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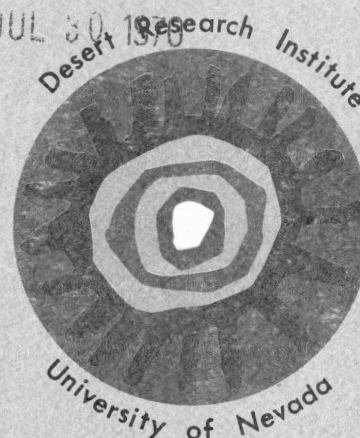
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Irrigation

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Irrigated Lands of Nevada

by

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IRRIGATED LANDS OF NEVADA

1/

Charles T. Bourns

The production of cultivated crops in Nevada is almost entirely dependent upon irrigation. Much of the State's average precipitation of 9 inches falls during winter. Precipitation varies from about 3 inches in the southern desert lowlands to over 20 inches at high elevations in the mountain ranges. The location and extent of irrigated acreage is determined more by water supply than the availability of land suitable for irrigation.

The map "Irrigated Lands of Nevada" shows the location, approximate extent, and shape of irrigated lands. This map was compiled from large scale maps of various portions of the State upon which irrigated areas were drawn. The maps were prepared by local field technicians (Soil Scientists, Engineers, Farm Planners, etc.) of each district of the Soil Conservation Service, U. S. Department of Agriculture. The final composite map was then reviewed by the personnel of the State office of the Soil Conservation Service who gave particular attention to its authenticity and interpretation.

The map presents the irrigated acreage when the water supply is ample: it includes the wild flooded pasture and meadow lands. Along the Carson and Truckee Rivers, the lands shown are those irrigated when water is short. Perhaps an additional 10,000 acres are irrigated when water is ample. In Tables 1 and 2, the irrigated areas are tabulated by county and drainage area. The first column in each table is the estimated irrigated acreage when the annual water supply is 10 percent below the long time mean. On this acreage irrigation is relied upon for crop production each year.

1/ Former Associate Irrigation Engineer, University of Nevada.

The second column presents irrigated acreage when the water supply is ample (10 percent above the mean). The added acreage in years of plentiful water supply is largely wild flooded pasture lands. This acreage may receive only one irrigation by stream overflow in the spring or from simple diversion systems. The total area from which crops or hay are harvested in years of restricted water supply is about 600,000 acres. The remainder is largely irrigated pasture, although some areas may be used for crop or hay land, depending upon physical and economic factors.

There are four major areas which have a fairly stable surface water supply: Fallon-Fernley area (irrigated from the Truckee River and Lahontan Reservoir); Lovelock area (irrigated from Rye Patch Reservoir), and the Muddy River area (irrigated from large springs).

The acreage irrigated by pumping ground water does not vary widely from year to year. There is a gradual increase as new areas are brought under production through establishment of Desert Land Entries. This increase is partly offset by abandonment. It is estimated that the acreage irrigated by ground water is approximately 200,000, of which about 80,000 are irrigated by sprinkler systems.

About 90 percent of irrigated acreage in Nevada is devoted to producing forage crops. The balance is devoted to a wide variety of crops. The specific crop for any area is related, primarily, to its adaptation to the climate, soils, water requirements, distance to markets, and farmer preferences.

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Table II

Irrigated lands in the principal valleys of Nevada

Table 1

Irrigated lands in counties of Nevada

County	Water Supply	
	Limited Thousands of Acres	Ample Thousands of Acres
Churchill	87.9	95.0
Clark	12.5	13.5
Douglas	32.0	46.7
Elko	229.9	329.8
Esmeralda	6.8	7.7
Eureka	56.5	79.9
Humboldt	227.6	312.4
Lander	39.5	52.1
Lincoln	18.5	32.1
Lyon	60.6	78.8
Mineral	5.3	6.2
Nye	43.1	54.6
Ormsby	4.0	4.7
Pershing	42.6	64.3
Storey	1.5	1.7
Washoe	49.2	77.1
White Pine	31.1	55.4
TOTAL	948.6	1312.0

Area	Water Supply	
	Limited Thousands of Acres	Ample Thousands of Acres
Amargosa Desert (1)	6.0	6.0
Diamond Valley (1)	29.5	32.7
Fallon-Fernley Area	87.9	98.0
Hualapai Flats - Gerlach Area (2)	13.8	15.2
Upper Humboldt River Drainage (3)	120.5	155.5
Middle Humboldt River Drainage (4)	62.1	99.8
Lower Humboldt River Drainage (5)	30.7	40.1
Kings River Drainage (2)	30.0	43.2
Lund Area	8.4	11.0
Minden-Gardnerville Area	32.0	46.4
Muddy River Drainage	6.8	7.6
Owyhee River Drainage	78.6	90.6
Pahranagat Valley	6.1	6.7
Pahrump Valley Area (1)	12.7	12.7
Little Humboldt Riv. Drain. (Paradise Valley)	59.6	73.9
Quinn River Drainage (2)	60.0	75.8
Reese River Drainage (2)	22.4	28.5
Reno-Truckee Area	24.2	31.2
Ruby-Clover Valley Area	16.0	22.9
Smith Valley	22.6	25.5
Smokey Valley (2)	10.3	15.8
Yerington Area	38.0	72.9
All other areas	170.4	300.0
TOTAL	948.6	1312.0

- (1) Irrigated primarily by pumped ground water.
- (2) Irrigated mainly by pumped ground water - some surface water used.
- (3) Above Palisades
- (4) Between Palisades and Rye Patch Reservoir, excluding Paradise Valley.
- (5) All Humboldt drainage below Rye Patch Reservoir.

