

**FEDERAL FINANCIAL ASSISTANCE
AWARD OF DOMESTIC GRANT 013-DG-11051900-013
Between The
COUNTY OF EL DORADO
And The
USDA, FOREST SERVICE
LAKE TAHOE BASIN MANAGEMENT UNIT**

Project Title: Sediment Reduction Project

Upon execution of this document, an award to The County of El Dorado, hereinafter referred to as "El Dorado County," in the amount of \$150,000, is made under the Lake Tahoe Restoration Act, Public Law 106-506 as amended, P.L. 108-108, Section 337.. El Dorado County accepts this award for the purpose described in the application narrative. Your application for Federal financial assistance, dated December 7, 2012 (Attachment C, SF-424), application narrative titled "Sediment Reduction Project JN 99230, Federal 2012 Lake Tahoe Soil Erosion Grants Program Final Application Submittal", dated October 2012 (Attachment D), and the attached U.S. Forest Service provisions, 'U.S. Forest Service Award Provisions,' are incorporated into this letter and made a part of this award.

The County of El Dorado is required to provide a 1:1 match for the awarded funds.

This is an award of Federal financial assistance and is subject to USDA regulations 7CFR 3016 Uniform Administrative Requirements, 2 CFR 225 Cost Principles, and OMB Circular A-133 as implemented by USDA regulation 7 CFR 3052. All Federal and Recipient matching/cost-share contributions are subject to all relevant OMB Circulars and Code of Federal Regulations.

The OMB Circulars are available on the internet at http://www.whitehouse.gov/omb/grants_default/. Electronic copies of the CFRs can be obtained at the following internet site: <http://www.gpoaccess.gov/cfr/index.html>. If you are unable to retrieve these regulations electronically, please contact your Grants and Agreements Office at (530) 478-6828.

Effective October 1, 2010, recipients are required to report information on subaward and executive total compensation, as required by the Federal Funding Accountability and Transparency Act of 2006 (Pub. L. 109-282), as amended by section 6202 of Public Law 110-252, hereinafter referred to as "the Transparency Act." See the award terms in Attachment B: 2 CFR Part 170.

The following administrative provisions apply to this award:

- A. **LEGAL AUTHORITY.** El Dorado County shall have the legal authority to enter into this award, and the institutional, managerial, and financial capability to ensure proper planning, management, and completion of the project, which includes funds sufficient to pay the nonfederal share of project costs, when applicable.



- B. **PRINCIPAL CONTACTS.** Individuals listed below are authorized to act in their respective areas for matters related to this award.

Principal Cooperator Contacts:

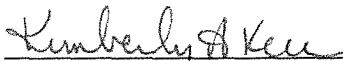
Cooperator Program Contact	Cooperator Administrative Contact
Donaldo Palaroan 924-B Emerald Bay Road South Lake Tahoe, CA 96150 Telephone: (530) 573-7900 FAX: (530)541-7049 Email: donaldo.palaroan@edcgov.us	Steve Kooyman 2850 Fairlane Court, Bldg C Placerville, CA 95667 Telephone: (916) 358-3603 Email: steve.kooyman@edcgov.us

Principal U.S. Forest Service Contacts:

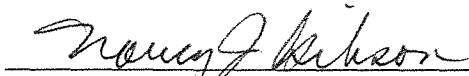
U.S. Forest Service Program Manager Contact	U.S. Forest Service Administrative Contact
Barbara Shanley 35 College Drive South Lake Tahoe, CA 96150 Telephone: (530)543-2657 or cell: (530) 448-0607 FAX: (530) 543-2693 Email: bshanley@fs.fed.us	John Hefner 631 Coyote Street Nevada City, CA 95959 Telephone: (530) 478-6828 Email: jvhefner@fs.fed.us

- C. **ADVANCE AND REIMBURSABLE PAYMENTS – FINANCIAL ASSISTANCE.**
See provision "J" in the attachment, 'U.S. Forest Service Award Provisions.'
- D. **PROGRAMMATIC CHANGES.** El Dorado County shall obtain prior approval for any change to the scope of objectives of the approved project, key personnel, or transfer of substantive programmatic work to another party.
- E. **MODIFICATIONS.** Modifications within the scope of this award shall be made by mutual consent of the parties, by the issuance of a written modification signed and dated by all properly authorized, signatory officials, prior to any changes being performed. Requests for modification should be made, in writing, at least 90 days prior to implementation of the requested change. The U.S. Forest Service is not obligated to fund any changes not properly approved in advance.
- F. **COMMENCEMENT/EXPIRATION DATE.** This award is executed as of the date of the last signature and is effective for five years at which time it will expire.

G. AUTHORIZED REPRESENTATIVES. By signature below, each party certifies that the individuals listed in this document as representatives of the individual parties are authorized to act in their respective areas for matters related to this award. In witness whereof, the parties hereto have executed this award as of the last date written below.




KIMBERLY KERR, Director of Department of Transportation (Interim) Date
The County of El Dorado



NANCY J. GIBSON, Forest Supervisor Date
U.S. Forest Service, Lake Tahoe Basin Management Unit

The authority and format of this award has been reviewed and approved for signature.



ROBIN BRYANT Date
U.S. Forest Service Grants Management Specialist

ATTACHMENT A: U.S. FOREST SERVICE AWARD PROVISIONS

- A. COLLABORATIVE ARRANGEMENTS. Where permitted by terms of the award, El Dorado County may enter into collaborative arrangements with other organizations to jointly carry out activities with grant funds.
- B. FOREST SERVICE LIABILITY TO THE RECIPIENT. The United States shall not be liable to the recipient for any costs, damages, claims, liabilities, and judgments that arise in connection with the performance of work under this award, including damage to any property owned by the recipient or any third party.
- C. NOTICES. Any notice given by the U.S. Forest Service or El Dorado County will be sufficient only if in writing and delivered in person, mailed, or transmitted electronically by e-mail or fax, as follows:

To the U.S. Forest Service Program Manager, at the address specified in the grant.

To El Dorado County, at El Dorado County's address shown in the grant or such other address designated within the grant.

Notices will be effective when delivered in accordance with this provision, or on the effective date of the notice, whichever is later.

- D. USE OF U.S. FOREST SERVICE INSIGNIA. In order for El Dorado County to use the U.S. Forest Service insignia on any published media, such as a webpage, printed publication, or audiovisual production, permission must be granted from the U.S. Forest Service's Office of Communications. A written request must be submitted and approval granted in writing by the Office of Communications (Washington Office) prior to use of the insignia.
- E. MEMBERS OF U.S. CONGRESS. Pursuant to 41 U.S.C. 22, no United States member of, or United States delegate to, Congress shall be admitted to any share or part of this award, or benefits that may arise therefrom, either directly or indirectly.
- F. TRAFFICKING IN PERSONS.
1. Provisions applicable to a Recipient that is a private entity.
 - a. You as the Recipient, your employees, subrecipients under this award, and subrecipients' employees may not—
 - (1) Engage in severe forms of trafficking in persons during the period of time that the award is in effect;
 - (2) Procure a commercial sex act during the period of time that the award is in

effect; or

- (3) Use forced labor in the performance of the award or subawards under the award.
- b. We as the Federal awarding agency may unilaterally terminate this award, without penalty, if you or a subrecipient that is a private entity —
- (1) Is determined to have violated a prohibition in paragraph a.1 of this award term; or
 - (2) Has an employee who is determined by the agency official authorized to terminate the award to have violated a prohibition in paragraph a.1 of this award term through conduct that is either—
 - i. Associated with performance under this award; or
 - ii. Imputed to you or the subrecipient using the standards and due process for imputing the conduct of an individual to an organization that are provided in 2 CFR part 180, “OMB Guidelines to Agencies on Government wide Debarment and Suspension (Nonprocurement),” as implemented by our agency at 2 CFR 417.
2. Provision applicable to a Recipient other than a private entity. We as the Federal awarding agency may unilaterally terminate this award, without penalty, if a subrecipient that is a private entity—
- a. Is determined to have violated an applicable prohibition in paragraph a.1 of this award term; or
 - b. Has an employee who is determined by the agency official authorized to terminate the award to have violated an applicable prohibition in paragraph a.1 of this award term through conduct that is either—
 - (1) Associated with performance under this award; or
 - (2) Imputed to the subrecipient using the standards and due process for imputing the conduct of an individual to an organization that are provided in 2 CFR part 180, “OMB Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement),” as implemented by our agency at 2 CFR 417.
3. Provisions applicable to any recipient.
- a. You must inform us immediately of any information you receive from any source alleging a violation of a prohibition in paragraph a.1 of this award term.

b. Our right to terminate unilaterally that is described in paragraph a.2 or b of this section:

- (1) Implements section 106(g) of the Trafficking Victims Protection Act of 2000 (TVPA), as amended (22 U.S.C. 7104(g)), and
- (2) Is in addition to all other remedies for noncompliance that are available to us under this award.

c. You must include the requirements of paragraph a.1 of this award term in any subaward you make to a private entity.

