UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF RECLAMATION

March 1945

ROZA DIVISION - YAKIMA PROJECT, WASHINGTON

The Roza Division, now under construction, is a part of the Yakima Project, situated in Yakima, Kittitas, and Benton Counties, on the eastern slope of the Cascade Mountains in south central Washington. The irrigable lands occupy a comparatively narrow strip of very fertile land on both sides of the Yakima River, extending from Easton to Kennewick, a distance of about 175 miles. The total project area served by the irrigation system in 1944 was approximately 412,000 acres. This included lands receiving supplemental water under special contracts. Upon completion of the entire development, the total area to be served in the Yakima River valley will approximate 595,000 acres. An adequate and dependable water supply is obtained from the natural flow of the Yakima River and its tributaries, which is supplemented by storage provided in six reservoirs, having a combined capacity of 1,063,800 acre-feet.

<u>Location</u>. - The Roza Division, embracing 72,000 acres, lies above lands already under irrigation in a narrow strip, one to three miles in width and about 90 miles in length, extending from about eight miles north of Yakima southeasterly to the vicinity of Benton City.

Climatic Conditions. — The elevation of Division lands ranges from 700 feet to 1,200 feet above sea level. The climate is mild and free from extreme weather conditions. The average temperature range is from a minimum of 0° F. to a maximum of 100° F., with only occasional extremes beyond these limits. The annual mean temperature averages about 52° F., the frost free period about 190 days, and the rainfall about 7 inches per year. The irrigation season extends from April 1 to October 31.

<u>Soil</u>. - The Division lands have been classified as irrigable and non-irrigable to insure water being delivered only to those lands which can be successfully farmed by irrigation. Irrigable lands are very fertile, easily tilled, and well adapted to general diversified farming and dairying, with certain localities suitable for fruit production. Soil classification data have been indicated on topographic maps, which may be obtained for any tract of land by writing the Bureau of Reclamation at Yakima, Washington.

Excess Lands. - In compliance with the Reclamation Law, no part of the water supply shall be delivered to more than 160 acres in the ownership of any one person. Holdings by any one person in excess of 160 acres shall be considered as excess lands, and no excess lands while held in one ownership shall receive water on any project or division until the owner has executed a valid recordable contract for the sale of such lands under terms and conditions satisfactory to the Secretary of the Interior and at prices not to exceed those fixed by the Secretary. Until at least one-half of the construction charges against excess lands shall have been paid (in cases where large landowners permit the delivery of water to the excess land by executing recordable contracts), no sale of any such lands shall carry the right to receive water unless and until the purchase price involved in such sale is approved by the Secretary of the Interior, and the recordable contracts with large landowners shall so provide. After the owner shall have executed a recordable contract and after the payment of one-half of the construction charges, excess land shall be subject to the same provisions as apply to non-excess lands.

Land Appraisal. - To prevent land speculation, all of the land of the Division has been appraised, by a board appointed by the Secretary of the Interior, as to its dry-land value without consideration of the prospect of obtaining water from the irrigation works being constructed by the Government. Improvements on the land, such as buildings, leveling, ditches, and other improvements of a permanent character were appraised separately. Appraised values for unimproved lands range from \$3 to \$18 per acre. Non-excess lands may be sold for more than the appraised value upon the condition that 50 percent of the selling price in excess of the appraised value of the land and improvements thereon shall be turned over to the district to be applied as a credit to the water right charges on that particular tract of land. Appraisal information on any tract may be obtained by writing the Superintendent or Construction Engineer, Bureau of Reclamation, Yakima, Washington. Copies of the appraisal are also on file in the office of the Superintendent of Irrigation of the Sunnyside Division, Sunnyside, Washington, and in the office of the Roza Irrigation District, Zillah, Washington. The original appraisal of lands in Yakima County is filed with the County Auditor of Yakima County, Yakima, and for lands in Benton County with the auditor of Benton County, Prosser.

<u>Land Ownership</u>. - Most of the lands of the Division are privately owned and would-be purchasers must negotiate directly with owners or real-estate dealers. The Bureau does not maintain a list of farms for sale.

Considerable acreage is owned by the Northern Pacific Railway Company, which are being sold at appraised prices. Inquiries regarding these lands should be directed to the Land Department, Northern Pacific Railway Company, 812 Smith Tower, Seattle, Washington. For information on the limited acreage of unimproved lands owned by the State, inquiries should be directed to the Land Commissioner, State of Washington, Olympia, Washington.

