

Valdor, Upper and Lower Roads Sediment Reduction Implementation Project

Section 1: Summary Information

1. Project type: (Sediment reduction, fish passage, etc.)	Sediment Reduction
2. Project title:	Valdor, Upper and Lower Roads Sediment Reduction Implementation Project
3. Applicant name:	Northwest CA RC&D Council, 5C Program
4. Contact person:	Mark Lancaster
5. Address:	PO Box 2571
6. City, State, Zip:	Weaverville, CA 96093-2571
7. Telephone #:	530.623.3967 x111
8. Fax #:	530.623.3979
9. Email address:	mlancaster@5counties.org
10. Type:	Public Agency ☐ Nonprofit Organization ☒ Indian Tribe ☐ Other ☐
11. Amount requested:	\$ 25,300
12. Total project cost:	\$ 38,300
13. Project objectives:	Reduce approximately 1,160 yd ³ of potential fine sediment to tributaries to the Trinity River and/or Canyon Creek.
14. Time frame:	Two years from time of contract execution; estim Sept 2014 – Aug 2015
15. Stream:	Tributaries to Trinity River and Canyon Creek

Section 2: Location Information

1. Township, Range, Section:	Sections 35 & 36, T34N, R11W, MDB&M.
2. Latitude, Longitude (in decimal degrees, Geographic, NAD83):	~40.7649°N, 123.0713°W
3. Location description:	West of Junction City, North of the Trinity River.
4. Directions:	From Weaverville, take Highway 299 west to Valdor Road (~3 miles west of Junction City). Turn right on Valdor Road and continue to the end of the paved section (~0.32 mi). The project begins at Mile Post ~0.32 (Wheel Gulch) continuing east to the end of the County road at MP 2.06 (intersection with Power Inn Road).. To reach Upper and Lower Roads, turn left at the intersection of Valdor and Power Inn Road and go ~0.05 miles to Upper Road or Lower Road ~0.1 mile. Note: landowners or others living in these areas with marijuana gardens may contact vehicles and inquire why they are on these roads.

Section 3: Watershed Information

1. Watershed name:	Wheel Gulch and Unnamed Tributaries of the Trinity River and Canyon Creek.
2. Watershed area:	~ None are more than 2 mi ² in area and most are less than 0.25 mi ²

3. Watershed area directly affected by the proposed project:	~ 1,000 acres
4. Land use statement:	Current land uses within the watershed include limited rural residential development with approximately 50% of the watershed managed by the BLM. The lowest parts of the Valdor Road watersheds are bisected by Highway 299. The majority of the watershed area is steep, timber and brush lands and has sparse residential development . These land uses are expected to remain as such for the next 5 years.
5. Project area ownership:	Private: <u>50%</u> State: <u>0%</u> Federal: <u>50%</u>
6. Project area with landowners in support of proposal:	The project work is all Trinity County managed roads, The County is partnering with the RC&DC on this project,
7. Length of blue line streams directly affected by proposal:	<0.5 miles
8. Watershed Plan(s):	This project is upslope of the Wheel Gulch Creek TRRP Project. It is adjacent to a major stream crossing failure and repair project in Wheel Gulch in 2005 (see discussion below and attached photos).

Section 4: Project Objectives

1. Background information:

The County terminated maintenance of Valdor Road east the Wheel Gulch (~MP 0.32 to ~2.06) crossing in the early 2000's. The termination, however, did not include placing the road into a storm proof/hydrologic neutral condition. While routine maintenance was discontinued, Trinity County adopted policies preclude seasonally closing or permanently blocking vehicle access to the terminated segments. In 2005 the inlet of the County road culvert on Wheel Gulch was plugged (purportedly by kids damming the channel at the culvert inlet) and portions of the stream flow diverted down the road and over the bank (refer to attached photos). The failure was repaired Trinity County RCD and contract crews in late 2005.

The road systems are within Salmon Hornblende Schist parent materials which has "soils [that] are erodible and release a large number of clay-sized amphibole crystals into the Trinity River" (DWR, 1980). The roads are located in the mid-slope to spur ridge tops within extremely steep slopes directly above Highway 299, Trinity River, and Canyon Creek. The steep slopes mean that water diversions off the road surfaces can travel extensive distances downslope, potentially scouring and debris torrenting in the process. Upper and Lower Roads while in the same geology have a higher percentage of the road within bedrock compared to Valdor Road.