4. Definitions. For purposes of this award term:

a. "Employee" means either:

- (1) An individual employed by you or a subrecipient who is engaged in the performance of the project or program under this award; or
- (2) Another person engaged in the performance of the project or program under this award and not compensated by you including, but not limited to, a volunteer or individual whose services are contributed by a third party as an in-kind contribution toward cost sharing or matching requirements.

b. "Forced labor" means labor obtained by any of the following methods: the recruitment, harboring, transportation, provision, or obtaining of a person for labor or services, through the use of force, fraud, or coercion for the purpose of subjection to involuntary servitude, peonage, debt bondage, or slavery.

c. "Private entity":

(1) Means any entity other than a State, local government, Indian tribe, or foreign public entity, as those terms are defined in 2 CFR 175.25.

(2) Includes:

- i. A nonprofit organization, including any nonprofit institution of higher education, hospital, or tribal organization other than one included in the definition of Indian tribe at 2 CFR 175.25(b).
- ii. A for-profit organization.

d. "Severe forms of trafficking in persons," "commercial sex act," and "coercion" have the meanings given at section 103 of the TVPA, as amended (22 U.S.C. 7102).

G. DRUG-FREE WORKPLACE.

1. El Dorado County agree(s) that it will publish a drug-free workplace statement and provide a copy to each employee who will be engaged in the performance of any project/program that receives federal funding. The statement must
 - a. Tell the employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in its workplace;
 - b. Specify the actions El Dorado County will take against employees for violating that prohibition; and
 - c. Let each employee know that, as a condition of employment under any instrument, he or she
 - (1) Must abide by the terms of the statement, and
 - (2) Must notify you in writing if he or she is convicted for a violation of a criminal drug statute occurring in the workplace, and must do so no more than five calendar days after the conviction.
2. El Dorado County agree(s) that it will establish an ongoing drug-free awareness program to inform employees about
 - a. The dangers of drug abuse in the workplace;
 - b. Your policy of maintaining a drug-free workplace;
 - c. Any available drug counseling, rehabilitation and employee assistance programs; and
 - d. The penalties that you may impose upon them for drug abuse violations occurring in the workplace.
3. Without the U.S. Forest Service's expressed written approval, the policy statement and program must be in place as soon as possible, no later than the 30 days after the effective date of this award, or the completion date of this award, whichever occurs first.
4. El Dorado County agree(s) to immediately notify the U.S. Forest Service if an employee is convicted of a drug violation in the workplace. The notification must be in writing, identify the employee's position title, the award number of each award on which the employee worked. The notification must be sent to the U.S. Forest Service within ten calendar days after El Dorado County learn(s) of the conviction.

5. Within 30 calendar days of learning about an employee's conviction, El Dorado County must either
 - a. Take appropriate personnel action against the employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973 (29 USC 794), as amended, or
 - b. Require the employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for these purposes by a Federal, State or local health, law enforcement, or other appropriate agency.

- H. ELIGIBLE WORKERS. El Dorado County shall ensure that all employees complete the I-9 form to certify that they are eligible for lawful employment under the Immigration and Nationality Act (8 USC 1324a). El Dorado County shall comply with regulations regarding certification and retention of the completed forms. These requirements also apply to any contract or supplemental instruments awarded under this award.

- I. FINANCIAL STATUS REPORTING. A Federal Financial Report, form SF-425 (and Federal Financial Report Attachment SF-425A, if required for reporting multiple grants), must be submitted semi-annually. The final SF-425 (and SF-425A, if applicable) must be submitted either with the final payment request or no later than 90 days from the expiration date of the award. These forms may be found at www.whitehouse.gov/omb/grants_forms.

- J. ADVANCE AND REIMBURSABLE PAYMENTS – FINANCIAL ASSISTANCE. Advance and reimbursable payments are approved under this award. Only costs for those project activities approved in (1) the initial award, or (2) modifications thereto, are allowable. Requests for payment shall be submitted on Standard Form (SF) 270 or SF271, and shall be submitted no more than monthly. In order to approve a Request for Advance Payment or Reimbursement, the U.S. Forest Service shall review such requests to ensure advances or payments for reimbursement are in compliance and otherwise consistent with OMB, USDA, and U.S. Forest Service regulations. Advance payments shall not exceed the minimum amount needed or no more than is needed for a 30-day period, whichever is less. If El Dorado County receive(s) an advance payment and subsequently requests an advance or reimbursement payment, then the request must clearly demonstrate that the previously advanced funds have been fully expended before the U.S. Forest Service can approve the request for payment. Any funds advanced, but not spent, upon expiration of this award shall be returned to the U.S. Forest Service.

The invoice must be sent by one of three methods (email is preferred):

EMAIL: asc_ga@fs.fed.us
FAX: 877-687-4894

POSTAL: Albuquerque Service Center
Payments – Grants & Agreements
101B Sun Ave NE
Albuquerque, NM 87109

Send a copy to: Lake Tahoe Basin Management Unit
Attention: Barbara Shanley
35 College Drive
South Lake Tahoe, CA 96150

- K. AWARD CLOSEOUT. El Dorado County shall close out the grant within 90 days after expiration or notice of termination.

Any unobligated balance of cash advanced to El Dorado County shall be immediately refunded to the U.S. Forest Service, including any interest earned in accordance with 7 CFR 3016.21, 7 CFR 3019.22, or other relevant law or regulation.

Within a maximum of 90 days following the date of expiration or termination of this grant, all financial performance and related reports required by the terms of the award shall be submitted to the U.S. Forest Service by El Dorado County.

If this award is closed out without audit, the U.S. Forest Service reserves the right to disallow and recover an appropriate amount after fully considering any recommended disallowances resulting from an audit which may be conducted later.

- L. PROGRAM PERFORMANCE REPORTS. El Dorado County shall monitor the performance of the grant activities to ensure that performance goals are being achieved.

Performance reports shall contain information on the following:

- A comparison of actual accomplishments to the goals established for the period. Where the output of the project can be readily expressed in numbers, a computation of the cost per unit of output may be required if that information is useful.
- Reason(s) for delay if established goals were not met.
- Additional pertinent information including, when appropriate, analysis and explanation of cost overruns or high unit costs.

El Dorado County shall submit semi-annual performance reports. These reports are due 30 days after the reporting period. The final performance report shall be submitted either with El Dorado County's final payment request, or separately, but not later than 90 days from the expiration date of the grant.

- M. NOTIFICATION. El Dorado County shall immediately notify the U.S. Forest Service of developments that have a significant impact on the activities supported under this grant. Also, notification shall be given in case of problems, delays or adverse conditions that materially impair the ability to meet the objectives of the award. This notification shall include a statement of the action taken or contemplated, and any assistance needed to resolve the situation.
- N. CHANGES IN KEY POSITIONS AND PERSONNEL. Any revision to key positions and personnel identified in the application for this award require prior, written approval from the U.S. Forest Service. All technical positions are considered Key Personnel by the U.S. Forest Service. Failure on the part of El Dorado County to obtain prior, written approval when required may result in the disallowance of costs.
- O. FREEDOM OF INFORMATION ACT (FOIA). Public access to grant or agreement records shall not be limited, except when such records must be kept confidential and would have been exempted from disclosure pursuant to "Freedom of Information" regulations (5 U.S.C. 552).
- P. TEXT MESSAGING WHILE DRIVING. In accordance with Executive Order (EO) 13513, "Federal Leadership on Reducing Text Messaging While Driving," any and all text messaging by Federal employees is banned: a) while driving a Government owned vehicle (GOV) or driving a privately owned vehicle (POV) while on official Government business; or b) using any electronic equipment supplied by the Government when driving any vehicle at any time. All recipients and subrecipients are encouraged to adopt and enforce policies that ban text messaging when driving company owned, leased or rented vehicles, POVs or GOVs when driving while on official Government business or when performing any work for or on behalf of the Government.
- Q. PUBLIC NOTICES. It is the U.S. Forest Service's policy to inform the public as fully as possible of its programs and activities. El Dorado County is/are encouraged to give public notice of the receipt of this award and, from time to time, to announce progress and accomplishments. Press releases or other public notices should include a statement substantially as follows:

"The Lake Tahoe Erosion Control Grants Program of the U.S. Forest Service Department of Agriculture, funds the planning and construction of Urban Erosion Control Projects. This Program allows government agencies with jurisdictions within the Lake Tahoe Basin to design and implement water quality improvement elements within the jurisdictional right-of-way or acquired easements. These elements are mainly intended to remove or reduce fine sediment loading to creeks and tributaries to Lake Tahoe as well as the Lake itself."

