Statement by Commissioner, Gilbert G. Stamm,  
Bureau of Reclamation, Department of the Interior,  
before the Subcommittee on Water and Power Resources,  
House Committee on Interior and Insular Affairs  
on Legislation to Authorize Certain Feasibility Investigations  

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Mr. Chairman, and members of the Subcommittee, we appreciate the opportunity to testify today as the Departmental witnesses on proposed legislation that would authorize the Secretary of the Interior to undertake feasibility studies on 10 potential Reclamation projects. The bills involved are H.R. 4922, H.R. 5813, H.R. 5850, H.R. 6009, H.R. 6236, H.R. 6237, H.R. 6411, H.R. 6620, H.R. 6653, H.R. 6671, and H.R. 6669.

H.R. 6669 is an omnibus measure containing the substance of all the other bills, and the other bills are as follows: H.R. 5813, which concerns power transmission systems in the Western States; H.R. 6009, which deals with the Boulder Canyon Project modification at Hoover Dam in Arizona and Nevada; H.R. 6411, which deals with the Minidoka Dam Powerplant on the Snake River in Idaho; H.R. 5850, concerning the Mora River Basin in New Mexico; H.R. 6236, which concerns the Yakima Indian Reservation near the Yakima River in Washington; H.R. 6237, covering the Columbia Northside Project on the White Salmon River in Washington; H.R. 4922, regarding the Seward Project in Oklahoma; H.R. 6620, which covers the Frenchman-Cambridge Division of the Pick-Sloan Missouri Basin Program in Nebraska; H.R. 6671, covering the Upper Canadian River Basin, New Mexico; and finally, H.R. 6653, which concerns the Vorsiipi Unit, Pick-Sloan Missouri Basin Program, North Dakota.
We will discuss briefly each of the potential investigations before you:

**Power Intertie Study - (H.R. 5813):**

H.R. 6669 would authorize the Secretary of the Interior to conduct electric power intertie studies in the Western States. The study would consider electric power transmission improvements through an evaluation of the benefits, revenues, and costs that will result from integrating loads and resources among major river basins by means of power interties.

Power interties have the potential of helping to alleviate future electric power crises by enabling expanded use of existing and new generating capabilities, to utilize more effectively the daily, seasonal, and cyclical surpluses. Possible benefits could result from diversity in types of loads served, seasonal load variations, diversity in streamflow and load differences due to a difference in time zones. It may also be possible to reduce the individual basin reserve and standby power requirements by reason of ability to pool capacities of several transmission systems.

The study program includes consideration of potential power interties in the Western States which would assist Federal, public, and private power suppliers to serve their customers' load requirements at a lower cost as well as result in conservation of resources. Both public and private entities will be involved throughout the course of the study and specific input will be included from private power interests in the major power marketing areas.
A benefit-cost ratio is not available for precise alternatives to be considered in this study. However, previous preliminary studies by Department of the Interior agencies of similar power interties completed in 1968, indicated benefit-cost ratios ranging from 1.3 to 1.9.

Boulder Canyon Project - (H.R. 6009):

H.R. 6669 would authorize the Secretary of the Interior to conduct a feasibility study of the potential modification and enlargement of the hydroelectric powerplant at Hoover Dam by adding or modifying generating units to increase the plant's power peaking capacity. The proposed study includes an examination of many considerations, such as the effect of the potential powerplant modification on the fisheries of the Lake Mead area, the possibility of river channel excavation, an evaluation of the value of potential generating capacity additions, and environmental impact studies, including consideration of any additional or enlarged transmission lines.

A preliminary investigation of additional generating capacity at Hoover Powerplant was completed in April, 1973. The investigation indicated that it was technically and economically feasible to increase the peaking capacity at Hoover Powerplant by an additional 1,000 megawatts. During the study a variety of possible modifications were considered, including both conventional hydroelectric units and reversible pumped-storage hydroelectric units. On the basis of these preliminary studies, the potential project is estimated to have a benefit-cost ratio of at least 1.0 to 1.0.
Minidoka Powerplant Project - (H.R. 6411):

H.R. 6669 would authorize the Secretary of the Interior to conduct a feasibility study of the rehabilitation and enlargement of the existing Minidoka Dam, Powerplant, and Reservoir on the Snake River in Idaho. Minidoka Dam was completed in 1906, one of Reclamation's earliest projects. The study would evaluate the feasibility of rehabilitating or replacing the existing units, most of which are small and quite old, and providing additional generating capacity at the existing Minidoka Powerplant. The existing installed capacity of 13,400 kilowatts (kW) could be increased to about 30,000 kW. Powerplant enlargements in the range of 10-25,000 kW would be evaluated. The possibility of peaking operations and downstream re-regulation also would be considered.

