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OWEB 201-537  
Monitoring Report

# Sunset Valley Irrigation Enhancement Project



## PROJECT MONITORING REPORT OWEB #201-537

Submitted by  
The Owyhee Watershed Council

APR 25 2005

OK Karen Fundesch  
OK  
4/26/05

**1. Description of maintenance performed:**

Strickland and Sisson Farms performed some maintenance on this project since its implementation due to some initial difficulties with the operation of the large pivot sprinklers. Specifically the operators had some difficulties getting their sprinklers to move properly through their sandy soils. By incorporating the use of straw within the corrugates, the landowners solved this problem.

**2. Accounting of any costs associated with maintenance and monitoring:**

Maintenance to Date: \$1,500.00 (paid by the landowner for replaced nozzles, professional assistance, straw, time cleaning the bubbler, etc.)

Monitoring to Date: \$65.00 (contributed by OWC for photo monitoring time and mileage)

**TOTAL Monitoring & Maintenance: \$1,565.00**

**3. Assessment of whether the project continues to meet the goals specified in the grant application:**

Prior to the implementation of the Sunset Valley Irrigation Enhancement project, the Strickland and Sisson Farms operated using only flood/furrow irrigation. NRCS maintains that this form of irrigation tends to cause high rates of irrigation-induced erosion. The Sunset Valley Irrigation Enhancement Project proposed to assist area landowners in transitioning their operations from flood to sprinkler. In doing this the project hoped to accomplish less erosion and less sedimentation into waters of the state. The landowners also hoped that sprinkler systems would make chemical applications more effective, thus preventive excessive chemical leaching and/or runoff into ground and surface waters.

Two related farms, Strickland and Sisson, took the lead in implementing this project. The Strickland and Sisson families also included neighboring farms, not currently having the financial capability to make the conversion, in the project by setting-up the water delivery system so that the option of converting from flood to sprinkler irrigation would be available in the future when it becomes economically feasible.

While phase two of the project has not been fully implemented, phase one is working to reduce irrigation-induced erosion and has served as a positive example for neighboring farms. The sprinkler systems also seem to be making chemical applications more effective, and with proper management of the new system crop yields are still expected to increase.

**4. Summary of any public awareness or educational activities related to the project:**

Since its completion, this project has been highlighted in numerous community presentations given by the Owyhee Watershed Council. It was also featured in an article of the "Owyhee Outlook", the Owyhee Watershed Council's newsletter, as well as a special ag edition of the Argus Observer, a local newspaper.

**5. Summary of the project results and statement of effect the project has on the Owyhee River including any positive effects of the project relating to water quality and the upland vegetation:**

This project has been successful in reducing irrigation-induced erosion and improving irrigation efficiency in order to prevent the runoff of sediment and nutrients to the Owyhee River system. This is of particular importance to the watershed as surface water quality issues identified within the area include sediment and nutrients. Wildlife habitat areas designated under the project provide important nesting habitat for quail and pheasant populations, especially during summer and fall harvests. Overall, the project is a tremendous success and has already inspired other area landowners to follow suit.

**6. Description of the condition of the project as it relates to the original proposed design and any modifications made during implementation:**

The project generally followed the original proposal in its implementation. Costs associated with certain aspects of the project did not match projected project costs, but the landowners accounted for most of the unexpected expense. The Oregon Department of Fish and Wildlife helped secure donated seed for habitat planting through Pheasants Forever. The project was implemented in two phases. Phase one of the project was entirely installed with sprinklers prior to the initialization of phase two. Due to economic hardships and technical difficulties that arose during the project, the installation of sprinklers for phase two was delayed.

We intended that the installation of either drip or sprinkler irrigation on these fields would be complete upon submission of this monitoring report. All OWEB funded portions of this project have been completely installed and inspected. The landowners have surpassed their 25% match requirement and are still fully committed to installing sprinkler and/or drip systems within the entire project area. Due to technical difficulties with the large pivot sprinkler installed as part of phase I of this project, phase II was revised to include the use of two smaller pivots rather than one large one. In order to account for additional costs the landowners sought and received EQIP funding from the USDA and have plans to install the system in Fall of 2005.

**3. SLIDES / PHOTOGRAPHS**



Sunset Valley Irrigation Enhancement Project  
Phase I Completion Photo (6/10/2002)



Sunset Valley Irrigation Enhancement Project  
Photopoint #1: Bubbler 2/28/02 (before)



Sunset Valley Irrigation Enhancement Project  
Photopoint #1: Bubbler 2/20/04 (after)



Sunset Valley Irrigation Enhancement Project  
Photopoint #1: Bubbler 4/15/05 (monitoring)



Sunset Valley Irrigation Enhancement Project  
Photopoint #2: Pipeline and Pivots – Phase I 2/28/02 (before)



Sunset Valley Irrigation Enhancement Project  
Photopoint #2: Pipeline and Pivots 2/20/02 (after)



Sunset Valley Irrigation Enhancement Project  
Photopoint #2: Pipeline and Pivots 4/15/05 (monitoring)



Sunset Valley Irrigation Enhancement Project

Photopoint #3: Pipeline and Pivots – Phase II 2/28/02 (before)

*Note: The mainline has been installed underground but sprinklers have not yet been installed as explained previously in this report.*



Sunset Valley Irrigation Enhancement Project

Future location of Phase II Pivot – see note above 4/15/05 (monitoring)