El Dorado County may call on the U.S. Forest Service's Office of Communication for advice regarding public notices. El Dorado County is/are requested to provide copies of notices or announcements to the U.S. Forest Service Program Manager and to the

U.S. Forest Service's Office of Communications as far in advance of release as possible.

- R. RIGHT TO TRANSFER EQUIPMENT. Equipment approved for purchase under this award is available only for use as authorized. The U.S. Forest Service reserves the right to transfer title to the federal government of any equipment with a current per-unit fair market value of \$5,000 or more purchased with U.S. Forest Service funding. Upon expiration of this award, El Dorado County shall forward an equipment inventory to the U.S. Forest Service, listing all equipment purchased with U.S. Forest Service funding throughout the life of the project. Disposition instructions shall be issued by the U.S. Forest Service within 120 calendar days from termination date of this award.
- S. U.S. FOREST SERVICE ACKNOWLEDGED IN PUBLICATIONS, AUDIOVISUALS, AND ELECTRONIC MEDIA. El Dorado County shall acknowledge U.S. Forest Service support in any publications, audiovisuals, and electronic media developed as a result of this award.
- T. NONDISCRIMINATION STATEMENT – PRINTED, ELECTRONIC, OR AUDIOVISUAL MATERIAL. El Dorado County shall include the following statement, in full, in any printed, audiovisual material, or electronic media for public distribution developed or printed with any Federal funding.

In accordance with Federal law and U.S. Department of Agriculture policy, this institution is prohibited from discriminating on the basis of race, color, national origin, sex, age, or disability. (Not all prohibited bases apply to all programs.)

**To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 1400 Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD).
USDA is an equal opportunity provider and employer.**

If the material is too small to permit the full statement to be included, the material must, at minimum, include the following statement, in print size no smaller than the text:

“This institution is an equal opportunity provider.”

- U. TERMINATION BY MUTUAL AGREEMENT. This award may be terminated, in whole or part, as follows:
- When the U.S. Forest Service and El Dorado County agree upon the termination conditions, including the effective date and, in the case of partial termination, the portion to be terminated.
 - By 30 days written notification by El Dorado County to the U.S. Forest Service setting forth the reasons for termination, effective date, and in the case of partial

termination, the portion to be terminated.

If, in the case of a partial termination, the U.S. Forest Service determines that the remaining portion of the award will not accomplish the purposes for which the award was made, the U.S. Forest Service may terminate the award in its entirety.

Upon termination of an award, El Dorado County shall not incur any new obligations for the terminated portion of the award after the effective date, and shall cancel as many outstanding obligations as possible. The U.S. Forest Service shall allow full credit to El Dorado County for the United States Federal share of the non-cancelable obligations properly incurred by El Dorado County up to the effective date of the termination. Excess funds shall be refunded within 60 days after the effective date of termination.

V. DISPUTES.

1. Any dispute under this award shall be decided by the Signatory Official. The Signatory Official shall furnish El Dorado County a written copy of the decision.
2. Decisions of the Signatory Official shall be final unless, within 30 days of receipt of the decision of the Signatory Official, El Dorado County appeal(s) the decision to the U.S. Forest Service's Director, Acquisition Management (AQM). Any appeal made under this provision shall be in writing and addressed to the Director, AQM, USDA, Forest Service, Washington, DC 20024. A copy of the appeal shall be concurrently furnished to the Signatory Official.
3. In order to facilitate review on the record by the Director, AQM, El Dorado County shall be given an opportunity to submit written evidence in support of its appeal. No hearing will be provided.

W. DEBARMENT AND SUSPENSION. El Dorado County shall immediately inform the U.S. Forest Service if they or any of their principals are presently excluded, debarred, or suspended from entering into covered transactions with the federal government according to the terms of 2 CFR Part 180. Additionally, should El Dorado County or any of their principals receive a transmittal letter or other official federal notice of debarment or suspension, then they shall notify the U.S. Forest Service without undue delay. This applies whether the exclusion, debarment, or suspension is voluntary or involuntary.

X. SYSTEM FOR AWARD MANAGEMENT REGISTRATION AND UNIVERSAL IDENTIFIER REQUIREMENTS

1. Requirement for System for Award Management Registration (SAM – formerly Central Contractor Registration or CCR):

The recipient must maintain the currency of information in the SAM until submission of the final financial report required under this award or receipt of the final payment, whichever is later. This requires that a review and update of the

information at least annually after the initial registration, and more frequently if required by changes in information or another award term.

2. *Requirement for Data Universal Numbering System (DUNS) Numbers:*

If authorized to make subawards under this award:

- a. Must notify potential subrecipients that no entity (see definition in paragraph C of this award term) may receive a subaward unless the entity has provided its DUNS number to you.
- b. May not make a subaward to an entity unless the entity has provided its DUNS number.

3. *Definitions:*

For purposes of this award term:

- a. *System for Award Management Registration (SAM)* means the Federal repository into which an entity must provide information required for the conduct of business as a recipient. Additional information about registration procedures may be found at the SAM Internet site (currently at <https://www.sam.gov>).
- b. *Data Universal Numbering System (DUNS) number* means the nine-digit number established and assigned by Dun and Bradstreet, Inc. (D&B) to uniquely identify business entities. A DUNS number may be obtained from D&B by telephone (currently 866-705-5711) or the Internet (currently at <https://fedgov.dnb.com/webform>).
- c. *Entity*, as it is used in this award term, means all of the following, as defined at 2 CFR part 25, subpart C:
 - i. A Governmental organization, which is a State, local government, or Indian Tribe;
 - ii. A foreign public entity;
 - iii. A domestic or foreign nonprofit organization;
 - iv. A domestic or foreign for-profit organization; and
 - v. A Federal agency, but only as a subrecipient under an award or subaward to a non-Federal entity.

4. *Subaward:*

- a. This term means a legal agreement to provide support for the performance of any portion of the substantive project or program covered by this award and that are subsequently awarded to an eligible subrecipient.
- b. The term does not include procurement of property and services needed to carry out the project or program (for further explanation, see Sec. II.210 of the attachment to OMB Circular A-133, "Audits of States, Local Governments, and Non-Profit Organizations").
- c. A subaward may be provided through any legal agreement, including an agreement that may be considered a contract.

5. *Subrecipient:*

- a. Receives a subaward under this award;
- b. Is accountable to the recipient for the use of the Federal funds provided by the subaward.

[END OF PROVISION]

ATTACHMENT B: 2 CFR PART 170

Appendix A to Part 170—Award Term

I. Reporting Subawards and Executive Compensation.

a. Reporting of first-tier subawards.

1. *Applicability.* Unless you are exempt as provided in paragraph d. of this award term, you must report each action that obligates \$25,000 or more in Federal funds that does not include Recovery funds (as defined in section 1512(a)(2) of the American Recovery and Reinvestment Act of 2009, Pub. L. 111–5) for a subaward to an entity (see definitions in paragraph e. of this award term).
2. *Where and when to report.*
 - i. You must report each obligating action described in paragraph a.1. of this award term to <http://www.fsrs.gov>.
 - ii. For subaward information, report no later than the end of the month following the month in which the obligation was made. (For example, if the obligation was made on November 7, 2010, the obligation must be reported by no later than December 31, 2010.)
3. *What to report.* You must report the information about each obligating action that the submission instructions posted at <http://www.fsrs.gov> specify.

b. Reporting Total Compensation of Recipient Executives.

1. *Applicability and what to report.* You must report total compensation for each of your five most highly compensated executives for the preceding completed fiscal year, if—
 - i. the total Federal funding authorized to date under this award is \$25,000 or more;
 - ii. in the preceding fiscal year, you received—
 - (A) 80 percent or more of your annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and
 - (B) \$25,000,000 or more in annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and
 - iii. The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at <http://www.sec.gov/answers/excomp.htm>.)
2. *Where and when to report.* You must report executive total compensation described in paragraph b.1. of this award term:
 - i. As part of your registration profile at <http://www.ccr.gov>.
 - ii. By the end of the month following the month in which this award is made, and annually thereafter.

c. Reporting of Total Compensation of Subrecipient Executives.

1. *Applicability and what to report.* Unless you are exempt as provided in paragraph d. of this award term, for each first-tier subrecipient under this award, you shall report the names and total compensation of each of the subrecipient's five most highly compensated executives for the subrecipient's preceding completed fiscal year, if—

i. in the subrecipient's preceding fiscal year, the subrecipient received—

(A) 80 percent or more of its annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and

(B) \$25,000,000 or more in annual gross revenues from Federal procurement contracts (and subcontracts), and Federal financial assistance subject to the Transparency Act (and subawards); and

ii. The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at <http://www.sec.gov/answers/execomp.htm>.)