Preliminary 1975 reconnaissance data and evaluations indicated a project benefit-cost ratio of 1.5 to 1.0 for a plan with single-purpose hydropower enlargement of 16,600 kW at the powerplant as the only function.

The need for new recreation facilities at Lake Walcott (the reservoir formed by Minidoka Dam) would be studied. Fish and wildlife and water quality enhancements also would be considered. However, a multipurpose alternative has not been analyzed as to its economic viability.

Mora River Basin Project - (H.R. 5850):

H.R. 6669 would authorize the Secretary of the Interior to conduct a feasibility study of the water resources of the headwaters of the Mora River, located in Mora County in north-central, New Mexico.
There is currently a lack of support for any of the developments proposed in the "Mora Project Wrap-Up Report" prepared by the Bureau of Reclamation in January 1974. The report also estimates that more than 50 percent of the costs would be allocated to fish and wildlife and recreation which exceeds the limit for those purposes established by Public Law 89-72.

Yakima Project - (H.R. 6236):

H.R. 6669 would authorize the Secretary of the Interior to conduct a feasibility study of irrigation and related recreation, flood control, fish and wildlife, and redevelopment potentials for the Yakima Indian Reservation area in south-central Washington in the vicinity of the Yakima River. Major population centers on the reservation are Wapato, Toppenish, White Swan, Harrah, Brownstown, and Parker. The total Indian population is over 5,000. Non-Indian cities adjacent to the reservation area are Yakima, Granger, and Union Gap with populations totaling about 50,000.

The proposed investigation combines the results of three previous studies, including two sponsored by the Bureau of Indian Affairs (BIA) of potential plans to develop the Mabton and Toppenish-Simcoe Projects within the Yakima Indian Reservation with our appraisal and feasibility level studies of the potential Ahtanum Unit, Yakima Project. Therefore, the objective of this study is to combine the viable aspects of the above three studies into a single, updated proposal for consideration by the Congress. There is now general acceptance in the valley and by the Yakima Tribal Council and BIA for combining the potential
developments into a single-coordinated proposal.

The combined project would have the potential to irrigate 19,800 acres of Indian and 13,400 acres of non-Indian lands; provide 600,000 recreation days annually under initial use conditions; enhance fishing and hunting to the extent of up to 258,000 man-days per year, as well as provide significant flood control and area redevelopment benefits. A reformulation combining the functions of the three individual projects as a unit indicates a benefit-cost ratio of 1.11 to 1.0.

Columbia Northside Project - (H.R. 6237):

H.R. 6669 would authorize the Secretary of the Interior to conduct a feasibility study of water resource development potentials along the White Salmon River in Klickitat and Skamania Counties, Washington.

The purpose of the feasibility investigation is to formulate a viable plan for developing offstream storage in the White Salmon River drainage and would include the following considerations: (1) provide the hydrologic and physical setting for a pumped-storage hydroelectric generating complex with an estimated capacity of 1,500 megawatts (MW) to be developed in conjunction with a public utility district or some other non-Federal entity; (2) provide an irrigation water supply to develop fruit orchards on 10,000 to 20,000 acres in the area; and, (3) supply municipal and industrial (M&I) water to the towns of White Salmon and Bingen. The storage would also provide a base for water-oriented recreation, fishery resource, and incidental flood control benefits.
In addition, the study would formulate an environmentally acceptable plan for removing the Condit Dam from the White Salmon River to open 25 miles of main river fishery habitat to salmon and steelhead trout.

Results of a February 1974 appraisal report on the project indicated a benefit-cost ratio of 1.84 to 1.0 for one of five alternative plans considered in that report. That plan included fishery enhancement; hydroelectric power generation (pumped-storage concept); domestic, municipal, and industrial water supply; and, recreation, irrigation, and flood control.

**Seward Project - (H.R. 4922):**

H.R. 6669 would authorize feasibility studies of water resource development proposals for central Oklahoma, including the cities of Guthrie, Edmond, and five other communities.