2. Need for the project:

The terminated road segments contain road ruts, unmonitored culverts, and ditch and bank erosion sources. While there are no perennial stream crossings the Valdor Road east of Wheel Gulch there are a series of ephemeral streams and steep swales that lead to Highway 299 and the Trinity River. There are a series of similarly unnamed ephemeral streams and swales crossing Upper and Lower Roads. The 2005 stream diversion demonstrates the potential for significant erosion road damage from lack of road inspection and routine maintenance. A rapid assessment of the terminated maintenance portion of Valdor, and Upper and Lower Roads was done for this grant proposal and found significant risks for future fill and road surface failures.

The treatments proposed consist of installation of critical dips at each swale and stream crossing, outslipping segments of each road where safe, removal of stored berm material, and installation of rolling dips where safe and within stable soils. The new critical dips and other drainage structures will reduce the potential for stream diversion if a crossing should fail. The project will not require additional staffing for traffic control. No paving is proposed and minimal supplemental rock surfacing at rolling dips will be required.

The project will reduce the potential for approximately 1,160 yd³ of road and channel related fine sediment to reach tributaries to the Trinity River and/or Canyon Creek. This project will reduce sediment delivery potential

associated with failed stream crossings and road washouts. If funded, the terminated maintenance section of the road will have critical dips installed at unmaintained culvert stream crossings and swales, berm materials will be removed from the outside edge of the road, road segments will be outsloped where safe and feasible, and rolling dips installed in stable locations.

3. Additional objectives:

The project will contribute to meeting the TRRP Objective to reduce the delivery of fine sediment (fine sand to fine gravel) to the Trinity River or to tributary habitats used by anadromous salmonids, especially within the "Upper Middle Area" of the river. Sediment control projects that exclude a large quantity of fine sediment relative to the local fine sediment budget have higher priority.

The project is consistent with the narrative of Section 5.2 of Appendix C of the TRRP ROD: "Road maintenance involves grading, rocking and clearance of drainage structures on existing roads to ensure that a minimum amount of erosion occurs. The current level of inadequate funding for road maintenance activities increases the risk of catastrophic failure of road fills when culverts and other drainage structures become plugged."

The project is consistent with the prioritization and work plan elements of Section 5.3 of the ROD as follows: "Watershed restoration priorities must address the physical, biological and legal issues associated with the Trinity River.

4. Project Tasks and Results

Detailed project tasks:

1. Complete NEPA/CEQA And Obtain Permits To Construct Project.
2. Complete 100% Design (Including Establish Photo Points, Field Survey/Stake Sites and Typical Sections)
3. Construct Critical Dips, Rolling Dips, Outslope, Berm Removal
4. Install Erosion Control
5. Photo Point Monitoring
6. Invoicing And Reporting

Time frame:

Two years from time of contract execution; estim Sept 1, 2014 – Aug 31, 2016

Deliverables:

1. 401 & 404 Certification or Waiver
2. Quarterly progress reports.
3. Post photo point monitoring
4. Final project report

6. Expected quantitative results (cost per unit):

The project will reduce the potential for approximately 1,160 yd³ of road and channel related fine sediment (or more) to reach tributaries to the Trinity River and/or Canyon Creek.

7. Other products and results:

This project complements past Wheel Gulch watershed restoration efforts.

8. Applicant's qualifications and experience:

The Northwest CA RC&D Council's 5C Program has conducted road sediment inventories utilizing the DIRT methodology on approximately 2,455 miles of County roads since 2000. The 5C staff, in cooperation with Trinity County DoT crews, has worked on the design and implementation of numerous road sediment reduction projects (Browns Mountain Road, China Gulch Road, Deadwood Road, Dutch Creek Road, Lewiston-Turnpike Road, Roundy Road, Trinity Dam Boulevard,) as well as projects on private lands (e.g. Browns Creek) and in partnership with other counties (e.g. Usal Road, Fish Rock Road).

