

## 12-408-253 - Rural Roads Erosion Control Assistance Program

PURPOSE: State shall provide a grant to and for the benefit of the Grantee for the purpose of facilitating the construction of projects that utilize Best Management Practices (BMPs) to reduce sediment loads, utilize Low Impact Development (LID) techniques on adjacent developed properties that contribute to increased road erosion, and expand Rural Roads Erosion Control Assistance Program.

### B. PROJECT-SPECIFIC REQUIREMENTS

1. Regional Water Board Kick-off Meeting
  - 1.1 Present the Project scope at a Regional Water Board grant kick-off meeting. Submit the presentation materials to the Grant Manager.
2. Technical Advisory Committee (TAC)
  - 2.1 Assemble a TAC, comprised of area professionals educated on water quality issues as they relate to roads and home drainage to review and advise on project and site selection. Submit a list of TAC members and their affiliated organizations to the Grant Manager.
  - 2.2 Convene a minimum of two (2) TAC meetings throughout the course of the grant, and submit meeting agendas, minutes, and sign-in sheets to the Grant Manager.
  - 2.3 Present the Rural Road Rapid Assessment Method (RAM) developed in Item 5.1 and ranking criteria developed in Item 5.5 for site prioritization and selection.
3. Outreach and Education
  - 3.1 Update, print, and distribute the rural roads and home drainage guide (*Slow it, Spread it, Sink it!*) through retail outlets, workshops, and other public events.
  - 3.2 Develop one (1) newsletter with articles related to road and home drainage BMPs contributed by local resource professionals and technical experts. Distribute the newsletter to participants in the workshops (Item 3.3), tours (Item 3.4), and technical trainings (Item 4.1), and submit a copy to the Grant Manager.
  - 3.3 Conduct two (2) educational workshops on road and home drainage BMPs, available technical assistance, and help in completing applications. Submit the workshop agendas, solicitation material, workshop summaries, and sign-in sheets to the Grant Manager.
  - 3.4 Conduct two (2) site tours of existing implementation projects, one (1) for roads and one (1) for home drainage, to educate the public about BMPs. Submit the agenda, handouts, sign-in sheets, and a summary of each tour to the Grant Manager.
  - 3.5 Review road and home drainage applications with the TAC, prioritize which will receive road or home drainage assessments, and submit a prioritized list to the Grant Manager.
4. Technical Trainings
  - 4.1 Conduct one (1) roads technical training for contractors and road maintenance personnel, and one (1) home drainage technical training for contractors and landowners, to include a live demonstration of BMP installations.
    - 4.1.1 Conduct outreach for training participants through press releases, emails, and mail solicitations to local landowners, contractors, and associations.
    - 4.1.2 Submit the agenda, solicitation material, training curriculum, sign-sheets, and photos of the BMP installations to the Grant Manager.

- 4.2 Complete two (2) follow-up surveys of all contractors trained to determine the number of water quality BMPs installed for contractor clients, and submit a summary of the surveys to the Grant Manager.
5. Condition and Treatment Assessments
  - 5.1 Develop a rural road RAM tool based on the Lake Tahoe model to assess risk of sediment delivery to identify high priority roads, and submit to the TAC for comment and the Grant Manager for review and approval.
    - 5.1.1 Prepare a user manual for the rural road RAM tool and submit to the Grant Manager.
    - 5.1.2 Conduct user training on the use of the RAM tool.
    - 5.1.3 Input RAM data into a database developed by the contractor.
  - 5.2 Compile existing road assessment data including field surveys, sediment load reduction estimates, improvement inventories, and other previous information on pre- and post-implementation road conditions. Conduct analysis to identify critical road characteristics used to define previous estimates of sediment yield and improvement strategies.
  - 5.3 Obtain Geographic Information System (GIS) mapping data including road networks, local stream layers, soils and other key landscape features to define determination of road attributes and potential sediment generation risk. Submit the GIS mapping data to the Grant Manager.
  - 5.4 Prioritize high priority project areas, based on the road conditions, utilizing RAM data, and submit to the Grant Manager.
  - 5.5 Develop and approve a methodology and ranking criteria for selected projects, using potential risk generation attributes and RAM results, and submit them to the TAC and the Grant Manager for review and approval.
  - 5.6 Road Condition Assessments
    - 5.6.1 Develop a Landowner Road Assessment Worksheet for landowners and/or road associations, to collect preliminary BMP information on individual roads in order for the TAC to prioritize roads for assessment, and submit to the Grant Manager for review and approval.
    - 5.6.2 Obtain signed Request for Assistance forms from landowners or road associations.
    - 5.6.3 Conduct road condition assessments on a minimum of fifty (50) miles of road, and work with landowners to complete the Landowner Road Assessment Worksheets and identify potential BMPs. Submit a list of total miles assessed per sub-watershed to the Grant Manager.
  - 5.7 Home Drainage Assessments
    - 5.7.1 Develop a Landowner Home Drainage Assessment Worksheet in order for the TAC to identify high priority BMP projects, and submit to the Grant Manager for review and approval.
    - 5.7.2 Obtain signed Request for Assistance forms from landowners.

5.7.3 Conduct six (6) to nine (9) home drainage assessments with landowners, using the Landowner Home Drainage Assessment Worksheet to address roof and impervious surface runoff that drains to the roads, and submit a summary to the Grant Manager.

6. Implementation

- 6.1 Present the results of site visits and field assessments, including RAM results, to the TAC in order to develop a list of prioritized road projects and a list of prioritized home drainage projects. Submit both lists to the Grant Manager for review and approval.
- 6.2 Obtain landowner agreements, with incorporated long-term maintenance commitments, for each road erosion control and home drainage project implemented.
- 6.3 Prepare draft designs for sites chosen from the TAC prioritized project list, and submit to the TAC and the Grant Manager for comments.
- 6.4 Complete the final designs and submit to the Grant Manager for review and approval.
- 6.5 Work with landowners to secure cost estimates/bids for Project construction.
- 6.6 Implement nine (9) to twelve (12) private road erosion control BMP projects and two (2) to four (4) home drainage BMP projects.
- 6.7 Complete Project summaries with accompanying pre- and post-implementation photos for each project and submit to the Grant Manager.
- 6.8 Conduct site visits with the Grant Manager.

7. Post-Implementation Photo Monitoring, BMP Effectiveness, and Program Evaluation

- 7.1 Develop and distribute annual follow-up surveys to all workshop participants in Item 3.3 to determine if additional projects were implemented, and collect data on the sub-watershed and type of BMPs implemented.
- 7.2 Review and revise existing rural roads annual follow-up surveys, distribute to rural road implementation project landowners, and submit the completed surveys to the Grant Manager.
- 7.3 Develop a home drainage annual follow-up survey, distribute to home drainage implementation project landowners, and submit the completed surveys to the Grant Manager.
- 7.4 Complete annual photo monitoring of projects permitted under Partners in Restoration permit coordination and submit to the Grant Manager

8. Program Expansion

- 8.1 Prepare a Tool Kit, to include sample budgets, work plans, program, and other reference materials that can be distributed to other counties interested in starting rural road and home drainage programs, and submit the Tool Kit to the Grant Manager.

9. Regional Water Board Wrap-up Meeting

- 9.1 Present the Project activities, findings, and resulting products at a Regional Water Board grant wrap-up meeting. Submit the presentation materials to the Grant Manager.