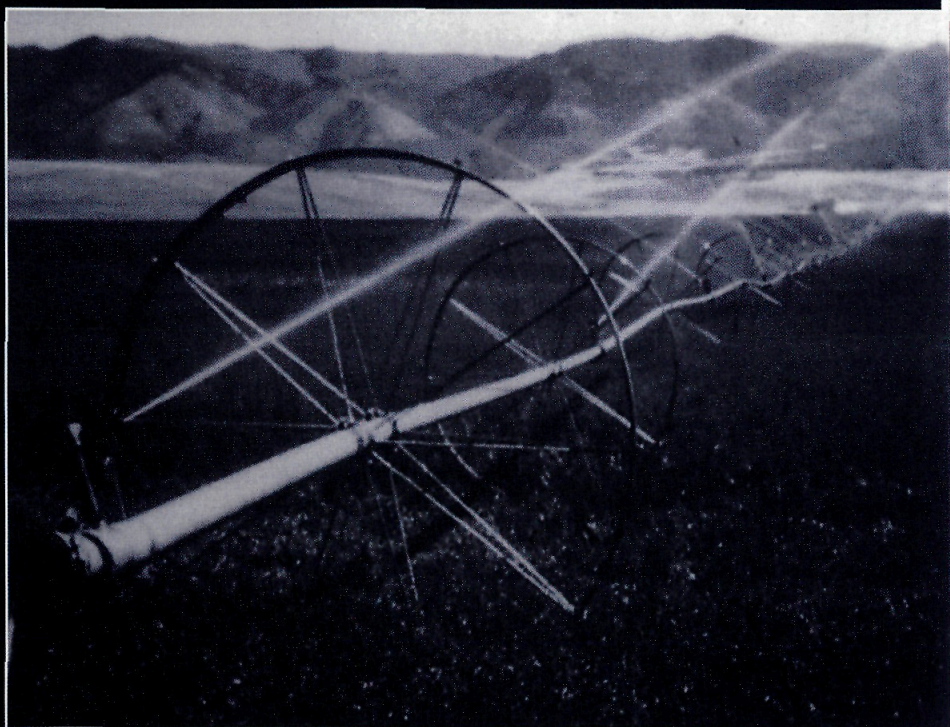


Selection of Irrigation Methods for Agriculture



On-Farm Irrigation Committee



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SELECTION OF IRRIGATION METHODS FOR AGRICULTURE

PREPARED BY
On-Farm Irrigation Committee
of the
Environmental and Water Resources Institute

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Abstract: This report provides an overview of the various agricultural irrigation methods. The variations of each general method (surface irrigation, drip/micro irrigation, sprinkler irrigation, and subirrigation) are described. These descriptions are useful to both the novice and experienced irrigation professional. Most importantly, this report explains the capabilities, limitations, institutional considerations, and economic factors of the methods and their variations. These explanations will facilitate the proper selection of irrigation method for any particular circumstance. Readers will find that there is no universally "best" irrigation method, and that the proper method selection will depend upon the crop, climate, economics, water quality, support infrastructure, energy availability, and numerous other factors.

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PREFACE

This report was prepared to assist engineers, designers, sales people, irrigation managers, students, and others with related interests to become aware of the advantages and limitations of the many available irrigation methods and their variations. The report will assist in broadening considerations for irrigation method selection before the final choice of irrigation method is made. It is intended to reduce the likelihood of falling into a conventional choice just because that is the way it has been done historically. The use of variations, alternatives, and improvements in water application methods may be stimulated. Changes from existing conditions of crops, energy costs, labor, land values, and water availability may require reconsideration of existing conditions. This manual will be of value to all, including the most widely experienced irrigation specialists and designers. It is not a design handbook, but it does indicate important factors to be considered when selecting and designing irrigation systems.

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