

Washington, D.C. Aug 5--Special to the Herald--The progress in agriculture in the arid states and territories for the decade ending in 1899 is shown in the report published by the 12th census report.

As this progress is attributable to irrigation, the statistics relating thereto are of general interest.

The number of irrigators in the U.S. in 1899 not including irrigators of rice was 108,218, an increase of 99.6 per cent. The area irrigated was 7,539,545 acres, an increase of 107.6 per cent. Of this area 5,944,412 were in crops and 1,595,123 in pasture and unmatured crops.

The cost of irrigating systems in operation exclusive of those on rice plantations was \$67,770,942 with the value being \$85,860,491 for the irrigated crops.

The total length of all the main ditches in the arid and semi-arid states and territories was 44,149 miles.

The average number of irrigated acres was 71; the average value of irrigated land per acre \$42.53; the average value of crops produced on irrigated land \$14.81; the average first cost of water \$7.80; the average annual cost of maintenance 38 cents. Of the 5,711,965 acres in crops hay and forage occupied 3,665,654 or 64.2 per cent; cereals were 1,399,709 or 24.5 per cent; vegetables 168,432 or 2.9 per cent; orchard fruits 251,299 or 4.4 per cent; other crops 4 per cent.

In Washington the number of irrigators increased from 1,046 in 1890 to 3,513 in 1899, or 235.9 per cent and the number of irrigated acres from 43,799 to 135,470 or 177.6 per cent.

The average value of farm land per acre was \$10.22, of irrigated land \$48.85. The ditches in operation in 1899 had a total length of

806 miles and cost \$1,679,319 and irrigated 133,698 acres.

There were 1,772 acres irrigated from wells. The irrigated area in crops was 117,798 acres yielding products valued at \$2,361,838. The area irrigated in pasture was 17,672 acres....-Yakima Herald, August 12, 1902.

Wash. Dec. 29--An appropriation of \$150,000,000 for use by the reclamation bureau in conducting economic surveys of reclamation projects was recommended by the budget bureau to congress today.

The appropriation is intended for carrying out the reappraisal provision of the new reclamation law. The work will be organized at Denver, Jan. 6. The investigations to start shortly thereafter will determine the causes for inability of settlers to pay construction costs on projects.

Results of the new survey will be completed in time to report the findings to congress at its session next December--
The Yakima Daily Republic, Dec. 29, 1924.

Washington, Jan. 31-- Government aid to settlers on new reclamation projects was approved today by the senate reclamation committee in ordering reported to the senate a bill introduced by Senator Kendrick, Wyoming.

The measure approves for government loans to future settlers of amounts up to \$3,000 at four per cent.

Loans would be authorized up to 60 per cent of the improvements made by the settler or up to that amount of cattle purchased by him.

The secretary of the interior would be authorized to supervise the settling of the projects. The original proposal in the measure for the government to purchase the land was eliminated.

Sen. Kendrick said the bill would do away with lottery systems of settling projects resulting in greater community interest and increase cooperative production and distribution on projects. It was indorsed by Commissioner Meade of the reclamation bureau, the budget bureau and Secretary Work.

Projects under construction which would be affected by the measure are portions of the Shoshone, Wyoming and the Kittitas and Baker projects in Washington--The Yakima Daily Republic, January 31, 1925.

Reclamation

Washington, June 12- AP Settlers will need from \$4,000 to \$7,000 in property with which to equip farms on any of seven irrigation projects in Washington, Oregon, Nevada, Utah and Wyoming the interior department announced today.

The finding resulted from an investigation by the reclamation bureau. This inquiry brought out that the average settler is now investing only from \$1,000 to \$2,500 in cash and such household furniture as he may possess.

The conclusion reached by the official investigators was approved by local committees of businessmen and by farmers who were familiar with marketing conditions and other conditions in their communities--The Yakima Republic, June 12, 1925.

Irrigation

A flow of one miner's inch of water continually is sufficient to irrigate from five to fifteen acres of land.

The inch measurement equals thirteen gallons per minute in Colorado and nine gallons per minute in California. A_n inch is measured by having the water pass from a box through a hole one inch square. The difference in quantity comes from the pressure being six inches in Colorado and only four inches in California.

An inch continuous flow for twenty four hours is sufficient to cover one acre of land to a depth of one-half inch solid sheet of water. The cost of constructing and maintaining canals and reservoirs for irrigation for the entire cultivated area of arid America varies from 10 cents to \$10 per acre annually, the average being \$1.07.

"Bookwalter's table for measuring water quoted.

Yakima Herald, June 20, 1895.

Reclamation

Washington, July 20, AP Secretary Work, who returned today from a six week tour of the Northwest declared that inspection of government irrigation projects confirmed the soundness of his reclamation policy.

"There is no need for more reclamation projects until the present ones are put on a sound basis, he asserted.

"One third of the projects are insolvent and one fourth of them should never have been built.

"Six thousand farms under government ditch are without occupants and there is no more reason to construct more additional projects than there would be to build houses without prospects of tenants-"
Yakima Republic, July 20, 1925.

Reclamation Projects

Repayment

Washington, Nov. 2-AP A change in the method of reimbursing the government for reclamation expenditures was advocated today by Representative Cramton, Republican of Michigan in a report to President Coolidge on an extensive inspection of the irrigation projects of the west, just completed .