Section 6: Landowners, Access and Permits

1. Landowners Granting Access for Project: (Please attach provisional access agreement[s]) BLM – federal land and Stewart mining claim	
2. Required Permits:	N/A
3. Lead CEQA/NEPA agency:	A CEQA Initial Study will be completed and if appropriate a Notice of Exemption would be filed. The project will tier off of the Trinity River EIS ROD.
4. Required mitigation:	Yes ☐ No ☒

Section 7: Project Budget

1. Summary project costs (Please attach detailed budget[s]):

Valdor, Upper and Lower Roads Sediment Reduction Implementation Project	Requested Total	Match Total	Total Project Cost
Personnel			
5C Program Director	\$3,371	\$500	\$3,871
5C Project Coordinator	\$2,041	\$0	\$2,041
5C Office Manager	\$562	\$0	\$562
Subtotal Personnel	\$5,974	\$500	\$6,474
Operating			
Construction Labor and Equipment	\$11,390	\$8,916	\$20,306
Permits	\$350	100	\$450
Materials & Supplies	\$4,560	\$1,520	\$6,080
Subtotal Operating	\$16,300	\$10,536	\$26,836
Subtotal	\$22,274	\$11,036	\$33,310
Administrative Overhead 15.02%	\$3,027	\$1,964	\$4,990
	\$25,300	\$13,000	\$38,300

Sources of Funds	Cash	In-kind (if applicable)	Status S,P,U (secured, pending, unknown)	Anticipated award date	Total
Trinity River Restoration Program	\$25,300				\$25,300
State Agencies <u>Name(s) and amount(s) of each:</u> CA Coastal Conservancy (via applicant) and/or CA Fish and Game					
Applicant:		\$3,300	P	6/2014	\$3,300
Other Sources <u>Name(s) and amount(s) of each:</u>		\$9,700	P	6/2014	\$9,700
Total	\$25,300	\$13,000			\$38,300

Estimated Project Cost by Task

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3. Budget justification:

NEPA and CEQA costs may vary depending on the extent of existing data and analysis completed. If NEPA/CEQA costs are less than budgeted, remaining funds would be applied to additional road drainage and berm removal.

Construction cost estimates are based on contract rates for work done on past projects and on current contract rates. The actual labor cost for this project may vary due to the extent of lumber framing needed to form weirs/pool structures. Typically these types of projects utilize pre-formed structures but the unique bedrock and steep canyons at these sites requires site specific framing and cast in place structures. Materials costs are based on rock and concrete costs for projects done in 2013 in Trinity County.

4. Administrative overhead:

Fifteen point zero two percent overhead is proposed to cover all indirect costs as well as materials costs required during the course of the implementation work. This will cover applicant overhead expenses (rent, communications, utilities, general liability insurance), office supplies and services (paper, printing, mailing), and cost of using existing survey equipment or field equipment (e.g., GPS, distance measurer).

Section 8: Supplemental or Specialized Information

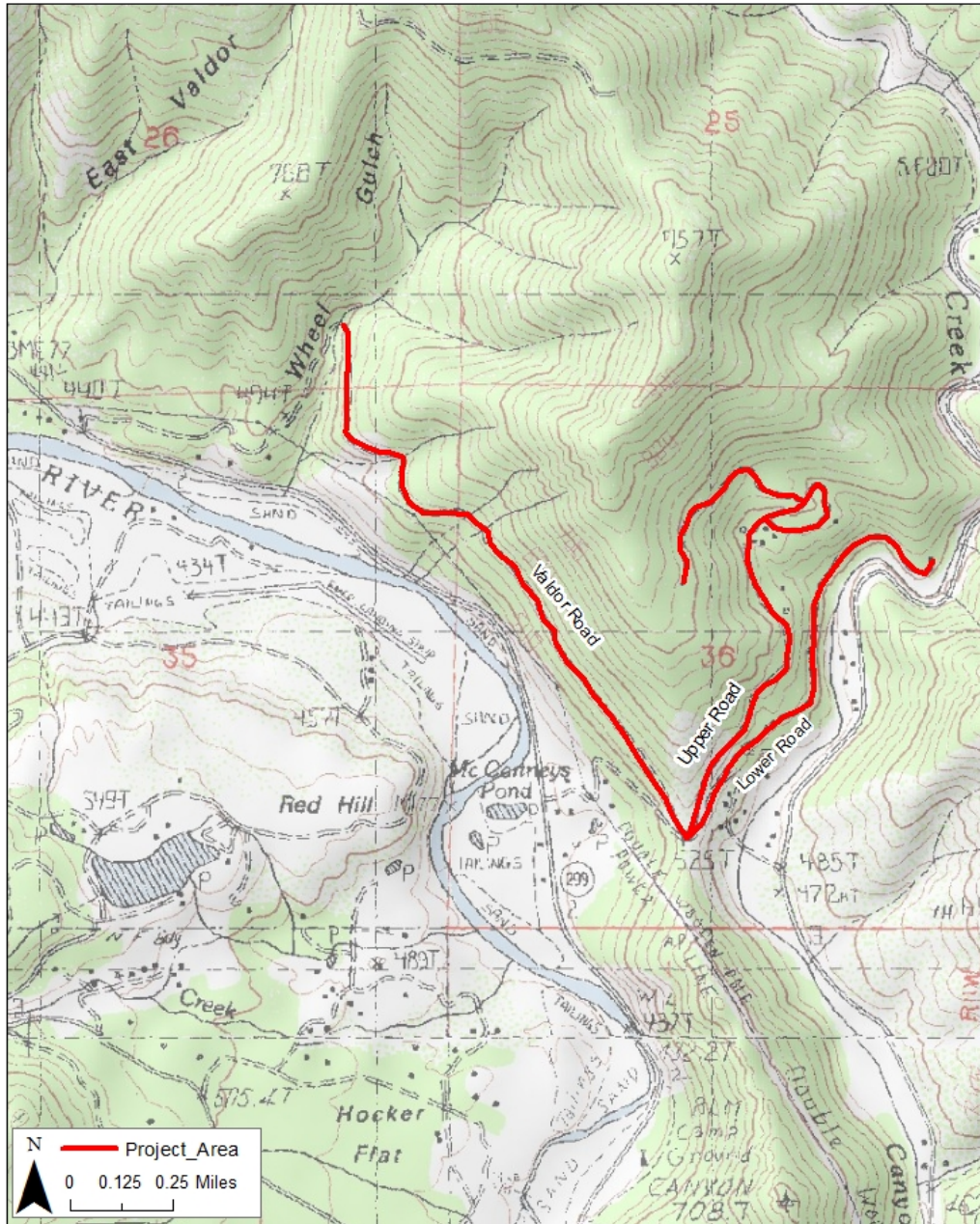
Please attach the following required items to the application:

