

## **Coos SWCD Outstanding Cooperator of the Year for 2010: Ed Groves**



**Elk Creek Ranch:** 148 acres located between Myrtle Point and Sitkum on the East Fork Coquille River and the confluence of Elk Creek.

Ed Groves and his family were the Coos SWCD Outstanding Cooperator for the year of 2010. They completed a large scale irrigation efficiency project with the collaborated efforts of the Coos SWCD as well as the Natural Resource Conservation District (NRCS) the Oregon Department of Fish and Wildlife (ODFW) and the Oregon Watershed Enhancement Board (OWEB) in order to put in a 50 acre k-line irrigation project on their property. This project was completed in October of 2009. This project was important because this new more efficient irrigating system will use 60% – 70% less water from the Coquille River to water the landowner's fields. Along with all the agencies that took part in the project the Groves family all pitch in to help, including Ed Groves wife Julie and his daughters Emily and Bethany.

Ed and Julie bought this ranch back in 2001 and have 20 Black Angus, two horses, three dogs and a cat. The family said that this property is very special to them because Ed's grandparents homesteaded on Elk Mountain which is approximately 12 miles above their property. The groves said that they have driven past their current home for years and loved looking at it from afar. Elk Creek starts up the mountain on the homestead and ends as it flows into the Coquille River on their property.

Below are some of the pictures of the instillation of the k-line project. The entire project was designed and constructed by Pacific Ag Systems, Inc., and the Coos SWCD would especially like to thank David Bower and Tye Fountain. Also below is the Conservation Farm Plan that Ed's daughter Emily completed through Oregon State University. The Coos SWCD would like to thank the entire Groves family and really appreciates all the work and involvement they have done and continue to do for their property and their community. Well done!

**GROVES IRRIGATION EFFICIENCY PROJECT PHOTOS:**



Trenching Work



More Trenching Work



Trenching Work



New k-line pods



Supplies and Materials



Finished k-line project

# **FARM CONSERVATION PLAN FOR ELK CREEK RANCH**

*Prepared For Ed Groves 98436 Shiloh Lane, Myrtle Point, OR 97458*

Prepared by: Emily Groves, Oregon State University Student, Corvallis, OR 97330

## **INTRODUCTION**

### **Farm Location/Context**

Elk Creek Ranch is located 12 miles East from Myrtle Point on Sitkum Lane. It resides in Coos County along the East Fork of the Coquille River. This ranch is owned by Ed and Julie Groves and operated by family. It consists of 148 acres, with approximately 50% of this being bottom ground or pasture, while the remaining 50% contains timber approximately 8 years old. Elk creek runs through this ranch joining into the East fork of the Coquille River (see map 1). This ranch produces Black Angus beef cattle as well as the feed for its livestock. Currently this property supports 20 head (pair) of cattle and harvests two of its pastures for hay once a year. These bottom pastures are fertilized by Triple 16 and Urea alternating each every other year, keeping the impacts to surrounding ecosystems a minimum.

This Ranch falls entirely within the Coquille Watershed Association, which is active in watershed conservation and enhancement in overall watershed health. This farm plan will incorporate watershed support services to contribute to conservation efforts.

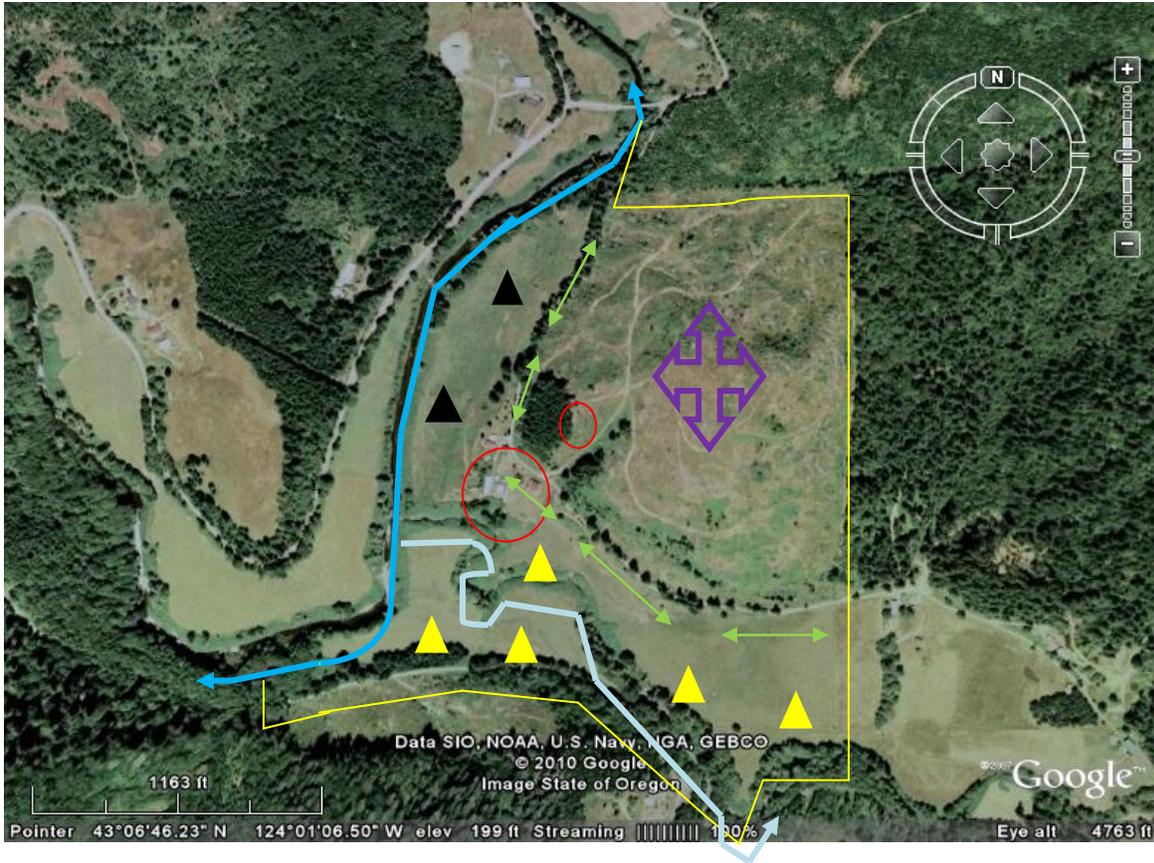
### **GOALS AND OBJECTIVES**

This plan will achieve the following goals/objectives.

