

Nuclear Plant Irrigation Possibilities Eyed

Long Awaited Soil Survey Started in North Morrow

By AL OSMIN

A long awaited soil survey by the Heppner Soil and Water Conservation District has been started in the north end of the county. The survey is being conducted by the Soil Conservation Service. Two soil scientists full time, and one part time leader part time from The Dalles are working on this detailed survey of high intensity now.

With a financial assist of \$1,000.00 from the county court, two more soil scientists will be in the county as soon as the weather permits. The court feels the benefits of this survey will

far exceed the cost. With the addition of these two men, it will assure completion of the survey this year. Our soil scientists operate on a schedule and without these two extra men, it could take several years to complete the project.

This survey will play an important part in the development of this land. With the completion of this detailed survey, a land use map with the facts can be made. This will stop speculation as to the amount of class one land and amount of other classes of land in the north end.

Snow, Rain Bring Erosion Problems

By AL OSMIN

Morrow county has experienced much in the past year. We had one of the driest springs and summers on record, yet our total rainfall for the year was above average.

With the large amount of rainfall and snow we have received this fall, comes the ever present problem of erosion. We have already had some bad erosion in some parts of the county. Once a pattern of erosion in a field has been started, it is very difficult to break up. It usually takes a combination of many soil conservation practices to do the job. Structural measures needed would be diversion ditches with sod waterways. These could be implemented with strip cropping and contour farming. Some soil management practices which could be added are stubble mulching, minimum or cloddy tillage, grasses and legumes in rotation, fertilizing, and subsoiling stubble in the fall.

Some may remember about four years ago at the annual meeting Verle Kaiser, Manage-

ment Agronomist, SCS, spoke on the benefits of diversion ditches. One very interesting comment made by him was that diversion can reduce a 100% erosion potential on a full length slope to 25% on half length, 11% on a third length, and 6% on one-fourth length. It is quite significant that when you double the slope length you increase erosion by four times.

Some of the benefits of diversion ditches alone are:

1. Reduce erosion.
2. Conserve moisture.
3. Make a permanent guideline for contour farming.
4. Help in laying out strip-cropping or a crop rotation.
5. Reduce machinery breakage caused by gullies.
6. Reduce power requirements because operations are on the contour.
7. Provide lasting protection.

We here at the Heppner Work Unit like to encourage the use of other conservation practices along with diversion ditches. We will be glad to visit with cooperators about the installation on any of these practices.



W. E. HUGHES (left) of Heppner and Edwin Hoeft (center) of Pendleton were among award-winning conservationists who received a four-day vacation study of Goodyear Farms at Litchfield Park, Ariz. In this picture, George Busey, vice-president and general manager of Goodyear Farms, explains his land-use program. The two, who received the award through the Umatilla Soil Conservation District, were among 106 winners who were guests at the farm, resort and planned community complex.

Hughes Hailed 'Outstanding Conservationist'

W. E. (Ebb) Hughes, who lives in two SWCDs, has done an outstanding job carrying conservation plans in both the Southern Umatilla SWCD and the Heppner SWCD.

His accomplishments in Umatilla county on a unit which consists of 5,456 acres with more than 90% range and forest land are: development of 11 springs, 108 acres of irrigated and dry land seedings, rotation and deferred grazing and a very successful range seeding after a forest and range fire which covered a portion of the ranch.

The quality of conservation work accomplished is commendable. Hughes does an outstanding job in spring development which cuts his maintenance to a minimum. Seedbed preparation and care of new brass seeding on dryland and irrigated pastures is also exceptionally good.

The range and woodland conservation plan in the Southern Umatilla SWCD was initiated in August, 1963, and is completed except for water spreading practice in 3 pastures, development of 2 or 3 more springs, channel improvement work, and woodland thinning. In the fall of 1966, Hughes sponsored a woodland tour of his ranch. The state SCS Woodland Conservationist gave Ebb and his neighbors some pointers on woodland thinning and future market prospects for different timber species.

Sweet corn, \$150 from 36.2 tons—12,537 acres.

Watermelons, \$381 from 9 tons—217 acres.

Onions, \$647 from 359.3 CWT—849 acres.

Green peas, \$121 from 1.6 tons—5,020 acres.

Are you surprised by the 28.5 per cent of the Washington Basin Project devoted to alfalfa hay production? What are other crop possibilities — concord grapes, cantaloupes, sweet potatoes, spearmint — at commercial scales?

The Ebb Hughes ranch in the Heppner SWCD consists of 16,599 acres of which 15,765 acres are range, 758 acres are cropland, and 76 acres are improved pasture. This plan was initiated when the District was organized in the 1940's. Completed practices on this unit are 9 stock ponds, 800 feet of mainline irrigation, 100 acres of range seeding, 8 spring developments, 720 feet of drainage, 5 acres of land leveling and 481 acres of subsoiling. The quality of the work here is again commendable. Ebb

has further conservation plans including: cross fencing of rangeland, pasture seeding, stream channel improvement, subsoiling and additional stock ponds.