2. *Where and when to report.* You must report subrecipient executive total compensation described in paragraph c.1. of this award term:

i. To the recipient.

ii. By the end of the month following the month during which you make the subaward. For example, if a subaward is obligated on any date during the month of October of a given year (*i.e.*, between October 1 and 31), you must report any required compensation information of the subrecipient by November 30 of that year.

d. *Exemptions* If, in the previous tax year, you had gross income, from all sources, under \$300,000, you are exempt from the requirements to report:

1. Subawards, and

2. The total compensation of the five most highly compensated executives of any subrecipient.

e. *Definitions.* For purposes of this award term:

1. *Entity* means all of the following, as defined in 2 CFR part 25:

i. A Governmental organization, which is a State, local government, or Indian tribe;

ii. A foreign public entity;

iii. A domestic or foreign nonprofit organization;

iv. A domestic or foreign for-profit organization;

v. A Federal agency, but only as a subrecipient under an award or subaward to a non-Federal entity.

2. *Executive* means officers, managing partners, or any other employees in management positions.

3. *Subaward:*

- i. This term means a legal agreement to provide support for the performance of any portion of the substantive project or program for which you received this award and that you as the recipient award to an eligible subrecipient.
 - ii. The term does not include your procurement of property and services needed to carry out the project or program (for further explanation, see Sec. II .210 of the attachment to OMB Circular A-133, “Audits of States, Local Governments, and Non-Profit Organizations”).
 - iii. A subaward may be provided through any legal agreement, including an agreement that you or a subrecipient considers a contract.
4. *Subrecipient* means an entity that:
- i. Receives a subaward from you (the recipient) under this award; and
 - ii. Is accountable to you for the use of the Federal funds provided by the subaward.
5. *Total compensation* means the cash and noncash dollar value earned by the executive during the recipient’s or subrecipient’s preceding fiscal year and includes the following (for more information see 17 CFR 229.402(c)(2)):
- i. *Salary and bonus.*
 - ii. *Awards of stock, stock options, and stock appreciation rights.* Use the dollar amount recognized for financial statement reporting purposes with respect to the fiscal year in accordance with the Statement of Financial Accounting Standards No. 123 (Revised 2004) (FAS 123R), Shared Based Payments.
 - iii. *Earnings for services under non-equity incentive plans.* This does not include group life, health, hospitalization or medical reimbursement plans that do not discriminate in favor of executives, and are available generally to all salaried employees.
 - iv. *Change in pension value.* This is the change in present value of defined benefit and actuarial pension plans.
 - v. *Above-market earnings on deferred compensation which is not tax-qualified.* vi. Other compensation, if the aggregate value of all such other compensation (e.g. severance, termination payments, value of life insurance paid on behalf of the employee, perquisites or property) for the executive exceeds \$10,000.

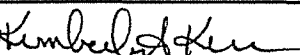
END OF ATTACHMENT B: 2 CFR PART 170

Attachment C

OMB Number: 4040-0004
Expiration Date: 01/31/2009

Application for Federal Assistance SF-424		Version 02
*1. Type of Submission:		*2. Type of Application * If Revision, select appropriate letter(s)
<input type="checkbox"/> Preapplication		<input checked="" type="checkbox"/> New
<input checked="" type="checkbox"/> Application		<input type="checkbox"/> Continuation *Other (Specify)
<input type="checkbox"/> Changed/Corrected Application		<input type="checkbox"/> Revision _____
3. Date Received: <u>12/10/12</u>		4. Applicant Identifier:
5a. Federal Entity Identifier:		*5b. Federal Award Identifier: <u>13-06-11051900-013</u> <i>RB</i>
State Use Only:		
6. Date Received by State:		7. State Application Identifier:
8. APPLICANT INFORMATION:		
*a. Legal Name: County of El Dorado		
*b. Employer/Taxpayer Identification Number (EIN/TIN): 94-6000511		*c. Organizational DUNS: 62-140-9171
d. Address:		
*Street 1: <u>924B Emerald Bay Rd</u>		
Street 2: _____		
*City: <u>South Lake Tahoe</u>		
County: <u>El Dorado County</u>		
*State: <u>CA</u>		
Province: _____		
*Country: <u>US</u>		
*Zip / Postal Code <u>96150</u>		
e. Organizational Unit:		
Department Name: Transportation		Division Name: Tahoe Engineering
f. Name and contact information of person to be contacted on matters involving this application:		
Prefix: _____		*First Name: <u>Steve</u>
Middle Name: <u>P.</u>		
*Last Name: <u>Kooyman</u>		
Suffix: _____		
Title: <u>Acting Deputy Director</u>		
Organizational Affiliation:		
*Telephone Number: 530-573-7910		Fax Number: 530-541-7049
*Email: <u>steve.kooyman@edcgov.us</u>		

Application for Federal Assistance SF-424	Version 02
*9. Type of Applicant 1: Select Applicant Type: B.County Government Type of Applicant 2: Select Applicant Type: Type of Applicant 3: Select Applicant Type: *Other (Specify)	
*10 Name of Federal Agency: United States Forest Service - Lake Tahoe Basin Management Unit	
11. Catalog of Federal Domestic Assistance Number: 10-690 CFDA Title: Lake Tahoe Soil Erosion Control Grants Program	
*12 Funding Opportunity Number: *Title: Round 12 - Soil Erosion Control Grants Program	
13. Competition Identification Number: Title: 	
14. Areas Affected by Project (Cities, Counties, States, etc.): County of El Dorado	
*15. Descriptive Title of Applicant's Project: Round 12 - Soil Erosion Control Grants Program	

Application for Federal Assistance SF-424		Version 02
16. Congressional Districts Of:		
*a. Applicant: 14	*b. Program/Project: 14	
17. Proposed Project:		
*a. Start Date: 01/01/13	*b. End Date: 01/01/18	
18. Estimated Funding (\$):		
*a. Federal	_____	\$150,000
*b. Applicant	_____	
*c. State	_____	
*d. Local	_____	
*e. Other	_____	
*f. Program Income	_____	\$150,000
*g. TOTAL	_____	\$300,000
*19. Is Application Subject to Review By State Under Executive Order 12372 Process?		
<input type="checkbox"/> a. This application was made available to the State under the Executive Order 12372 Process for review on _____		
<input type="checkbox"/> b. Program is subject to E.O. 12372 but has not been selected by the State for review.		
<input checked="" type="checkbox"/> c. Program is not covered by E. O. 12372		
*20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes", provide explanation.)		
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
21. *By signing this application, I certify (1) to the statements contained in the list of certifications** and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances** and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U. S. Code, Title 218, Section 1001)		
<input checked="" type="checkbox"/> ** I AGREE		
** The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions		
Authorized Representative:		
Prefix: _____	*First Name: <u>Kimberly</u>	
Middle Name: <u>A.</u>		
*Last Name: <u>Kerr</u>		
Suffix: _____		
*Title: Interim Director Department of Transportation		
*Telephone Number: 530-621-7533	Fax Number: 530-626-0387	
* Email: kimberly.kerr@edcgov.us		
*Signature of Authorized Representative: 	*Date Signed: <u>12/7/12</u>	

Application for Federal Assistance SF-424

Version 02

***Applicant Federal Debt Delinquency Explanation**

The following should contain an explanation if the Applicant organization is delinquent of any Federal Debt.

N/A

BUDGET INFORMATION - Non-Construction Programs

OMB Approval No. 0348-0044

SECTION A - BUDGET SUMMARY						
Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. Regenerative Air Sweeper	10.69	\$	\$	\$ 150,000	\$ 150,000	\$ 300,000
2.						
3.						
4.						
5. Totals		\$	\$	\$ 150,000	\$ 150,000	\$ 300,000
SECTION B - BUDGET CATEGORIES						
6. Object Class Categories	GRANT PROGRAM, FUNCTION OR ACTIVITY				Total (5)	
	(1)	(2)	(3)	(4)		
a. Personnel	\$	\$	\$	\$	\$	
b. Fringe Benefits						
c. Travel						
d. Equipment	150,000	150,000			300,000	
e. Supplies						
f. Contractual						
g. Construction						
h. Other						
i. Total Direct Charges (sum of 6a-6h)	150,000	150,000			300,000	
j. Indirect Charges						
k. TOTALS (sum of 6i-6j)	\$ 150,000	\$ 150,000	\$	\$	\$ 300,000	
7. Program Income						

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Prescribed by OMB Circular A-102

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SECTION C - NON-FEDERAL RESOURCES					
(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) TOTALS	
8. County Road Fund	\$	\$ 150,000	\$	\$ 150,000	
9. County NPDES fund (see matching funds sheet)					
10.					
11.					
12. TOTAL (sum of lines 8-11)	\$	\$ 150,000	\$	\$ 150,000	
SECTION D - FORECASTED CASH NEEDS					
	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
13. Federal	\$ 150,000	\$ 75,000	\$ 75,000	\$	\$
14. Non-Federal	150,000	75,000	75,000		
15. TOTAL (sum of lines 13 and 14)	\$ 300,000	\$ 150,000	\$ 150,000	\$	\$
SECTION E - BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT					
(a) Grant Program	FUTURE FUNDING PERIODS (Years)				
	(b) First	(c) Second	(d) Third	(e) Fourth	
16.	\$	\$	\$	\$	
17.					
18.					
19.					
20. TOTAL (sum of lines 16-19)	\$	\$	\$	\$	
SECTION F - OTHER BUDGET INFORMATION					
21. Direct Charges:		22. Indirect Charges:			
23. Remarks:					

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Attachment D

SEDIMENT REDUCTION PROJECT JN 99230

Federal 2012 Lake Tahoe Soil Erosion Control Grants
Program

Final Application Submittal

October 2012

County of El Dorado
Department of Transportation

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SEDIMENT REDUCTION PROJECT

STATEMENT OF NEED

The County of El Dorado (County), Department of Transportation (EDOT) is requesting \$150,000 to contribute to the purchase of a mobile Best Management Practice (BMP) to reduce sediment on the road surface and prevent fine particulates from being transported to receiving water bodies. EDOT has a contribution of \$150,000 to match this funding request for the proposed sweeper via the County Road Fund.