Rep. Cramton who is chairman of the house sub-committee which drafts the interior department appropriation bill, said settlers should be required to complete their payments in 40 years instead of having reimbursement to the government reckoned at 5 per cent of their gross crop as the law now provides .

Cramton said he was whole heartedly in favor of Secretary Work's effort to require payment from the water users on reclamation projects and that while there was criticism of the secretary's policy in the west, largely of a political nature, the settlers he said are not antagonistic and believe the government is attempting to institute a more businesslike program to their benefit as well as that of the government.

Representative Cramton said he was opposed to the present method of computing reclamation payments because it involved complicated calculation that had not proven feasible and in the opinion of experts would result in stretching reimbursements over at least 75 years -- The Yakima Republic, Nov. 2, 1925.

Spokane, Nov. 20, 1925 Senator C.C. Dill here today reiterated his objection to state aid for reclamation projects and criticized Secretary of the Interior Work for what he declared was the secretary's opposition to expenditure of appropriations on western projects, particularly the Kittitas unit of the Yakima project in this state.

Dill said he would seek action directing the senate public lands committee to hold hearings next summer on the Columbia Basin and Umatilla projects--The Yakima Republic, Nov. 20, 1925

Up to the present moment only \$20,000,000 ever has been advanced from the United States general treasury for the use of the United States Reclamation service during the 20 22 years that the service has been operating under its own fund.

And twenty percent of that money or \$4,000,000 is already repaid.

The eastern taxpayer is not footing the bill for our western reclamation. We are paying it ourselves.

In the twenty-two year period there has been contributed to the fund \$198,812,028. Of this sum sales of western public lands have accounted for \$125,905,028. It is sales of our own lands that chiefly have made reclamation possible.

Add to this \$52,238,213 which is the amount settlers on projects have paid back to the fund and you readily can perceive where the money for reclamation has been obtained--Seattle Times, January 13, 1906 1926.

Here is a grand opportunity for a member of our state legislature to distinguish himself, J.D. McIntyre, chief engineer of the Yakima Irrigation Canal said yesterday at Tacoma. All that is required is a man who will introduce and push through the legislature a bill similar to the Wright bill which has given such unqualified satisfaction in California.

After forty years of struggling, the Wright bill solved the irrigating problem in that state. It was passed in 1887 and provides that every community of farmers may petition the county commissioners in order to hold an election to pass upon the question of irrigation or no irrigation. If an irrigation district is formed, five men are chosen to supervise construction of the ditches. They are placed under bonds, as are also the contractors employed, so you see there is no chance for any swindling.

Since the Wright bill became a law in California over \$15,000,000 has been spent by the farmers in irrigating their lands. At present they are making \$500,000 worth of improvements monthly. C.C. Wright, a farmer, conceived the idea of forming a district irrigating scheme. These districts are allowed by the bill to issue bonds, the interest on which is secured by the land itself. The bonds sell readily in San Francisco, Chicago and New York. Under this arrangement the farmers get benefits of any profits which would otherwise go to the corporations owning the irrigation systems.

In Eastern Washington there are 10,000,000 acres of land which without irrigation are comparatively worthless; with irrigation the land would be worth \$50 per acre. That, you see, would result in a valuation of \$500,000,000. These are facts, not theories. Some of our legislators might better be pushing such a scheme than frittering away their time on senseless nothings. It is ~~an~~ a practical project

and in my opinion the only solution of the irrigation problem in this state. Mr. McIntyre is the chief engineer for Montana irrigating companies. In that state it costs an average from \$1 to \$1.50 per acre for water for irrigation purposes in addition to a water right tax of from \$5 to \$10. He supervised the building of 400 miles of irrigating ditches in Montana at a cost of \$1,000,000. In Montana the largest ditch is twenty-four feet in width at the bottom, forty feet at the top and six feet deep. Mr. McIntyre is a native of Canada and has been in the irrigating business twenty years. He supervised construction of a \$1,000,000 plant in Dakota.

It would cost the Washington farmers, said Mr. McIntyre, about \$7 per acre to irrigate their land. Washington land will sustain three or four times as many people as the Montana land, because Washington soil is the stronger and richer. With irrigation, Washington will be capable of sustaining untold millions of people. Then too, Washington has a decided advantage over California in this respect. In this state the rivers are large and the fall is great, thus ensuring an abundant supply at a nominal outlay. In California the streams are small and the fall, after you leave the mountains is light. It costs 50 per cent more to irrigate land in California than in Washington.

Regarding the various irrigation bills now before the legislature, Mr. McIntyre is reported as follows:

"There is no one of them that covers the whole ground. The bill introduced by Mr. Sharp of Kittitas covers several phases of the irrigation problem and although it contains some provisions which are slightly oppressive in their character, on a whole I think the people of Western Washington generally would be glad to see this bill become a law. But neither this bill or any other so far presented, reaches the vital question of how we are to irrigate our lands, or any way to secure money for such irrigation.

C.R. Rockwood returned from Denver Tuesday and it is with mingled congratulation and regret that The Herald announces the appointment of Rockwood as chief engineer of the Arizona and Sonora Land and Irrigation company and he will leave the latter part of next week for his new headquarters at Yuma. The promoters of the Arizona and Sonora Land and Irrigation company are capitalists of Denver and the irrigation scheme is the largest ever projected in the country. Two million acres of land are to be reclaimed of which the company owns a million and a half. C.E. Perry will accompany Rockwood to his new field of labor--Yakima Herald, September 1, 1892.