There are about 4,200 acres of unentered public lands in the Division, which will not be opened for entry until after the war. As water becomes available for these lands they are being leased for the present to qualified parties for a nominal charge in order to increase the production of foods essential to the prosecution of the war.

<u>Water Supply and Irrigation Works</u>. - The water supply for the Division is obtained from the Yakima River at the Roza Diversion Dam, situated about 12 miles north of Yakima. This structure is a concrete ogee weir, 558 feet long and 61 feet high. Two 14-foot by 110-foot roller gates provide regulation.

The main canal has a capacity of 2,200 second feet for the first 12 miles. Principal structures in this reach are £ 17-foot horseshoe-shaped tunnels, 3.4 miles long; a 28-foot by 13-foot concrete bench flume, 1.2 miles long; a 15-foot 4-inch diameter monolithic concrete siphon beneath the Yakima River, 1,510 feet long; 3.5 miles of lined concrete canal; and 3.6 miles of unlined canal. At the lower end of the upper 12-mile long section of canal, provision has been made for the ultimate installation of a power plant, of two 5,000 kilowatt generators. Twenty-six pumping plants will be constructed at various points along the lower section of the canal to serve about 25,000 acres of irrigable lands, which cannot be served by the gravity system. About 74 miles of 66,000-volt transmission line and 11 mile of 2,300-volt branch lines will be required to serve the pumping plants, the capacity of which will range from 4 to 48 cubic feet per second and the pumping heads of which will vary from 78 to 200 feet. From the power plant site, the Yakima Ridge Canal, having an initial capacity of 1,300 cubic feet per second, carries the water in a southeasterly direction

for 87 miles. Approximately 16 miles of this consists of tunnels, flumes, and lined sections. The remaining 71 miles are unlined.

Construction of the first 29 miles of the Yakima Ridge Canal and distribution system was completed and placed in operation in 1941, making the first water for irrigation available to approximately 3,300 acres. In 1943, 51 miles had been completed, making water available by gravity to a total of 15,500 acres of irrigable lands. Construction to Mile 59, a point north of Sunnyside, was completed early in 1944, making water available to an additional 5,500 acres. Under the current construction program water will be available in 1945 to an additional 20,000 acres between Miles 59 and 84, the latter point being north and about 4 miles east of Prosser. By 1946 it is expected that construction of the remaining gravity portion of the system will be completed, making water available to a total of about 47,000 acres of irrigable lands. Construction of the pumping plants and distribution system to serve the 25,000 acres of pump lands may not be undertaken until the end of the war.

Markets and Transportation. - Lands of the Division are situated within 6 miles of shipping points and social centers. The main line of the Northern Pacific Railway traverses the length of the Yakima Project and is conveniently accessible to Roza Division lands. A branch line of the Union Pacific Railway system, which has a terminal at Yakima, is also within easy access. Motor coach and freight line service is available along a concrete paved State highway which extends through the valley. Improved secondary roads have been provided to facilitate marketing of produce. Division lands are conveniently located with reference to the principal cities of the Pacific Northwest.

A local market for many farm products is provided by a large number of industries in the area. These include fruit and vegetable canneries and processing plants, fruit and vegetable evaporating plants, a beet sugar plant, meat packing plants, creameries and cheese factories, a winery, grape juice plants, etc. Cooperative fruit growers associations and numerous produce houses provide facilities for distribution and marketing.

Towns, Schools, and Churches. - The city of Yakima has a population of approximately 30,000, and is the county seat of Yakima County and the business center of the project. The largest town, centrally located with reference to Roza Division lands, is Sunnyside, which has a population of approximately 3,500. Other towns and trading centers are Prosser, county seat of Benton County, Grandview, Zillah, and Granger.

Excellent educational facilities are available in valley towns. School buses are operated by the rural school district. In Yakima are located a Junior College and two business colleges. At Ellensburg, 37 miles north of Yakima, the State maintains the Central Washington College of Education.

Reclamation Offices. Field offices of the Bureau of Reclamation are located at Yakima, Washington. The Regional Office is located at Boise, Idaho; the Chief Engineer at Denver, Colorado; and the Commissioner at Washington, D. C. Communications intended for these offices should be addressed as follows:

Superintendent, Bureau of Reclamation, Yakima, Washington;
Construction Engineer, Bureau of Reclamation, Yakima, Washington; Regional Director, Bureau of Reclamation, Boise,
Idaho; Chief Engineer, Bureau of Reclamation, U. S. Custom House,
Denver 2, Colorado; and
Commissioner, Bureau of Reclamation, Washington 25, D. C.