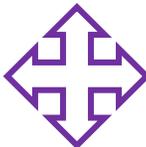
- 1) Maintain livestock production, while increasing feed yield.
- 2) Conservation of both water and power through more improved irrigation methods.
- 3) Reduce stream/bank erosion, improve riparian zone health.
- 4) Improve overall watershed health.

The primary objectives of this ranch/farm plan are to increase production while implementing both water and power conservation techniques. Secondary goals are to enhance riparian zone health, by reducing erosion and exposure to contaminants. Lastly overall watershed health will be addressed to better contribute to the efforts by the Coquille Watershed Association as a whole.

**MAP 1/ Ranch Identification**



**LEGEND MAP 1**

	Property Boundary
	E. Fork Coquille River/Property Boundary
	Elk Creek Boundary
	Fields/Pasture prepared & harvested for feed
	Fields/Pastures used for livestock grazing
	Upper Timber/Wooded property
	Buildings located on property
	Road/Driveway

## **CONSERVATION AND HABITAT ENHANCEMENTS**

The following projects or steps will be implemented to obtain the previous mentioned objectives; each will address different areas as well as have significant impacts to the overall conservation plan. The primary objectives will be achieved by the installation of a new more efficient and eco-friendly irrigation practice, which will subsequently improve riparian ecosystem health and increase production and forage yields. The installation of new K-line irrigation systems will allow for more bottom ground to be used for hay production by increasing irrigation capabilities, as well as the significant reduction in water and electricity used to sustain the new system. Fish friendly screens are designed to fit the new K-line irrigation thus improving aquatic habitat and detriment to species.

Secondary goal for this ranch include reductions in riparian zone erosion and improvement of overall watershed health will be achieved by installation of a bridge for cattle crossing Elk Creek, which will prevent any further erosion due to ground disturbance as well as reducing any possible contaminates to the water source. In addition vegetation will be restored to provide shade and bank stability as well as a buffer to enhance riparian zone and watershed health.

Costs Provided by: Pacific Ag Systems, Inc. 93780 Highway 99 South Junction City, Oregon 97448

### **K-Line Irrigation Costs**

ITEM	COST
Suction & Fish Screen	\$3,341.50
Pump, Trailer & Panel	\$6,762.31
Pump Discharge	\$5,375.73
PVC Mainline	\$14,995.90
Bridge Crossing	\$2,902.22
K-Line Above Ground	\$16,223.15
Design & Technical Support	\$5,440.00
<b>TOTAL</b>	<b>\$55,040.81</b>

The installation and purchase of the K-Line irrigation system allows for several opportunities of cost sharing, or grants from both state and federal organizations. National Resource Conservation Service (NRCS) has grants toward the overall costs of this project around the sum of \$32,000. Oregon Department of Fish and Wildlife (ODFW) will assist in offsetting the cost of the pump and screen in the amount of \$6,000 to \$8,000 due to its benefit to fish and habitat conservation. Additionally Oregon Department of Agriculture (ODA) Soil & Water Division has funds available around the amount of \$8,000 to offset costs even further. With the before mentioned possible funds to offset the cost of the new K-line Irrigation system the cost to the farmer still remains at about \$9,000 give or take. While the cost of this project is significant the advantages of its implementation is astronomical. It provides significant water and power conservation, as well significant increase in production capabilities.

After speaking with the Director of the Coquille Watershed Association Kelly Miles, grants are also available to cover all of the costs of installation of a bridge and vegetation along Elk Creek. This coverage of all costs is due to the elimination of possible contaminants as well as fish habitat restoration that will be possible by removing the cattle crossing across the creek bed itself. Meetings with Kelly Miles will be established at the property in conjunction with a fish biologist to observe and provide preliminary information to assist in the grant writing to provide the funding for this project.

## **ACKNOWLEDGMENTS**

I would like to thank Ed & Julie Groves for access to their property and allowing me to observe and research all aspects of the property. Similarly I would like to thank them for working with me to develop a plan that will enhance their property as well as meet their conservation goals. Several organizations assisted me in my research of several different projects including implementation and price associated with those projects. Those organizations include The Coquille Watershed Association and Pacific Ag Systems, Inc. The Coquille Watershed Association gave me information pertaining to the goal of the watershed as a whole as well as information on the different grants and monies available to help the landowner obtain those goals. Pacific Ag Systems, Inc. is an organization that specializes in K-line system installation and helped me to implement a plan and estimations for Elk Creek Ranch.

## **SOURCES**

Pacific Ag Systems, Inc. 93780 Highway 99 South, Junction City, Oregon 97448. Phone: 541-998-1983, Fax: 541-998-6768, Email: PacAg@aol.com

Kelly Miles Director, Coquille Watershed Association, 55153 Picture Valley Road, Coquille, OR 97423.  
[www.coquillewatershed.org](http://www.coquillewatershed.org) Phone: 541-572-2541

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National Resource Conservation Service, United States Department of Agriculture <http://www.nrcs.usda.gov/>