## Bridge and Marble Canyon Dams and their Relationship to Grand Canyon National Park and Monument

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Bridge Canyon Damsite

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Relationship of

## Proposed Bridge and Marble Canyon Dams and Reservoirs on the Colorado River *to the* Grand Canyon National Park and Monument

The Bridge Canyon and Marble Canyon Dams and Reservoirs are key features proposed for construction on the Colorado River as a part of the proposed Pa-

cific Southwest Water Plan. Legislation for this purpose has been prepared for presentation to the Congress.

Energy from the hydropower plants at Bridge and Marble Canyons will be important for pumping of water and to provide a source of revenue to aid in financing the costly but vital water development plan.

Marble Canyon Dam and Reservoir: This project will be located 12-1/2 miles above the upstream boundary of Grand Canyon National Park, and is outside of the national park and monument. It is anticipated that a minimum flow of at least 1,000 cubic feet per second will be maintained below Marble Canyon Dam through the Grand Canyon.

Bridge Canyon Dam and Reservoir: Bridge Canyon Dam will be located about 2-1/2 miles upstream from Lake Mead. It is planned as a concrete arch structure rising 673 feet above streambed within the inner gorge of the canyon. At maximum normal water surface elevation of 1, 866 feet, Bridge Canyon Reservoir would be 93 miles long, contain 3, 710,000 acrefeet of water and have a surface of 16,650 acres.

The first 53 miles of the reservoir would be located in Lake Mead National Recreation Area. From this point, the reservoir would back water through Grand Canyon National Monument for a distance of 40 miles. The upper 13 miles of the reservoir would flood the inner gorge between Grand Canyon National Park and Monument. In no case will the water top the inner gorge and upstream, in the Monument and Park area, it will be well below the lip of the inner gorge.

At the mouth of Havasu Creek, for example, the reservoir at maximum operating elevation would be 83 feet deep within the inner gorge which is about 2,700 feet deep here. This is well below the lowest of the scenic falls of Havasu Creek as well as the Havasu Indian Reservation.



Reclamation Reservation Within the National Park: Section Seven of the Act of February 26, 1919 (40 Stat. 1176) authorizing Grand Canyon National Park states "That, whenever consistent with the primary purposes of said park, the Secretary of the Interior is authorized to permit the utilization of areas therein which may be necessary for the development and maintenance of a Government Reclamation Project."

The Department of the Interior is intensely aware of its responsibility to conserve scenic resources, as well as its responsibility to encourage judicious conservation of water resources. In the case of Bridge Canyon Dam and Reservoir, it is thought the far-reaching regional and national economic advantages

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to be gained from the project outweigh the impact on the natural scenic grandeur of the Grand Canyon.

On the other hand, Bridge Canyon Dam and Reservoir will provide a water highway through the spectacular inner canyon gorge of the Monument to the lower reaches of the Park. In the past this section of the inner canyon has been visited by wild river boating, a unique and exhilarating experience participated in by several hundred persons each year. Such "white water" river trips would still be possible through the National Park section of the Grand Canyon below Marble Canyon Dam. Below Kanab Creek, this recreational opportunity would be replaced by the usual reservoir type boating experience.

> In its assigned function as the Nation's principal natural resource agency, the Department of the Interior bears a special obligation to assure that our expendable resources are conserved, that renewable resources are managed to produce optimum yields, and that all resources contribute their full measure to the progress, prosperity, and security of America, now and in the future.



## U. S. DEPARTMENT OF THE INTERIOR Stewart L. Udall, Secretary BUREAU OF RECLAMATION Floyd E. Dominy, Commissioner