The feasibility study would proceed with an initial focus on the ground water capabilities in the area. There would be close cooperation with the Corps of Engineers, the Association of Central Oklahoma Governments, Oklahoma City, and the Oklahoma Water Resources Board in order to continuously evaluate the need for the project.

We note that the Corps of Engineers is currently exploring several projects which could be alternatives to the Seward Project, and the ground water situation in the area is not yet adequately known for long term municipal and industrial water supply needs.
A December 1974 appraisal level report studied a potential Seward Dam and Reservoir in Logan County. The dam would create a reservoir with a storage capacity of about 201,000 acre-feet at the top flood control pool, and a water surface area covering about 10,200 acres.

The benefit-cost ratio of the plan has been estimated at 1.3 to 1.0 in an evaluation which utilized an interest rate of 5-7/8 percent.

Frenchman-Cambridge Division, Pick-Sloan Missouri Basin Program—(H.R. 6620):

H.R. 6669 would authorize the Secretary of the Interior to conduct a feasibility investigation of a supplemental water supply for the Frenchman-Cambridge Division, Pick-Sloan Missouri Basin Program (P-SMBP), located in southwest Nebraska. An appraisal report is underway and scheduled for completion in June 1975.

The goal of the potential plan is to prevent a loss of water supply to 10,000 acres of presently irrigated land which might otherwise go out of production by year 2000 due to a decreasing water supply.

The feasibility study would evaluate alternative plans and implementation schedules to optimize the water resources of the Frenchman-Cambridge Division, including alleviating water supply shortages of the Frenchman Valley and H&RW Irrigation Districts. The alternatives to be considered include: (1) measures to reduce distribution system losses; (2) irrigation management services (IMS); (3) development of additional storage facilities; and (4) no development.
However, the implementation of any corrective measures and an eventual solution to the water problems of the area, may be dependent upon Nebraska legislation to control further encroachment on surface water flows by ground water development. In addition, some type of equitable cost-sharing arrangements by a non-Federal entity will be explored.

The best potential plan among alternatives considered in the current appraisal study is estimated to have a benefit-cost ratio of 2.86 to 1.0.

Upper Canadian River Basin Project – (H.R. 6671):

H.R. 6669 would authorize the Secretary of the Interior to conduct a feasibility investigation of the development of a municipal and industrial water supply for the city of Raton, located in northeastern New Mexico.

Previous city of Raton consultant reports have provided information, and studied plans relative to development of a water supply for the city. Thus, considerable appraisal level data is available from which to initiate a feasibility study.

A feasibility study would evaluate all available studies and incorporate useful information therefrom in determining the overall feasibility of the proposed development. The investigation would assess alternative plans for the immediate and long-range municipal and industrial water needs of Raton. It would assess the environmental and social conditions with and without a project.
Also, a feasibility level study of potential ground water and surface water resources would be conducted, and would include: (1) the Upper Canadian River and its tributaries; (2) the Dry Cimarron River Basin; and, (3) ground water resources in the vicinity of Capulin, located about 30 miles east of Raton.

Versippi Unit, Heart Division, Pick-Sloan Missouri Basin Program – (H.R. 6653): H.R. 6669 would authorize a study of the Versippi Unit, Heart Division, Pick-Sloan Missouri Basin Program, principally for the purpose of projecting long-range water supply plans for the city of Dickinson, North Dakota.

Initiation of the study should, however, depend on better indications that anticipated growth in the area will take place, with the study designed toward providing long range water supply contingency plans.

A feasibility study now being accomplished by the Bureau of Reclamation should lead to a plan for supplying Dickinson with adequate M&I water through 1985. Beyond that time frame a large project of the scale of the Versippi Unit will be required only if there is substantial development of the lignite coal reserves in the area of Dickinson. The feasibility study of the Versippi Unit would be an important factor in the planning process if this level of industrial development does indeed occur.

The principal long-term alternative to the above mid-term plan is to secure additional water supplies from the potential Versippi Unit, including the Versippi damsite and reservoir on the Green River about 6 miles from Dickinson. The estimated project cost is $12,000,000 and
the benefit-cost ratio is evaluated at about 1.5 to 1.0. The Versippi site would also provide fish, wildlife, and recreational benefits, as well as some flood control.