Notes for Comments by G. G. Stamm, Chief, Division of Irrigation and Land Use before the Water Resources Committee, American Association of Land Grant Colleges and State Universities, Kansas City, Missouri, November 13-16, 1961

Chairman Renne suggested that I report on the work of the Bureau of Reclamation during the past year and offer recommendations in the field of water resource development and utilization for consideration of your committee.

The program and activities of the Bureau of Reclamation are, of course, part and parcel of the national picture even though our work is restricted to the western states. In this general context I would like to review briefly:

1. The Senate Select Committee's findings regarding the Nation's water resources
2. Recent approved and proposed legislation
3. Reclamation's relationship to the problem and program, and
4. Recommendations for your consideration

Report of Senate Select Committee

The report of the Senate Select Committee on National Water Resources, released in January 1961, was based on 32 reports prepared by various Federal agencies on particular aspects of the Nation's water resources.

This report states in part, "the first and most important step toward getting the job done is the development of increased public
awareness and understanding of the Nation's water resource problems; of their effects on the Nation's economy; and of the possible ways of solving them." This report discusses (1) the Nature of the National Water Problem, (2) actions required in resource development and (3) offered five principal recommendations.

The National Water Problem

A. Nature of:

(1) Water supply in relation to demand. Demand on the Nation's water resources will almost double by 1980, and will triple by year 2000.

(2) Problems of distribution. Full development of all the available water resources in 5 of the 22 water resource regions will be required by 1980 or earlier if the projected increases in population and economic activity are to be achieved. These 5 are South Pacific, Colorado River, Great Basin, Upper Rio Grande-Pecos River, and Upper Missouri River. By year 2000, 3 additional regions will require full development--Upper Arkansas-Red River, Western Great Lakes, Western Gulf.

(3) Water quality problems

(4) Pollution problems

(5) Variability problems. Annual variations of supply for the country as a whole ranges from 50 percent of the average to 140 percent.

(6) Flood problems.
B. Actions Required in Water Resource Development

5 major categories of effort are needed in the future for meeting prospective demands on a long-range basis so as not to inhibit national or regional economic growth.

(1) Regulated stream flow through construction of reservoirs and watershed management.

(2) Improving quality of streams through pollution abatement programs.

(3) Making better use of underground storage.

(4) Increasing efficiency of water use.

(5) Increasing natural water yield by desalting, weather modification, and other artificial means.

C. Recommendations:

(1) The Federal Government, in cooperation with the States, should prepare and keep up to date comprehensive plans for water development and management for all major river basins of the U. S.

(2) Stimulate more active participation by the States in planning and undertaking water development and management activities by setting up a 10-year program of grants to the States for water resources planning.

(3) Undertake a coordinated scientific research program on water.

(4) Prepare biennially an assessment of the water-supply-demand for each of the water resource regions of the
United States as a means of informing the Congress and the public of current and prospective actions needed to meet future demands.

(5) The Federal Government, in cooperation with the States, should take the following steps to encourage efficiency in water development and use:

(a) Regulate flood plain use

(b) Study the emerging water problems of the areas in which water shortage will be most acute by 1980.

(c) Study future needs for major storage reservoirs for river regulation for all purposes.

(d) Provide for public hearings to be held on proposed developments.

RECENT LEGISLATION

Water Pollution

The Water Pollution Control Act of 1948 was extended in 1956 and was further amended by Public Law 87-88 approved July 20, 1961. In summary, the new amendments:

(1) Authorize additional water storage in Federal reservoirs for release during periods of low streamflow

(2) extend enforcement authority against polluters of interstate or navigable waters,

(3) authorize regional laboratories for basic research, and

(4) increase the authorization for matching incentive grants to local governments for construction of State-approved plants.
National Water Resources Planning Act of 1961

The President's proposed Water Resources Planning Act of 1961 would have an important bearing on all water and land conservation and development activities. This proposed legislation would accomplish the following:

1. Provide orderly planning, coordinated effort, and a sensible division of responsibilities.
2. Provide balance in Federal activities in the water resource field, without gaps or overlaps.
3. Permit adapting water policy to changing needs.
4. Permit effective participation by States in water resource planning with grants to States of $5 million for a period of 10 years.
5. Provide assurance of coordinated development within a basin.
6. Provide a means of reconciling all interests in a common development program.
7. Provide a means for keeping over-all development plans current and orderly timing of development to meet over-all needs.

