediment management program will provide the science, assessment, and management recommendations functions envisioned for AEAM program for sediment related resources. The sediment management plan will provide support of environmental permitting associated with sediment related restoration activities like coarse sediment injections. Results and predictions from the sediment budget and sediment modeling will be used to help develop the annual flow recommendations.

Funding and Budget:

Reoccurring Annual Costs

Item	Cost
Sediment monitoring	$200,000
USGS participation and review of sediment monitoring (annual plan, data collection, analysis, reporting)	$30,000
Sediment modeling	$150,000
Sediment budget calculation	$35,000
Symposium	$10,000
Reoccurring annual costs	$425,000

Additional Costs

Item	Cost
Complete Coarse Sediment Management Plan	$80,000 (Oct 2004)
Complete comprehensive management plan	$250,000 (FY05-06)
Project specific studies	As needed

Additional Support Needed:

Input and review from sediment technical workgroup. This group is currently envisioned to be composed of all technical specialists with current sediment related contracts / agreements. Funding support for their participation in the annual symposium and workgroup activities to be covered by their individual agreements.

Development of technical aspects of sediment management plans to be contracted out.

Independent peer review committee to review annual scopes of work and RFP submittals.

Internal Coordination Requirements:

Annual flow reporting / scheduling team

Coarse sediment injection project implementation

Watershed team and restoration activities

Strategic plan

External Coordination Requirements:

Annual symposium to inform and involve TMC technical representatives, TAMWG, and Science Advisory Board (SAB). Sediment management team will present information (or request review comments) to TMC, TAMWG, and SAB as needed.

Brandt to coordinate development of sediment management plans with regulatory agencies.

Target Completion Date and Major Milestones:

(see primary deliverables section)

Primary Deliverables:

Coarse sediment management plan (Dec 2004)

Comprehensive sediment management plan (FY06)

Annual sediment budget (annually by Oct.)

Sediment monitoring plan with QA/QC (August 2004)

Annual sediment symposium (annually in Nov.)

WATERSHED RESTORATION (SEDIMENT SUBGROUP)
Project Team Charter

Team Leader: Andreas Krause

Core Team Members: Brandt Gutermuth, Noelyn Habana, umbrella watershed management group

Primary Objectives:

Support properly functioning watershed conditions using and eco-system based watershed restoration approach. TRRP would provide support (staff and funding) to a larger watershed management umbrella group. Within this larger context, TRRP will focus on sediment source control as directed by the ROD. The primary objective will be to minimize delivery of sediment less than 8 mm in size while not disrupting the coarse sediment supply. The primary focus is on watersheds located between Lewiston and the North Fork.

Scope of Work:

In January 2004, TRRP met with Trinity RCD, USFS, NRCS, BLM, Trinity County, USGS to discuss formation of an umbrella watershed management group. There was support for the umbrella group and agreement that, as watershed coordinator, Trinity County RCD would be the point of contact for the umbrella group. Participants also agreed that TRRP is but one member among many. The umbrella group should be expanded if possible to include private industry (e.g. SPI) and private landowners. A charter still needs to be developed that clarifies the roles and responsibilities of the various entities and staff.

Working with the USGS, the TRRP watershed team will develop a watershed assessment strategy that focuses on the fine and coarse sediment objectives of the ROD but fits within the larger context of watershed interests and objectives. The strategy will lay out how watershed assessments are to be conducted, the parameters of interest, scope and scale of the assessments and anticipated restoration, prioritization criteria, analysis methods, monitoring, and adaptive management. The strategy is basically a work plan (short, less than 20 pages) that covers the who, what, when, where, why, and provides thumbnail cost estimate. The strategy will be developed conjunctively with the larger umbrella group to ensure consistency of application, integration with other watershed efforts, and general acceptance. Once strategy is completed, the watershed team will work with the umbrella group to conduct watershed assessments and begin implementation of sediment source control projects. The first watershed assessment (targeted for completion by October 2004) will be for Rush Creek.

Policy Implications for Program:

The ROD specifically states that "the Trinity Management Council will guide an upslope watershed restoration program to address the problems of excessive sediment input from many of the tributaries of the Trinity River resulting from land use practices." The ROD also states that the TMC can consider watershed restoration for all tributaries downstream of Lewiston Dam (including the South Fork Trinity River) and areas in the Lower Klamath basin between the

Trinity River confluence and the ocean. However, priority will be given to watersheds located between Lewiston Dam and the North Fork Trinity River as recommended in Appendix C of the EIS (referred to by the ROD).

The watershed team would develop and implement the watershed elements of the ROD within the larger context of an overall watershed management group. The watershed assessment strategy will outline a realistic plan to provide the science, assessment, and management recommendation functions envisioned for AEAM program for watershed related sediment resources. The strategy and subsequent watershed assessments will provide support of environmental permitting associated with watershed related restoration activities. This plan currently focuses exclusively on sediment resources and envisions the upland and wildlife watershed resources to primarily be covered by other partners in the umbrella watershed group. The extent of TRRP involvement in tributary fish habitat should be determined by the incoming TRRP fisheries biologist. Although the initial focus will be on watershed located between Lewiston and the North Fork, the geographic scope will likely be expanded in the next few years. TRRP related activities outside of this geographic scope will need to be paid for with program funds not originating from Reclamation to avoid potential conflict with the Reclamation Solicitors opinion restricting use of Reclamation funds for mitigation of direct impacts from TRD operations.

Funding and Budget:

Available FY04 funds

Item	Allocated Funding
USGS agreement to develop watershed assessment strategy for sediment	$50,000
Rush Creek Watershed Assessment*	$100,000
Trinity County Watershed Grant Program	$200,000

* Note, no watershed assessments to be started until a watershed assessment strategy has been developed.

The watershed assessment strategy should include a more refined 2 to 3 year budget.

Additional Support Needed:

The watershed assessment strategy and sediment source control assessments to be developed for TRRP through an agreement with the USGS. The TRRP watershed team to provide review and guidance.

Watershed assessments to be contracted out.

Watershed restoration project implementation to be contracted out.

Contract out periodic outside review and evaluation of effectiveness (cost and sediment reduction) of implemented project.

Independent peer review committee to review annual scopes of work and RFP submittals.

Internal Coordination Requirements:

Annual flow reporting / scheduling team

Sediment management team (sediment monitoring, modeling, assessment)

Strategic plan

External Coordination Requirements:

Project management for USGS agreement.

Trinity basin umbrella watershed management group (RCD, NRCS, USFS, BLM, County, SPI, etc.) and watershed coordinator (Pat Frost, RCD).

Sediment related aspects of watershed restoration to be included in annual sediment symposium and sediment workgroup. Annual symposium will inform and involve TMC technical representatives, TAMWG, and Science Advisory Board (SAB). Sediment management team will present information (or request review comments) to TMC, TAMWG, and SAB as needed.

Input and review from sediment technical workgroup.

Brandt to coordinate watershed assessment strategy with regulatory agencies.

Target Completion Date and Major Milestones:

(see primary deliverables section)

Primary Deliverables:

Watershed component of the TRRP strategic plan (May 2004)

Watershed assessment strategy by USGS (August 2004)

Sediment source control component of the Rush Creek watershed assessment by USGS (Oct. 2004)

Deliverables from the Trinity County Watershed Grants Program (who, what, and when determined by Trinity County)