

Wind Erosion Is Costly -- To Loser and Receiver

Heppner Soil and Water Conservation District

Annual Meeting Program

28th Year

THURSDAY, FEBRUARY 3, 1972

7:30 P.M.

LEXINGTON GRANGE HALL

1. Open Meeting
2. Business Meeting
3. Election of Two Supervisors
4. Introduction of Guests
5. Review progress on Rhea Creek Watershed —Darrell Learn

TALK and SLIDE PRESENTATION:

Columbia-Snake-Palouse Program

By Charles V. Liles, Field Representative
State Soil and Water Conservation Commission

REFRESHMENTS—Compliments of Heppner Soil and Water Conservation District

District Annual Report

	Number	Units
New Cooperators	2	3,825 acres
Services to Individuals	490	
Detailed Soil Survey		42,060 acres
Conservation Plans	5	57,445 acres
Units of Government Assisted	6	
Services to Groups	61	
Brush Control		218 acres
Chiseling & Subsoiling		1,206 acres
Conservation Cropping System		2,200 acres
Contour Farming		1,620 acres
Crop Residue Management		2,672 acres
Deferred Grazing		2,910 acres
Diversion		163,334 feet
Grassed Waterway		9.5 acres
Irrigation Pipeline		14,400 feet
Land Leveling		26 acres
Pasture & Hayland Management		568 acres
Pasture & Hayland Planting		516 acres
Proper Grazing Use		3,269 acres
Range Seeding		190 acres
Open Channel		2,948 feet
Land Adequately Treated		12,970 acres
Irrigation Water Management		604 acres
Critical Area Planting		22 acres
Woodland Improvement		5 acres

District Objectives for 1972

1. Give support to the Columbia-Snake-Palouse program.
2. Get printing completed on district long range program and objectives and distribute to cooperators.
3. Complete one coordinated ranch plan involving both public and private lands.
4. Enter Godyear conservation contest.
5. Urge construction funding be made available for Rock Creek Watershed.
6. Complete land treatment work on Shobe Canyon Watershed.
7. Continue emphasis on conservation education, including grade school tours.
8. Work with County Agricultural Stabilization & Conservation Service committee in emphasizing the installation of diversion ditches; consider other small watersheds for complete treatment such as Shobe.
9. Continue emphasis on wind erosion control work.

District Achievements for 1971

1. Lake Penland Project was completed.
2. Started construction of complete land treatment program on Shobe Canyon Watershed.
3. Worked with State Engineers Office in getting core drilling work completed and stream flow gauge installed at the mouth of Rhea Creek.
4. Completed feasibility study for city of Lone watershed.
5. Soil surveying was completed on an additional 42,000 acres.
6. Diversion terrace construction is nearing 2,000,000 feet.

Heppner S&WCD Works On Wind Erosion Problem

By DON BELLAMY
Soil Conservation Service

In the United States, it is estimated that 30 million tons of soil enters the atmosphere each year. Some of this comes from Morrow County. This past year had more wind than usual and several thousand acres in the Heppner Soil & Water Conservation District had severe wind erosion.

Much of the wind erosion problem is occurring where new lands are being developed for irrigation. The main reason for this is that the land is prepared for crop seeding before the irrigation equipment is installed. The use of irrigation water alone is not enough to protect bare soil which has been exposed to the wind. The low organic matter of these soils makes it necessary to use special practices to establish and grow row crops.

Many acres of dry cropland also have blow areas occurring. Stubble mulch, strip cropping and, in some cases on small areas, straw or manure can be applied to stop wind erosion. Some dune areas on overgrazed rangeland are causing problems.