Some things this proposed legislation will not do include:

1. It will not expand Federal jurisdiction and responsibility in water resources.
2. It will not give additional Federal control over water resources of the states.
3. It will not detract from the authority of Congress to authorize and fund developments.
4. It will not interfere with States' and local governments' rights in the field of water resources.
(5) It will not interfere with existing compact commissions or other groups that are doing an adequate job of comprehensive and coordinated planning.

(6) It will/reduce existing authority of Federal agencies for construction of projects.

In summary, one objective of this proposed legislation is to coordinate and strengthen the cooperative relationships among governmental agencies and between levels of government.

Water Supply Act of 1958

Section 10 of Public Law 87-88 amends the Water Supply Act of 1958. It provides:

(1) That costs of modifications or construction to provide storage for domestic, municipal and industrial water supplies are to be shared equitably by authorized purposes.

(2) Agreement by state or local interests to repay costs of supply for present demand in advance of start of construction or modification.

(3) That up to 30 percent of total costs of any project can be allocated to future demand where there are reasonable assurances and evidence that such demand will develop within a time period to permit payment of costs within the useful life of the project.

Saline Water

On June 26, the President acted to attack the water problem on another front when he forwarded to the Congress proposed legislation
to expand and extend efforts in the saline water program. Public law 87-295 approved September 22, 1961, will provide the basis for continued attack on conservation of saline water for man's use. This program will be at a level of $75 million for a period of 6 years. This is an increase from about $1 million to $12.5 million per year.

On June 21, the Nation's first saline water conservation and storage plant at Freeport, Texas, was dedicated. It is the first plant capable of producing 1 million gallons of fresh water per day and the first to regularly supply the water needs of a United States municipality.

RECLAMATION

In its recent final actions, the First Session of the 87th Congress provided one of the most generous Reclamation appropriations in a decade. For this fiscal year ending June 30, 1962, the construction and rehabilitation program (including loans for small projects) totals over $270 million. Final approval and funding of the program came three months late. This is not without precedent and for some projects it means a loss of three months of good construction weather. We believe our construction progress would be improved if funding were on a calendar year rather than a fiscal year basis. This would permit award of contracts during bad weather months and allow contractors a full season of work without interruption.

The over-all appropriation contained funds for 7 new construction starts as follows:
(1) San Luis Unit, Central Valley Project, California
(2) Bully Creek Extension, Vale Project, Oregon
(3) Western Division, The Dalles Project, Oregon
(4) Cheney Division, Wichita Project, Kansas
(5) Canadian River Project, Texas
(6) Norman Project, Oklahoma
(7) Emery County, Utah, a participating project of the Colorado River Storage Project.

Three of these new starts are largely municipal water supply developments. (Wichita-Cheney, Canadian River, and Norman).

Major construction activities will continue, of course, on the 4 storage units, transmission lines, and participating projects of the Colorado River Storage Project; Missouri River Basin Project; Central Valley Project, California; San Angelo Project, Texas; Weber Basin Project, Utah; Columbia Basin Project, Washington; and other projects in various stages of development.

**General Administrative Expenses**

In past years a share of general administrative expenses has, by the nature of appropriations, been charged against construction and operating projects. The F.Y. 1962 appropriation Act increased the amount of nonreimbursable funds for this purpose from $4,57 to $9.43 million. This will permit the charge of general costs not benefiting specific projects to be treated in the same manner as appropriations to other agencies and Departments of the Federal government.
Research

Total allowances for research were increased slightly over F.Y. 1961. However, it is significant that three new items of inquiry are provided for:

(1) Weather modification $100,000
(2) Power intertie studies 300,000
(3) Pump-back storage investigations 150,000

Legislation needed

Legislation needed which is directly related to administration of the Reclamation program includes:

(1) Repeal of the right-of-way provisions of the Act of 1890.