Urban development has increased the concentration and flow of stormwater from the County Right-Of-Way (ROW). Much of this flow originates from impervious areas in and around the County and ends up in local receiving water bodies. The use of high efficiency sweepers as a stormwater Best Management Practice (BMP) tool is being encouraged by local regulatory agencies with estimates indicating the reduction of sediment for meeting environmental and regulatory objectives being far superior to any other BMP on a unit cost basis.

GOALS AND OBJECTIVES

The goal of the Project is to improve the clarity of Lake Tahoe by reducing the detrimental water quality impacts from roadways on Lake Tahoe clarity. The objective of the Project is the reduction in the transport of fine sediment from the County ROW area by purchasing and operating a regenerative air sweeper.

PROJECT DESCRIPTION

Advanced methods are needed to meet the Lake Tahoe Total Maximum Daily Load (TMDL), which is expected to have a direct impact on the clarity of Lake Tahoe. Fine sediment particles < 16 microns in diameter transported by stormwater runoff have been identified as a major factor in the loss of clarity in Lake Tahoe. Much of the fine sediment particles are generated from roadways in urban areas. Recent TMDL cost-effectiveness analysis completed for Placer County (2nd Nature, NHC 2010) through a grant from the US Army Corps of Engineers indicates that increased street sweeping is highly cost-effective for removing fine sediment. The Pollutant Load Reduction Model (PLRM) initial estimates of pollutant loading have indicated that modifications to existing programs including winter abrasives applications and sediment recovery from roads via enhanced sweeping may constitute a large portion of potential credits for implementation of the TMDL.

High-efficiency street sweepers are included in the Environmental Improvement Program (EIP) Update under the improving air quality action priority, although it is recognized that they have multiple threshold benefits. EIP number 10174 is for the purchase and use of high-efficiency street sweepers. EIP number 10109 is

for BMP Effectiveness, and EIP number 10111 is for Loading Rates for Stormwater Runoff. The purchase and use of high efficiency sweepers will result in a reduction of fine sediment particles and nutrient loading from urban roadways and will reduce the amount of fine sediment particles that can become airborne. This will result in direct benefits and contribution to the EIP goals of reducing the pollutants that impact water quality and air quality. Additionally the reduction in fine sediment from the roadways will result in reduced BMP maintenance needs over time due to less pollutant generation. The Lahontan Regional Water Quality Control Board has acknowledged that a benefit does indeed exist to stormwater quality from sweeping and therefore is currently requiring the use of specific hydrologic models and methodology's aimed at understanding pollutant load concentrations and achievable reductions that can be gained through this practice.

To address the current water quality and air quality thresholds and pending Lake Tahoe TMDL load reductions for fine sediment particles, phosphorus and nitrogen, the Tahoe Basin stakeholders need to explore alternative products and methods to reduce, minimize, and/or eliminate the use of traction abrasives and enhance recovery effectiveness in the Tahoe Basin. The majority of governmental grant programs are focused on site improvements and implementation (design and construction), and there is a need to fund the capital expense of equipment targeted at air and water quality improvement. With the recent Lake Tahoe TMDL adoption, there is urgency in securing funding to reduce the fine sediment and nutrients generated from urban roadways. Without this grant, budget limitations and shortfalls will continue to prevent the County from using the best available technology for road abrasive recovery.

The project area for this grant includes all priority watersheds in El Dorado County. These include Montgomery Estates (all phases), Pioneer Trail, Apalachee (all Phases), Christmas Valley (all phases), Angora (all phases), Tahoe Hills and Rubicon. Emphasis will be given to primary high risk areas as identified in the PLRM, but also secondary high risk and directly connected watersheds to a receiving water body.

EVALUATION AND MONITORING

EDOT will track the total mass of the amount of material recovered by the sweeper. The County will take periodic samples from the sweeper and have them analyzed for particle gradation and particle size distribution. This will yield detailed quantities of particulates captured by the sweeper and their distribution. This information will then be compiled and reported to inform effectiveness and pickup efficiency.

The County will also utilize the estimates generated from the PLRM to track modeled fine sediment particle (FSP) loads from registered catchments in the County. The County plans to take credit for sweeping in TMDL registered

catchments and will be using modeled load estimates to translate on the ground actions to load reduction credits. This involves the use of PLRM load estimates combined with random field inspections as developed by local road inspection methodologies. The County will be using an assessment method for tracking sweeping frequencies and will verify that with periodic inspections to ensure the road has been properly swept as detailed in the County's Catchment Credit Schedules. These items as well as quantities will then be reported to grant funding agencies on an annual basis.

It is likely, based on current estimates, that increased sweeping capacity from one high efficiency sweeper may reduce a jurisdictional sediment load by 10 – 20 % over a five year period. Project accomplishments can be easily quantified for this Project, based on the research results for sweeping (hours and recovery percentage) and abrasives studies. It is estimated that implementation of the high efficiency sweeper in the Tahoe Basin will result in the collection of 1000 tons of recovered material per year (based on a 3 year average of sand and sediment collected by EDOT in the Tahoe Basin). The reduction in fine sediment particles will be documented through the Lake Clarity Crediting Program and through efforts such as this Project.

POLLUTANT LOAD REDUCTION

According to Duncan et al. (1985) implementation of a thorough sweeping program can reduce emissions from paved roads by approximately one-third. Cowherd (1988) estimated that a range of 33-37% emission reduction rate for particulate matter less than 10 microns from paved roadways was possible with a vigorous sweeping program. Street sweeping is a cost-effective pollutant control practice when compared to structural BMPs (e.g. detention ponds, settling or filtering devices) and prolongs their operational efficiency and reduces the required maintenance needs (Schilling 2005). Additionally, when utilizing street sweeping as a pollutant source control measure, and when combined with other structural and nonstructural BMPs, water quality is improved and habitat deterioration is reduced (Schilling 2005). This Project will allow the stakeholders to utilize modern technological products and methods to enhance the effectiveness of traction abrasive recovery in the Tahoe Basin. Abrasive recovery is a measurable activity and will be quantified and reported on an annual basis. Using the best available technology will further aid the collection and documentation of abrasive application and recovery efforts and will demonstrate a reduction of fine sediment particles and nutrients reaching Lake Tahoe.

The Pollutant Reduction Opportunity Report (2008) estimates that paved roads contribute 44.1% of the total annual fugitive dust emissions, further heightening the importance of controlling this source of atmospheric pollutants. Increasing the number of sweepers operated in the Tahoe Basin will allow for increased sweeping frequency and will increase removal of fine sediment and nutrient amounts. By increasing the sweeping capacity of each jurisdiction, the TMDL

goal of reducing fine sediment can be more achievable. The County recently purchased a new mechanical sweeper, the Elgin Eagle. Although this sweeper is highly effective at picking up material from the road surface, it is somewhat known to be inefficient at picking up the fine sediment particles. The new high efficiency sweepers can remove finer sediment particles resulting in less sediment sources on the road surface. The PLRM estimates range from a 25% (bi-weekly sweeping) to 31% (weekly sweeping) reduction of sediment. To address the current water quality and air quality threshold and pending Lake Tahoe TMDL load reductions for fine sediment particles, phosphorus and nitrogen, the CA and NV stakeholders need to explore alternative products and methods to reduce, minimize, and/or eliminate the use of traction abrasives and enhance recovery effectiveness in the Tahoe Basin.

El Dorado County currently recovers approximately 1,000 tons of material annually through its existing sweeping program. The total quantities and recovery amounts are detailed below.