The Heppner Board of Supervisors met numerous times with government agencies, other district boards and individuals on the wind erosion problem. One result of these meetings was a



THIS PICTURE SHOWS soil which has blown from exposed area and has been deposited behind fence. Proper spacing of drift fencing can be used for wind erosion control. (SCS Photo).

pamphlet, "Why Let Your Soil Blow Away", published by the Soil Conservation Service on some suggested control practices for wind erosion. Practices discussed in this pamphlet are as follows:

1. Irrigation Water Management.
 - a. Install irrigation equipment before opening new land.
 - b. Apply water according to intake rate of the soil and needs of the crop.
 - c. Use tillage immediately after irrigation to make clods.
2. Crop Residue Management.
 - a. Tillage should have adequate residue in top three inches.
 - b. Irrigate soil and plant cover crops immediately after harvest. (July to Oct. 1).
 3. Mulching.
 - a. To prevent wind erosion from getting a start.
 4. Pasture & Hayland.
 - a. For long term soil protection.

This pamphlet and other information on wind erosion can be obtained at the district office in Heppner. Following is a chart showing sample rotations which can be used.

SOIL COVER CHOICES											
Cover Crop						Stubble					
Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
CC			Potatoes						Cover Crop		
CC			Potatoes						Hay or Past.		
CC			Potatoes						Wheat		
			Wheat Crop						Stubble		
Stubble			Potatoes					Sil. or Sw. Corn	Stubble		
Stubble			Watermelons						Fall Grain		
			Grain Crop						Hay or Past.		
CC			Dry Beans						Grain		

- These give safe protection from wind erosion.
- Very sandy soils make weak clods, even when wet-worked. Always provide crop residue in soil surface.
- Double crop to sweet corn on trial basis only.
- Avoid crops with October harvest and light crop residues.

Irrigation Economic Evaluation Of Morrow County Farm Land

By GARY GRIEB

As we the farmer, continue to struggle with the ever present problem of the cost-price squeeze, we look to irrigation as an aid to increased production. However, with irrigation, as with any other investment type enterprise there are many points of economics which must be studied.

When considering Morrow County for irrigation we should realize that there are many economic factors in our favor. We would at the same time assume that basically the majority of the land would be irrigated by sprinklers rather than surface irrigated. So we should take a long look at many economic determinations before we start investing in irrigation equipment.

1. Location and source of water. Varies greatly over the county. Columbia River is our best source.
2. Elevation of water lift. Can be very critical.
3. Existing practices. How many changes will have to be made? How much present equipment will need replacing or changing?
4. Size, shape and quality of design area. Size is not much problem in the county. Shape and quality varies throughout.
5. Distance of design area to water. Main source of water is a great distance from some of the more productive soils.
6. Crops to be irrigated. Morrow County is adaptable to almost any crop we would want to raise. Our distance to market for some crops is the greatest drawback. The extension service has enterprise cost estimates worked up for most irrigated crops being raised in the county. These are based on what

farmers particular crop costs are now.

7. Crop use. Many crops could be utilized within the county, i.e. Hay-pasture-seed-cover.
8. Wind direction, strength and occurrence. We can count on having a great amount of wind, with destructive strength to some sprinkler systems, at fairly regular occurrences.
9. Labor availability. Is really not as great a problem as is where to house your help.
10. Temperature. Can be a problem for 30 days or so. Normally not too bad.
11. Power supply. So far has been no problem, rates are in line with most other areas and in some cases lower.
12. Growing season. One of the county's better factors. Many times up to 200 frost free days.
13. Topography or layout. Some areas can be a serious problem. Generally above the 1000 foot elevation mark. An abundance of land lies below 1000 feet however.
14. Soil capacity and fertility. Intake rate has caused many problems already in many areas. Much work has been done on this within the county and the findings are available at the extension service office. Fertility varies throughout the county. Soil samples would need to be taken for the area being studied.
15. Desired return. Profits, land development for speculative sales, etc. Low crop prices, often below cost of production is a major concern.
16. Management. As has been said before, the whole project will be no better than the Man behind it. Or possibly how many times he can get by being late to the supper table...?



MARCEL JONES, 1971 Conservation Man of the Year, and wife, Dee, in front of their home. With them is Marcel's brother Judge Paul Jones. (SCS Photo).

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- Farmore Service Center Irrigation Division — Pendleton

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HEPPNER SOIL AND WATER CONSERVATION DISTRICT