This act gives the Government a perpetual easement for irrigation works on lands patented after 1890. We find adjacent lands patented both before and after 1890 in some project. Rivers and canals through lands not benefited areas. Equitable treatment should be accorded each class of owners. Also lands in W/L, 100 million.

(2) Amendment of excess land provisions of Reclamation Law.

A modified basis for definition of the limitation is needed to give equitable consideration to variations in land productivity and the full or supplemental nature of the water supply.

(3) General Authority for recreation projects.

RECOMMENDATIONS

Chairman Renne asked that my comments include recommendations in the field of water resource development and utilization for consideration of your Commission.
(1) The Senate Select Committee on National Water Resources emphasized that "the first and most important step toward getting the job done is the development of increased public awareness and understanding of the Nation's water resources problems; of their effects on the Nation's economy; and of the possible ways of solving them."

Legislation is not needed but you can make a distinct contribution through developing an understanding and awareness among your members, and the public, of these problems, their effects, and some of the ways to solve them.

(2) The Senate Select Committee report shows that 5 western river basins need to be fully developed by 1980. The water supply and pollution abatement problems involve the need for 315 million acre-feet of reservoir capacity by 1980, plus an additional 127 million acre-feet between 1980 and year 2000. To meet this need will require 3.6 times the total water storage capacity built by the Bureau of Reclamation in the 58-year period, 1902-1960. The 40-year need is 5 times greater than that which was built by the Bureau in 58 years.

Your active support of programs for meeting these goals is needed--your support as individuals and your collective support.

(3) The Senate Select Committee report outlines a distinct need for research in "evaluating completed projects with a view of determining methods to enable them more effectively to meet changing needs, to provide better guidelines for future projects, and to better determine their effects on the local, regional, and National economies."
The colleges and universities have a vast reservoir of talent for performing this type of evaluation. Heretofore, contributions have been more in the area of criticism of procedures used in evaluating projects rather than the development of coordinated acceptable procedures covering all phases of multipurpose project evaluation.

Understanding is needed that with the establishment of an irrigation economy, benefits accrue to the local area, to the region, and to the Nation. We need ways and means of separating and of measuring these so the irrigation allocation is based only on the direct irrigation benefits that accrue to the farmer.

The cost-benefit ratio is an attempt to apply a finite mathematical measurement to a socio-economic situation. We need new measures—new ways and means of obtaining a true evaluation of the benefits and of beneficiary groups. The colleges and universities can make a real contribution to water resource development if they will but lend their collective minds and efforts to this end. We would like to cooperate with you so that you understand fully the legislative and administrative problems inherent in such evaluation.

The President's proposal for coordinated water resources planning is contained in H.R. 8177, introduced by Congressman Aspinall last year. A chain is only as strong as its weakest link. Our Nation will be strengthened through the coordinated planning and development for making maximum beneficial use of our limited water resources.

Your active support of H.R. 8177 is needed. Let me urge you to study this proposal and develop that essential public awareness and understanding.

Recreation: Tremendous increase in use. No authority in order to provide projects for building facilities. No allocation of costs to Recreation.
Dr. Seeks - Forma Chancellor - West Univ. System

Aug. 1947

USWA - Laborer, Water Commission, St. Helens, Ore.

Byrd

F. Aug 4

J. Aug 5

York

Department

INTRODUCTION - Economic policies of the Federal Government have been a matter of public discussion for some time. The Government, through the United States Department of Commerce, is conducting investigations covering the practices of corporations and

(c) on the direct acquisition of coal and oil. In addition, the Government is also looking into the possibility of direct acquisition of coal and oil by the Federal Government itself. These investigations are being conducted under the direction of the Federal power agency.

D. Philip Cooke

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problems important to such enterprises.

(2) The President's Program for coordinated water resource planning

is contained in the . . . Bill introduced in Congress as S. 158. This bill

proposed to provide a comprehensive framework for planning and developing

West and Southeast water resources, as well as for the efficient and economical

use of our limited water resources.

For efficient use of our water resources, Federal action is necessary. Federal

action, in turn, must be based on the need for adequate supplies of water for

tions and the need to develop the regions' water resources.