Average Monthly Sweeper recovery

Average Monthly Sweeper Recovery		Average Monthly Sweeper Recovery	
Jan-Dec 2009		Jan-Dec 2010	
Average Monthly Miles	380	Average Monthly Miles	421
Average Material (yds)	69	Average Material (yds)	73
Average lbs	176451	Average lbs	188421
lbs/mile	455	lbs/mile	457
lbs / hour	1275	lbs / hour	1704
Average Monthly Cost	\$ 14,886	Average Monthly Cost	\$ 13,881
\$/lb	0.10	\$/lb	0.08
lb/\$	12.03	lb/\$	14.19

Annual Sweeper Maintenance Summary

Annual Repair Cost Summary		Maintenance Cost	Maintenance Cost / hour of operation
Date Range (Calendar year)	Unit		
1-1-04 to 12-31-04	Schwarze A8000	\$ 36,165.56	\$ 41.81
1-1-05 to 12-31-05	Schwarze A8000	\$ 38,711.76	\$ 44.75
1-1-06 to 12-31-06	Schwarze A8000	\$ 50,656.30	\$ 58.56
1-1-07 to 12-31-07	Schwarze A8000	\$ 46,370.63	\$ 53.61
1-1-08 to 12-31-08	Schwarze A8000	\$ 29,299.88	\$ 37.88
1-1-09 to 12-31-09	Schwarze A8000	\$ 53,917.85	\$ 50.65
1-1-10 to 12-31-10	Schwarze A8000	\$ 28,407.13	\$ 28.62
	Total Repair Cost (1-1-2004 to 12-31-10)	\$ 283,529.11	
	Average Annual Repair Cost (January 04 - December 10)	\$ 40,504.16	\$ 45.13
	Average Annual Fuel Cost	\$ 3,735.32	
	Calculated Average Annual Repair Cost + Fuel	\$ 44,239.48	
	Actual Cost to Repair Sweeper only from Jan 10-Dec 10 @ \$50/hour	\$ 49,625.00	

2010 Sweeper Cost

Date	\$ / lb	lbs / hour	Total Material (tons)	Total Man Hours (Sweeper & Dump Truck)	Total Man Hours (Sweeper)	Total Man Hours (Dump Truck)
Jan-10	\$ 0.17	593	55	176	96	80
Feb-10	\$ 0.08	1389	125	176	112	64.5
Mar-10	\$ 0.10	1054	86	163	92	71.5
Apr-10	\$ 0.06	1753	123	141	92	48.5
May-10	\$ 0.07	1589	73	92	60	32
Jun-10	\$ 0.06	2159	75	70	69	1
Jul-10	\$ 0.06	2029	112	110	84	26
Aug-10	\$ 0.07	1734	151	175	123	52
Sep-10	\$ 0.11	967	60	96	87	9
Oct-10	\$ 0.06	2023	124	107	86	21
Nov-10	\$ 0.05	3105	118	76	68	8
Dec-10	\$ 0.06	2052	28	28	26	2
	\$ / lb	lbs / hour	Total Material (tons)			
Average Annual	\$ 0.08	1,704				
Total Annual			1131	1408	993	416

2010 Sweeper Cost Continued

Date	Operator Cost (Sweeper & Dump)	Operator Cost (Sweeper)	Operator Cost (Dump)	Sweeper and Dump Truck Cost	Sweeper Cost	Dump Truck Cost	Refuse Fees	Total Monthly Sweeper cost
Jan-10	\$ 7,268.32	\$ 3,972.72	\$ 3,295.60	\$ 9,488.00	\$ 6,528.00	\$ 2,960.00	\$ 1,092.00	\$ 17,848.32
Feb-10	\$ 7,400.76	\$ 4,735.96	\$ 2,664.80	\$ 10,264.50	\$ 7,582.00	\$ 2,682.50	\$ 1,272.40	\$ 18,937.66
Mar-10	\$ 6,619.60	\$ 3,674.29	\$ 2,945.31	\$ 8,867.50	\$ 6,222.00	\$ 2,645.50	\$ 1,046.20	\$ 16,533.30
Apr-10	\$ 5,881.66	\$ 3,865.64	\$ 2,016.02	\$ 7,990.50	\$ 6,196.00	\$ 1,794.50	\$ 1,443.00	\$ 15,315.16
May-10	\$ 3,989.92	\$ 2,707.68	\$ 1,282.24	\$ 5,264.00	\$ 4,080.00	\$ 1,184.00	\$ 998.40	\$ 10,252.32
Jun-10	\$ 3,214.30	\$ 3,165.32	\$ 48.98	\$ 4,794.00	\$ 4,659.00	\$ 135.00	\$ 780.00	\$ 8,788.30
Jul-10	\$ 4,306.53	\$ 3,237.88	\$ 1,068.65	\$ 7,636.00	\$ 5,588.00	\$ 2,048.00	\$ 1,060.80	\$ 13,003.33
Aug-10	\$ 7,272.34	\$ 5,148.20	\$ 2,124.14	\$ 12,130.00	\$ 8,874.00	\$ 3,256.00	\$ 1,606.80	\$ 21,009.14
Sep-10	\$ 3,898.47	\$ 3,522.09	\$ 376.38	\$ 6,767.00	\$ 5,916.00	\$ 851.00	\$ 441.80	\$ 11,107.27
Oct-10	\$ 4,631.87	\$ 3,790.40	\$ 841.47	\$ 8,697.00	\$ 5,848.00	\$ 2,849.00	\$ 1,222.50	\$ 14,551.37
Nov-10	\$ 3,438.08	\$ 3,117.52	\$ 320.56	\$ 6,104.00	\$ 4,624.00	\$ 1,480.00	\$ 1,435.20	\$ 10,977.28
Dec-10	\$ 1,159.30	\$ 1,079.16	\$ 80.14	\$ 1,882.00	\$ 1,734.00	\$ 148.00	\$ 343.20	\$ 3,384.50
Total Annual	\$ 59,081.15	\$ 42,016.86	\$ 17,064.29	\$ 89,884.50	\$ 67,851.00	\$ 22,033.50	\$ 12,742.30	\$ 161,707.95

Quantified Pollutant Recovery

The Nevada Tahoe Conservation District (NTCD) calculated the fine fraction (<16 micron) sediment on the road to be 8.2% of the sediment mass on the road (Brown 2010). Based on 1000 ton of annual average aggregate recovery and assuming that 8.2% FSP (<16um) reduction, the total load reduction for this project is anticipated to be approximately 82 tons (164,000 lbs) annually.

The total load reduction required for the municipal NPDES permit through 2016 is 220 credits or 44,000 lbs of FSP (<16 micron). The above estimate is nearly 4 times the amount of credit needed in the entire first permit term, therefore this estimate is most likely not attainable by sweeping, therefore when evaluating the total load recovery from sweeping on a TMDL crediting basis using the hypothetical CRC estimates included in the PLRM, the reduction is as follows.

Sweeper Type	1-2 times / year	summer and Fall	Monthly	Twice Monthly	Weekly
High Efficiency	4.7%	9.5%	18.9%	21.3%	26.7%
Regenerative Air	1.7%	3.5%	6.9%	7.9%	9.7%
Tandem	0.8%	1.7%	3.3%	3.8%	4.7%
Mechanical	0.2%	0.4%	0.8%	0.9%	1.1%

Credit Need	220
lbs	44,000

Load reduction (lbs)	1-2 times / year	summer and Fall	Monthly	Twice Monthly	Weekly
High Efficiency	2,068	4,180	8,316	9,372	11,748
Regenerative Air	748	1,540	3,036	3,476	4,268
Tandem	352	748	1,452	1,672	2,068
Mechanical	88	176	352	396	484

Estimated County Wide Load Reduction	8%
--------------------------------------	----

The estimated TMDL load reduction through sweeping efforts is estimated to be approximately 8% of the County Wide Lake Clarity Credit Requirement or approximately 3500 pounds FSP. The benefits are assumed to be great; however the County intends to continue to refine these estimates to better understand relative associated benefits and costs.

PLRM Estimate Assumptions

Pollutant recovery through sweeping is the final opportunity to reduce pollutant supply on urban roads prior to storm water transport. Sweeping effectiveness is defined as the combination of sweeper type and the average sweeping frequency, which can be defined by the user for each road risk category.

Step 3: Determine Pollutant Recovery Effectiveness

Pollutant recovery through sweeping is the final opportunity to reduce pollutant supply on urban roads prior to storm water transport. PLRM assumes that the typical pollutant recovery practices implemented by the jurisdictions can be used to predict a reduction from the CRC for a given road pollutant potential score. PLRM defines the sweeping effort by the combination of sweeper type and the average sweeping frequency, defined by the user for each road risk category. All rationale and justification of pollutant recovery effectiveness estimates presented below are detailed in Appendix A.3 Water Quality Estimation Approach.

Step 3 User Input:

1. The user selects a sweeper type for each road risk category (Table 11). It is likely that the sweeper type will be the same for the entire project area, but the user will confirm.

