**OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY**
**NONPOINT SOURCE IMPLEMENTATION GRANT AGREEMENT**

**EXHIBIT E**
**PERFORMANCE REPORT/OWRI REPORT**

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| **Project name:** | Bear Creek TMDL Effectivness Monitoring Analysis | **DEQ Agreement #** | 044-20 |
| **Recipient:** | Rogue Valley Council of Governments | | |

All reports must be submitted in a format as recommended in this section to the DEQ Grant Administrator. The reports need to be provided electronically.

**Section I**

Please include a discussion that includes an overall summary of the Project to date and the partners involved. Include the following elements:

1. What were the goals for this Project? Were those goals met? If goals were not met, explain why not. Please enumerate specific quantifiable environmental changes and results that are a result of the Project. THIS IS THE MOST IMPORTANT PORTION OF THE FINAL PERFORMANCE REPORT AND NEEDS TO BE CLEAR AND EMPHASIZED. Include:
    a. Behavioral results such as the amount of BMPs installed;
    b. Estimates of the amount of pollutants prevented from reaching surface or ground water; and
    c. Documented changes in water quality based on monitoring.

The goals of the project were to:

1. Take a leadership role in the technical advisory committee providing guidance to the EPA ORISE data analyst (100%)
2. Develop and on-line story map showing the results of the analysis (72%)
3. Summarize trends, percent exceedances, and other results of the 24 sampling sites (60%)
4. Summarize implementation actions and BMPS (27%)
5. Collate and submit all data to DEQ (95%)
6. Formally present results and final work produce to TMDL working group (24%)

The project is still in progress, so the goals of the project are moving toward completions or completed in some cases. The estimated percent completed is listed at the end of the bullets above.

a. In terms of behavioral results, the project preceded regional TMDL plan updates. Changes were made to the implementation plans to move toward meeting water quality benchmarks. In addition, we are investigating changes to the monitoring program to see if we can better evaluate implementation activities. We are preliminarily planning on coordinating a technical team to discuss monitoring. In addition, we are compiling lists of BMPs and recommendations for implementation at specific locations.

   We are also using the Stream Smart platform to tie in relevant activities including results from this program to help us inform the public and build continued support for implementation programs. In addition to the support, community members can take various pledges to help improve water quality, volunteer to plant trees and clean up streams, learn about where sites are monitored and why, and other topics.

b. At the current state of the project, no estimates of pollutants prevented from reaching groundwater or surface water have been made.
c. The data analysis of the water quality data showed that there were only minor statistically significant trends. However, with the population growth in the region, climatic fluctuations including several droughts, bad fire years, and a highly managed water system, the water quality did not show any downward trend. While implementation of various implementation strategies including best management practices did not lead to any significant improvements or major progress towards meeting standards, the water quality held steady despite the pressures on it indicating that the TMDL program is helping to maintain existing water quality conditions.

2. Provide a written description of what worked and what did not work. Provide a written description of lessons learned in carrying out the Project.

The project has been mostly working as designed. We did have some unanticipated delays due to COVID19 that impacted the timeline and has led us to ask for an extension. In addition, we ended up getting technical support from EPA on the data analysis as opposed to needing consulting support which was an option considered during project development. We also did not get a list of recommended changes to the monitoring program which we had on our wish list of deliverables/goals in the initial phases of project development.

Lessons learned:

1. Localized conditions (e.g., ponding for water diversion and waterfowl use) may impact trends seen in water quality data.
2. Climatic and water conditions (flow, water use and movement) may vary from year to year making trends difficult to see.
3. No statistical test is perfect and sometimes it takes trial and error to find the best analysis methods.
4. It takes time to make significant (positive) impacts on water quality.
5. Analysis of additional parameters may be needed to see some of the trends and impacts.
6. Online mapping and story maps are effective ways to show project results and share information.
7. The TMDL monitoring program provides a vital data source for the Bear Creek basin, TMDL DMAs, and NPDES Phase II MS4s.

3. Describe how the Project's funding worked out. Include the projected cost and actual cost of the Project, how much of the Grant funds were spent, and how much funding (cash and in-kind) was provided as match from other sources.

The detailed funding is provided in Exhibit B, the match form, and the match tables. As of June 30th, 2020 we have spent a total of $24,554.04 ($14,596.00 of 319 funds and $9,958.04 of in-kind match).

To date, the funding has been adequate in meeting the project goals. Without the support of the local TMDL program which provides the primary amount of the match, the program would not be able to be completed.

4. What follow up is required? Include photos, graphics and 2 copies of all products produced in the effort. Project completion documentation can be submitted and are encouraged to be submitted in a digital format (one copy).

At this point, since the project is underway, no follow up is needed. Ongoing activities include completing the deliverables, requesting a project extension, and implementing the activities in the new 5-year TMDL Plan cycle.