1. Project location 7.5 minute topographic quadrangle map, (USGS).

Valdor Road Sediment Reduction Project Area

Junction City, CA

T34N R11W



2. Description of how this project meets the Trinity River Restoration Program criteria for Watershed Projects: TRRP Objectives (in italics):

Sediment control projects should reduce the delivery of fine sediment (fine sand to fine gravel) to the Trinity River or to tributary habitats used by anadromous salmonids- The Trinity River TMDL identified road sediment as the highest priority implementation recommendation, especially within the “Upper Middle Area” of the river.

Sediment control projects that exclude a large quantity of fine sediment relative to the local fine sediment budget have higher priority- The road is at mid-slope to ridge top on an extremely steep slope directly above Highway 299 and the river. The steep slopes mean that water diversions off the road surface can travel extensive distances downslope, potentially scouring and debris torrenting in the process. The project is within Salmon Hornblende Schist parent materials which has “soils [that] are erodible and release a large number of clay-sized amphibole crystals into the Trinity River” (DWR, 1980). Upper and Lower Roads are in similar geology but have much higher percentage of the road within bedrock compared to Valdor Road. Work on Upper and Lower Roads will be to improve overall drainage and install critical dips at stream crossings.

The project is consistent with the narrative of Section 5.2 of Appendix C of the TRRP ROD: “Road maintenance involves grading, rocking and clearance of drainage structures on existing roads to ensure that a minimum amount of erosion occurs. The current level of inadequate funding for road maintenance activities increases the risk of catastrophic failure of road fills when culverts and other drainage structures become plugged.”

The project is consistent with the prioritization and work plan elements of Section 5.3 of the ROD as follows: “Watershed restoration priorities must address the physical, biological and legal issues associated with the Trinity River. The following criteria are recommended:

1. Tributary watersheds located between the North Fork Trinity confluence and Lewiston Dam shall be the highest priority.- The project is within the criteria area
4. Roaded stream crossings at risk of catastrophic failure or migration barriers for anadromous fish.- The termination of maintenance without storm proofing significantly increases the probability of culvert plugging and fill failure.
5. Lands that are available for restoration because of landowner permission and/or completion of environmental compliance and permitting (Watershed Analysis, NEPA/CEQA/CWA 404, 401, etc.).- Trinity County is committing in-kind resources to the project.
6. Projects that provide a cost share from the landowner/agency or other funding sources.
7. Sub-watersheds identified as priorities through the TMDL, as well as State and Tribal Water Quality Control Plan processes and monitoring programs. Refer to discussion under #1 of the TRRP objectives above.