Road Sweeper Type	Example Model
High-efficiency vacuum-assisted (dustless)	Schwarze E31
Regenerative air (dustless)	Elgin Crosswind, Schwarze A-Series
Tandem operation (mechanical + vacuum sweeper)	Elgin Eagle or Mobil Mechanical (1963); followed by TYMCO vacuum sweeper
Mechanical broom (1963 model or newer)	Elgin Eagle, Mobil Mechanical (1963)

2. The user selects a sweeping frequency description that best fits the average annual practices for each road risk category in the catchment. It is assumed that resources available for sweeping are limited, and thus different road risk categories may have different sweeping frequencies. The user is asked to approximate sweeping frequency given annual climatic variability:
 1. Winter = 0 times; summer = 1-2 times (~2 annual sweepings)
 2. Winter and summer = 1-2 times per season (~4 annual sweepings)
 3. Winter = monthly; summer = 1-2 times; assume roads well swept prior to first fall rain (~8 annual sweepings)
 4. Winter = twice monthly; summer = 1-2 times; assume roads well swept prior to first fall rain (~12 annual sweepings)
 5. Winter = weekly or after abrasive application when possible; summer = monthly; assume roads well swept prior to first fall rain (~25 annual sweepings)

Step 3 PLRM Internal Calculation Process:

1. Based on the user input for Step 3,
 - a. The achievable TSS CRC percent reduction from the sweeping effort is identified from Table 12.
 - b. The achievable FSP CRC percent reduction from the sweeping effort is identified Table 13.

Table 12. Achievable TSS CRC percent reduction based on sweeper type and sweeper frequency (values being tested and refined in PLRM during Winter 2008-09)

Sweeper Type	Typical Annual Sweeping Frequency				
	<u>Rare</u> 1-2 times per year	<u>Occasional</u> Winter/Spring and Summer/Fall = 1-2 times per season	<u>Monthly</u> Winter/Spring = monthly; Summer/Fall = 1-2 times; assume roads well swept prior to first fall rain	<u>Twice Monthly</u> Winter/Spring = twice monthly; Summer/Fall = 1-2 times; assume roads well swept prior to first fall rain	<u>Weekly</u> Winter/Spring = weekly; Summer/Fall = monthly; assume roads well swept prior to first fall rain
High-efficiency vacuum-assisted (dustless)	6.9%	13.5%	27.1%	30.4%	33.1%
Regenerative air (dustless)	5.5%	11.0%	22.0%	25.3%	31.0%
Tandem operation (mechanical + vacuum sweeper)	3.2%	7.2%	14.4%	16.5%	20.3%
Mechanical broom (1968 model or newer)	2.3%	4.5%	9.0%	10.3%	13.0%

Table 13. Achievable fine sediment particle CRC percent reduction by sweeper type and frequency (values being tested and refined in PLRM during Winter 2008-09)

Sweeper Type	Typical Annual Sweeping Frequency				
	<u>Rare</u> 1-2 times per year	<u>Occasional</u> Winter/Spring and Summer/Fall = 1-2 times per season	<u>Monthly</u> Winter/Spring = monthly; Summer/Fall = 1-2 times; assume roads well swept prior to first fall rain	<u>Twice Monthly</u> Winter/Spring = twice monthly; Summer/Fall = 1-2 times; assume roads well swept prior to first fall rain	<u>Weekly</u> Winter/Spring = weekly; Summer/Fall = monthly; assume roads well swept prior to first fall rain
High-efficiency vacuum-assisted (dustless)	4.7%	9.5%	18.9%	21.3%	26.7%
Regenerative air (dustless)	1.7%	3.5%	6.9%	7.9%	9.7%
Tandem operation (mechanical + vacuum sweeper)	0.8%	1.7%	3.3%	3.8%	4.7%
Mechanical broom (1968 model or newer)	0.2%	0.4%	0.8%	0.9%	1.1%

Step 4: Determine Road Condition

Road condition represents the integration of the road pollutant potential with pollutant recovery effectiveness through sweeping (Figure 2). The road condition CRC for each road risk category is associated with specific runoff CRCs for TSS and fine sediment particles that are calculated as follows:

- Pollutant Potential CRC (Step 2) * (1 – CRC % reduction through sweeping) (Step 3) = Road Condition CRC

FREQUENCY OF SWEEPER USE

The frequency and use of the sweeper will ultimately depend upon its reliability while in use in harsh field conditions and the associated maintenance including downtime annually. The County intends to sweep all High Priority Primary roads at least twice monthly and all High Priority secondary roads at least once monthly. It is estimated that the sweeper will be in use approximately 800 hours per year.

LEASE VERSUS PURCHASE

The total Lease vs. Purchase option was evaluated to understand the economic benefits relative the 5 year grant term. The total estimated purchase price of the sweeper of 300K was used in this analysis and compared to the 300K leasing cost. The estimates were provided by Tymco for this analysis. The estimate is based on the purchase of a Tymco 500X regenerative air sweeper. The 5 year lease cost for the sweeper was calculated to be \$321,527. This exceeds the \$300,000 purchase cost. The itemized finance request is included below.

Details on the Tymco 500X

The TYMCO Model 500x truly is refined perfection. We took the best of the Model 600 – unprecedented reliability and incredible power – and integrated cutting edge multiplex electronics and the industry's highest dumping hopper lift assembly to build the most advanced high dump street sweeper available today.

Whether you're sweeping state highways, city streets or sweeping behind a milling machine or road reclaimer, any successful high dump sweeping program needs a reliable sweeper. The Model 500x is built using the high-efficiency, time-tested TYMCO Regenerative Air System that delivers rock-solid reliability and an amazingly clean sweep. With a fast dump cycle of less than 68 seconds and a soaring 11 foot dump height, the Model 500x provides more versatility than any other high dump street sweeper on the market.



TYMCO, Inc.
MUNICIPAL LEASE/PURCHASE PROGRAM
FINANCE REQUEST

DEALER INFORMATION

Dealer #:	460500	Phone No.:	916-383-1417
Name:	GCS Environmental Equipment Services, Inc.	Fax No.:	916-383-1493
Address:	6000 Morton St.	State:	CA
City:	Sacramento	Zip Code:	95828
Contact:	Tracy Pinkston		

LESSEE INFORMATION

Name:	Eldorado County	Phone No.:	
Address:	330 Fair Lane	Fax No.:	
City:	Placerville	State:	CA
Contact:	Mr. Russell Wigart	Zip Code:	95667
Email:		Fiscal Year Ending:	

BID REQUEST INFORMATION

Request for Proposal:	Yes	Estimated Award Date:	
Bid Closing Date:		State Sales Tax (% if any):	7.25%
		Unless shown state sales tax not included	

EQUIPMENT

Quantity:	1	New Model:	500X	Price w/sales tax:	\$300,000.00
				Less: Down Pmt.	\$0.00
				Finance Amount:	\$300,000.00

	OPTION I	OPTION II	OPTION III
No. of Years:	4	5	6
Pmt. Frequency:	Annual	Annual	Annual
Advance/Arrears:	Advance	Advance	Advance
No. of Pmts.:	4	5	6
Finance Amt.:	\$300,000.00	\$300,000.00	\$300,000.00
A.P.R.:	3.49%	3.59%	3.79%
Payment-periodic:	\$78,902.26	\$64,305.30	\$54,762.43
Pmt. Factor:	0.263008	0.214351	0.182541
Total Annual Pmt:	\$78,902.26	\$64,305.30	\$54,762.43
VALID THROUGH:	05/04/12	05/04/12	05/04/12

Notes: Budgetary Proposal. Financing based on approved credit and acceptance of TYMCO's lease purchase documents. Rates subject to change. First pmt due on delivery, annually thereafter. No lease document fees. No prepayment penalties. Non-binding until lease is signed.

PROJECT BUDGET AND SCHEDULE

EDOT is requesting \$150,000 to contribute to a sweeper purchase from the United States Forest Service (USFS) under the Southern Nevada Public Lands Management Act (SNPLMA). The Budget is outlined below in Table 1 and the schedule is outlined below in Table 2.

Table 1 – Project/Grant Budget

Task	Estimated Project Budget	County Road Fund Contribution	Grant Request Amount
Sweeper Purchase	\$300,000	\$150,000	\$150,000

Table 2 – Project Schedule

Task	Date
Grant Award	Fall 2012
Purchase Sweeper	Fall 2012
Operate Sweeper	Fall 2012 - Summer 2017
Final Report	Fall 2017

KEY PERSONNEL

COUNTY		
Program Administrator	Steve Kooyman	(530) 621-5932
Project Manager	Brendan Ferry	(530) 573-7905
Project Coordinator	Russell Wigart	(530) 573-7924
Accounting	Ruth Young	(530) 621-5934

PROJECT LOCATION

The sweeper will be utilized throughout County ROW areas in the Lake Tahoe Basin portion of the County. Sweeping emphasis will focus on watersheds that are directly connected to Lake Tahoe and perennial streams / rivers. Prioritization for sweeping will be given to those areas that have the greatest load reduction opportunity including those areas with excessive abrasive use. These priority watersheds include both EIP project areas and County registered and non-registered catchments.

