

PROPOSED
IRRIGATION PROJECTS
IN
UTAH



UTAH WATER AND POWER BOARD

DECEMBER, 1948

PROPOSED IRRIGATION PROJECTS IN UTAH

A Comprehensive Report of the Proposed
Irrigation Developments in Utah

Complied under Direction of
UTAH WATER AND POWER BOARD

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December, 1948

FOREWORD

This report was prepared by the Utah Water and Power Board pursuant to authority expressed by Section IV, Article 1, of Chapter 141, Laws of Utah of 1947.

The law creating the Utah Water and Power Board provides that the interests of the State of Utah require close cooperation between all State and Federal agencies, to the end that the underground waters and waters of the small streams of the State and land there under can be made to yield abundantly and increase the income and well being of the citizens of the State.

To this end, this report emphasizes the need of the smaller projects. It is the smaller projects that can be more efficiently investigated and constructed by the State and sponsoring water users. The larger and more expensive basin and stream developments will, we hope, be investigated and constructed by the United States Bureau of Reclamation.

Recognizing that fulfillment of Utah's potential growth demands forethought and long range planning, this report includes a discussion of each county's present water developments and its supplemental water requirements. It presents all the proposed small reservoir developments and the proposed diversion and conveyance improvements or replacements needed.

Alternate projects are included in order that the relative merit of all possibilities may be considered. Projects that have been reported or that are currently under investigation by the Bureau of Reclamation are mentioned, in order that a more complete picture of the ultimate development within Utah be shown.

Twenty two maps showing the location of the proposed reservoir sites, both State and Federal, are included. Also, these maps designate the lands that have an adequate supply of irrigation water, lands that require a supplemental supply of irrigation water, and irrigable lands that are included under potential irrigation developments.

Special acknowledgment is made to the State Utah Water Users Association which has so ably organized a county water users association in each of the twenty-nine counties in Utah. These organizations represent all the water users within their respective counties, and it was through their efforts that the Utah Water and Power Board was able to contact the majority of the water users representing over 668 organized irrigation companies, and an undetermined number of unorganized water users within Utah.

The Agricultural Experiment Station of the Utah State Agricultural College furnished valuable information which was used in the preparation of this report. It was through the extensive information compiled by them relative to the irrigation companies in Utah, and their irrigation needs, that we were able to assemble the required information in the listed time available.

(continued)

The greater part of the information contained herein on proposed reservoir sites was derived from previous studies made under the supervision of the State Engineer's office. The Soil Conservation Service, through its field offices, also gave valuable assistance and engineering advice on numerous proposed irrigation developments.

Acknowledgment is made to the U. S. Bureau of Reclamation, the reports of which provided the information contained herein on the proposed major irrigation developments.

Terms

Following is a list of terms that appear in this report and their definitions:

Acre-foot.- A unit of measure of volume. It is equivalent to the quantity of water that will cover 1 acre (43,560 square feet), 1 foot deep.

Second Foot.- (c.f.s.) A unit of measure of the rate of stream flow. It is the flow of 1 cubic foot (7.48 gallons) of water passing a given point per second of time. 1 c.f.s. running for 24 hours is equivalent to approximately 2 acre-feet.

Irrigable Land.- Land suitable for irrigated farming, included within an existing project or within a potential development, that reasonably could be furnished a water supply.

New Lands.- Irrigable lands which could be irrigated after project development.

Run-off.- The precipitation that appears as flow in streams. It is usually measured in volume per unit of time, such as acre-feet per day, month or year.

Return Flow.- That part of the divided stream flow returning to the stream.

Silt.- The solid matter or sediment transported by the flowing stream.

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