It is significant that Ebb is being honored this year, the 25th anniversary for our district that he helped organize. He was a Heppner SWCD supervisor for 13 years and received a certificate of merit in 1954 in the same district for outstanding accomplishment in Soil and Water Conservation.

Port Brochure to Show Site Potential in Morrow

By RUPERT KENNEDY
Port Commission Coordinator

The Port of Morrow and the U. S. Soil and Water Conservation Service are cooperating on Nuclear Power siting and the use of coolant waters for irrigation in Morrow county.

The Port Commission is publishing a very extensive color brochure to advertise their 4,000-acre waterfront industrial park at Boardman and other county developments. There is a major interest among the commissioners and people in the county in the warm water irrigation, a by-product of a Nuclear Power Plant.

In June of 1968 the Port asked the Soil and Water Service to cooperate in locating equalizing reservoirs and inventories irrigable lands. Conferences were held in the SCS office of A. J. Webber in Portland with Henry Pavlek, Oke Eckholm, Galen Bridge and Earl Jones of the Bend office, and a decision was made to proceed in the interest of the Industrial and Irrigation brochure.

Subsequent meetings were held with the Heppner Soil and Water District people in the office of Ralph Richards, whose staff would perform the preliminary study.

The proposed cooperative project was presented to the Columbia-Blue Mountain Resource Council and received their endorsement and a decision was made to proceed.

The Heppner staff and conservation engineers performed reconnaissance location of seven reservoirs approximately ten miles south of the Columbia River at Boardman at elevations from six to nine hundred feet. The Columbia at Boardman is an elevation of 265 feet. Soil classifications are now being made and it is estimated that 180,000 acres are very adaptable to economic irrigation in North-

Morrow county. One 1,000 megawatt nuclear plant conceivably could irrigate 65,000 acres.

The Port of Morrow Commissioners, Dewey West, Jr., of Boardman, Gar Swanson and Oscar Peterson of Ione, Dick Krebs of Cecil and Larry Lindsay of Lexington are very appreciative of the cooperation received from the various divisions of the Soil and Water Service.

Earl Jones, Area 2 Conservationist from the Bend office of SCS, had the service's cartographer office in Portland prepare a very extensive four-color map and negatives for the brochure showing the proposed Nuclear Plant siting on the river, the seven reservoirs located in the proposed irrigable lands.

The Port of Morrow Industrial and Irrigation brochure will come off the press early in March of 1969, and will be sent to 3,000 industries, food processors, developers, finance agencies, investors and government agencies across the nation.

The Port Commission has for years watched its area power supplies being transmitted a great many miles to the so-called load centers. It is now thought that due to the shortage of waterfront industrial sites in the Northwest that the very extensive sites in Morrow county will be used and the power of the area used for industries, food processors and irrigation.

There are a great many benefits from the projects. High production of the now arid lands, the diversification of industrial activity from congested urban areas with pollution problems, livability of our citizens in less populated areas, the multiple use of the reservoirs for recreation, wildlife and livability.

The Commission thinks that Morrow county has more of what it takes and the development capabilities are the best in Oregon.

IN WASHINGTON STATE—

Crop Figures Indicate Irrigation Potential

Washington's dollar harvest illuminates our irrigation potential when we explore what their farmers achieved on the average according to the 1967 crop report by the U. S. Bureau of Reclamation. The project composes 499,565 acres, with 452,773 irrigated and 440,158 harvested. Value of crop sales was \$75,291,795 with \$6,444,659 from sugar programs, ACP, diversion, certificates and support, totaling an average of \$180.52 per irrigated acre.

The major crops, average dollar harvest an acre were:

Alfalfa hay, \$121 from 5.4 tons—129,173 acres.

Wheat, \$104 from 74 bushels—105,054 acres.

Sugar beets, \$341 from 21.6 tons—33,740 acres.

Late potatoes, \$420 from 381.8 CWT—33,087 acres.

Early potatoes, \$405 from

337.6 CWT—15,451 acres.

Pasture, \$52 from 8.5 AUM—23,188 acres.

Alfalfa seed, \$233 from 444 pounds—3,507 acres.

Barley, \$64 from 58 bushels—10,343 acres.

Corn, \$148 from 110 bushels—6,846 acres.

Sorghum, \$104 from 83 bushels—213 acres.

Corn silage, \$152 from 21.4 tons—9,970 acres.

Dry beans, \$159 from 20.6 CWT—8,142 acres.

Peppermint, \$459 from 92 pounds—7,481 acres.

Asparagus, \$401 from 533 acres.

Snap beans, \$182 from 1.4 tons—6,000 acres.

Carrots, \$390 from 32.5 tons—318 acres.

Guard the Future of Your Farm, Community



Good CONSERVATION

Good soil conservation techniques work like a watchdog in the fields, guarding against erosion—the natural farm enemy. Stop soil depletion in the beginning before it robs the land of farm production . . . threatens your personal prosperity and your community's growth.

Conserve, maintain, improve land today with soil conservation for a prosperous tomorrow.

THE FOLLOWING IONE SPONSORS URGE YOUR SUPPORT OF GOOD CONSERVATION PRACTICES:

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