SPECIAL CONSIDERATIONS

There are no special considerations for the Project.

BIBLIOGRAHPY & SELECTED REFERENCES

1. Focused Stormwater Monitoring to Validate Water Quality Source Control Treatment Assumptions. 3.1, 2nd Nature. 2010.
2. Technical Memorandum 1 – Literature Review, Research in Support of an Interim Pollutant Removal Rate for Street Sweeping and Storm Drain Cleanout Activities., Center for Watershed Protection (CWP). 2006.
3. Code of Ordinances. Tahoe Regional Planning Agency (TRPA). December 2002.
4. County of El Dorado, Drainage Manual. County of El Dorado. March 14, 1995.
5. Effectiveness of Street Sweeping in Incline Village, NV. Nevada Tahoe Conservation District (NTCD). 2010
6. El Dorado County – Tahoe Basin: 2009 Pollutant Load Reduction Strategy. Board Order No. R6T-2005-0026; NPDES Permit No. CAG616001; WDID No. 6A099110003. May 2009.
7. Environmental Improvement Program: The Cooperative Effort to Preserve, Restore, and Enhance the Unique Natural and Human Environment of the Lake Tahoe Region. Master List of Threshold Needs. Tahoe Regional Planning Agency (TRPA). Volume 2. May 2001.
8. Lake Clarity Crediting Program Handbook: for Lake Tahoe TMDL Implementation v1.0, Prepared by Environmental Incentives, LLC. South Lake Tahoe, CA, Lahontan Water Quality Control Board and Nevada Division of Environmental Protection. 2011.
9. Lake Tahoe Total Maximum Daily Load Technical Report, Roberts, David M. and Reuter, John E., California and Nevada. September 2007.
10. Pollutant Load Reduction Model, NHC. 2009.
11. Placer County Baseline Load Report. 2011
12. Planning Guidance for Implementing Permanent Storm Water Best Management Practices in the Lake Tahoe Basin. Tahoe Basin Interagency Roadway Maintenance and Operations Committee (TBIRMOC). November 2001.
13. Street Sweeping – Report No. 1 State of the Practice. Schilling. 2005
14. Water clarity modeling in Lake Tahoe: Linking suspended matter characteristics to secchi depth. Aquatic Science 68: 1-15., Swift, Theodore J. et al. 2005
15. Water Quality Control Plan for the Lahontan Region North and South Basins. California Regional Water Quality Control Board Lahontan Region. October 1994.

CRC FSP reduction from PLRM

Sweeper Type	1-2 times / year	summer and Fall	Monthly	Twice Monthly	Weekly
High Efficiency	4.7%	9.5%	18.9%	21.3%	26.7%
Regenerative Air	1.7%	3.5%	6.9%	7.9%	9.7%
Tandem	0.8%	1.7%	3.3%	3.8%	4.7%
Mechanical	0.2%	0.4%	0.8%	0.9%	1.1%

Credit Need	220
lbs	44,000

Load reduction (lbs)	1-2 times / year	summer and Fall	Monthly	Twice Monthly	Weekly
High Efficiency	2,068	4,180	8,316	9,372	11,748
Regenerative Air	748	1,540	3,036	3,476	4,268
Tandem	352	748	1,452	1,672	2,068
Mechanical	88	176	352	396	484

Estimated County Wide Load Reduction	19%
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		lbs / \$	\$ / lb
Aprpx Average Annual Cost	\$ 350,000	0.010	42

Placer County Annualized Unit cost for Concept 2a (2nd nature 2011)

Table 2

	\$/lb-FSP removed/year	EDOT Baseline Load (lbs)	Total Cost to meet 5 yr credit goal	% of mass <16 micron	total mass recovered (ton)
Beck	\$ 4	44,000	\$ 165,000		
Brown	\$ 2	44,000	\$ 93,902	8.2%	1000
PLRM	\$ 42	44,000	\$ 1,851,852		

Summary of Loads from Varying Methods

	\$ / lb
Placer Report	4
PLRM Method	82
Brown Method	

Concept	Permutation of Concept	FSP Reduction as % of TMDL Baseline	Annualized Unit Cost (\$/lb FSP removed/year) ¹	Notes on Confidence in Performance and Cost Estimates
1	1a. Intensive water quality improvements in UPCs with "Highest" FSP loading rates ²	18%	\$70	<p><u>Load Estimate:</u> Source control is expected to improve WQIP treatment performance, thus increasing confidence that actions would achieve estimated load reductions. Requires a significant increase in maintenance commitments to ensure long-term achievement and sustainment of load reductions.</p> <p><u>Cost Estimate:</u> Probably too conservative, actual design and operations would likely be more cost-effective.</p>
	1b. Concept 1a + intensive water quality improvements in UPCs with "High" FSP loading rates ²	26%	\$88	
2	2a. Frequent sweeping on all High Risk roads	19%	\$3.75	<p><u>Load Estimate:</u> Limited data on the effectiveness of road maintenance practices related to improvement in FSP characteristic runoff concentrations. Actions to reduce road abrasives not defined, quantified, or compared across jurisdictions.</p> <p><u>Cost Estimate:</u> Actions associated with advanced sweeping cost are quantifiable. Advanced abrasive application controls are not yet defined.</p>
	2b. Frequent sweeping plus abrasive controls on all High Risk roads	27%	\$4.25	
	2c. Concept 2b + frequent sweeping plus abrasive controls on all Moderate Risk roads ³	38%	\$3.50	

Reduction in <16 micron mass (lbs)	Cost to own and operate sweeper (\$/yr)	Monthly High Efficiency Sweeper load reduction (lbs)	Reduction as % of TMDL Baseline
			19%
164,000	\$ 350,000		373%
	\$ 350,000	8,316	19%

Process for Purchasing the Equipment

Formal bids are required for purchases of supplies, materials, goods, furnishings, equipment and other personal property over \$25,000. The formal bid is the competitive process in which the request for bid for product or services is circulated to all vendors on an established bidders list for that commodity, is posted publicly and received sealed and in writing by a stated deadline. The process outlined below will apply to the purchase of the sweeper.

The Purchasing Agent will solicit sealed bids from prospective vendors on an established bidders list and any other interested vendors, and publicly post a notice of invitation to bid. The notice will include the deadline for receipt of bids and the time and place for opening of bids. The Purchasing Agent will open bids received by the advertised deadline in public at the time and place stated in the invitation to bid. Bids received after the deadline will be returned unopened to the respondent. The Purchasing Agent will review and evaluate the bids to determine the lowest responsive responsible bidder. Factors such as the quality of the items offered, their conformity to the specifications, the delivery and discount terms, applicable freight charges, any applicable County preferences, any conditions attached to the bid, and any other information that is pertinent to the decision-making process will be considered. Upon completion of bid evaluation, the Board of Supervisors may: 1) award the bid to the lowest responsive responsible bidder; 2) waive minor bid irregularities and accept any bid; 3) reject any bid in the event of omissions, irregularities, or errors; 4) reject any bid in the event that it is determined that the bidder is not responsible; or 5) reject all bids and determine whether to repeat the bid process until a lowest responsive responsible bidder can be determined. The Purchasing Agent will notify the bidders of the bid results in the manner described in the invitation to bid and posts bid results for public viewing. The protest procedure is an extension of the formal bid process that provides recourse to bidders that wish to protest bid results or the method by which a bid request was processed. The protest procedure will include a bid protest period of ten business days from the date of public posting of the bid results on the procurement and contracts internet website. The protesting bidder will be required to provide relevant facts in support of the protest. Based on the information provided by the protesting bidder, the Purchasing Agent may modify the award recommendation and notify all bidders or award according to the original recommendation. If the protest is unresolved after consideration by the Purchasing Agent, the protest may be submitted to the Board of Supervisors as a regular agenda item. The Board may accept or reject any or all bids, waive any informality or irregularities in a bid, or to make an award. The decision of the Board of Supervisors is final.

**Match Documentation Spreadsheet for SNPLMA Round 12 Award (FINAL)
Regenerative Air Sweeper Sediment Reduction Project**

USFS SNPLMA Round 12 Funding Request	EIP NO.	Project Name	Match Source	Match Award Amount ⁽¹⁾
\$150,000.00	10174	Regenerative Air Sweeper Sediment Reduction Project		
		County of El Dorado	Road Fund ⁽²⁾	\$150,000.00
\$150,000.00				\$150,000.00

Notes:

- (1) - All amounts are unspent as of 7/01/11
- (2) - 2011 Tahoe Basin Sweeper Purchase