

*Idaho Water Right
Scenic Beauty, Health,
Recreation, Transportation
Communication Purpose*

opposed to the project at elevation 2,069, whereas local sentiment at Priest River favored the proposal. The Governor of Idaho stated that a license and certificate of water rights had been issued in 1928 to the Governor, in trust for the people of Idaho, by the State commissioner of reclamation, for 2,400,000 acre-feet of water in Pend Oreille Lake. This action was directed by the legislature in the laws of 1927, chapter 2, section 1, which declared the preservation of the unappropriated water of Priest, Pend Oreille, and Coeur d'Alene Lakes "in their present condition" for scenic beauty, health, recreation, transportation, and commercial purposes necessary and desirable for all inhabitants of the State to be a beneficial use of such water. The Governor also stated that just prior to the hearing he had made application to the same official for a permit for the construction of a concrete power dam at Albeni Falls, which would impound 1,615,000 acre-feet and stabilize the lake level at elevation 2,064. Presumably this degree of regulation would, in the eyes of the State officials at that time, preserve the lake in its "present condition." The attorney general of Idaho later confirmed that such a permit had been issued. However, there has been no subsequent action toward development of the site by the State, and the testimony of these officials indicated clearly that the water-right filing was for the purpose of controlling, rather than either preventing or undertaking, the development locally.

54. One of a series of hearings held by the subcommittee of the Committee on Irrigation and Reclamation of the House of Representatives, Seventy-eighth Congress, first session, to investigate the plans for the improvement of Columbia River and tributaries, was held in Sandpoint, Idaho, August 28, 1943. The account of this hearing is published as part 2 of the publications covering the series. The Governor of Idaho testified (p. 533) that construction of a dam at Albeni Falls creating a top reservoir level at elevation 2,062.5 feet had been agreed upon by representatives of Bonner County and the State administration, following the June hearings.

55. A report entitled "Proposed Program of Development of Columbia Drainage Basin," issued December 17, 1943, by an advisory committee of the Northwest States Development Association, recommended for emergency or immediate postwar construction, a dam for power and storage at Albeni Falls with height of normal water surface at elevation 2,062.5. The association is formed by the Governors of Idaho, Oregon, Montana, Washington, and Wyoming. The committee is representative of the respective State departments having to do with the planning and administration of the land and water development resources within the Columbia Basin States.

56. A gradual crystallization of local opinion favoring limitation of storage in Pend Oreille Lake to an elevation not exceeding 2,062.5 has been evidenced through the course of the public hearings and official studies mentioned above. That criterion, therefore, was adopted by the Corps of Engineers in considering possible developments between the lake and the international boundary. The development that would produce maximum navigation, flood control, and power benefits is a dam at Boundary dam site to develop practically the entire length of Pend Oreille River within the United States and form a reservoir continuous with Pend Oreille Lake. Such a proposal was presented at public hearings at Sandpoint, Idaho, and Metaline Falls, Wash., during May 1947. The Boundary project was opposed by

many owners of farms in the area in the vicinity of Cusick, Wash., whose lands would be flooded, and by business interests connected with agriculture there. It was also strongly opposed by mining interests in the vicinity of Metaline Falls on the grounds that seepage of reservoir water would interfere with operating properties and might render inaccessible the great undeveloped zinc and lead ore resources of that area.

57. The representative of the Governor of Idaho stated that the pool level proposed for the Boundary project (elevation 2,062.5) was not objected to by the State. The majority of private interests in Idaho also did not object but some farmers in the vicinity of the town of Clark Fork and a few other property owners opposed development of the pool to this elevation. Many who opposed construction of Boundary Dam favored a series of low dams or development of sites upstream as alternatives. Several proposed that a dam with pool elevation not exceeding 2,062.5 be constructed at the Albeni Falls site.

58. It is believed that the voluminous expressions of public and official opinion available concerning development of Pend Oreille River establish conclusively that the maximum storage level now acceptable to the people of northern Idaho is elevation 2,062.5, and that the only site that is economically feasible and at the same time acceptable to the people of northeastern Washington for development in the foreseeable future, is at Albeni Falls.

CHAPTER III. PROJECT PLAN

59. Functions of the project. Albeni Falls project will serve the multiple purposes of power generation, navigation, flood control, fish and wildlife conservation, and recreation. Power development at the dam and increased power potentiality at all downstream generating stations through river regulation in the proposed reservoir will be a valuable and needed addition to the power supply of the region, now inadequate to meet the rapid growth of power loads. The value of power benefits is the predominant factor in the economics of the project. Navigation conditions in the lower Columbia, which constitutes an important artery of commerce extending more than 300 miles inland, will be improved by increases in minimum channel depths resulting from regulation in the reservoir. The opportunities for recreational boating, now an important activity on Pend Oreille Lake, will be extended and conditions for the support of fish will be improved by the greater constancy of water stages. The capacity for sustaining fish also will be increased somewhat by the prolongation of the lake downstream. A small adverse effect on wildlife will result from the project, largely to fur-bearing animals. (See appendix V.) Substantial benefits will accrue to the marginal areas around Pend Oreille Lake that are now periodically damaged by high water during the spring run-off. Improved channel conditions at the dam site, which now forms a constriction in the lake outlet, will permit floods to pass through the lake at lower peak stages. The proposed method of reservoir operation will provide simultaneously the maximum in system-power benefits and the maximum in flood-control benefits. Floods above normal pool elevation 2,062.5 will be passed through the reservoir as rapidly as possible and surplus waters will be impounded and

¹ Not printed.

only normal pool 2062.5

no summer & winter pool

Purposes
compare to
Id water rights
power generation
navigation
flood control
fish & wildlife
conservation
recreation

held at normal pool level until fall, thereby stabilizing Pend Oreille Lake levels through the spring and summer recreational period of about 6 months, in contrast with the rapid recession of lake levels now experienced from June to September. During the fall and winter period when regional power supply is lowest and power loads are greatest, the stored water will be drawn upon for power purposes at such a rate that maximum draw-down will occur just before the spring floods.

60. The maintenance of Pend Oreille Lake levels at or near the normal reservoir pool elevation of 2,062.5 throughout the summer growing season may foster the economical irrigation of certain adjacent shorelands by means of pumping from the lake. Any such irrigation probably would be developed as small private enterprises by individual landowners whenever economic conditions provided incentive. As these enterprises would not be components of the project development, the benefits that might be realized are not ascribed to the project nor included in the economic analysis thereof. Instead, they are considered more properly to be contingent advantages offsetting in some degree the reduction in agricultural production resulting from prolonged inundation of flood lands now capable of limited use following subsidence of high water. Ground-water levels in the Spokane and Little Spokane River valleys, where certain irrigation water supplies are pumped from wells, are believed to be related to Pend Oreille Lake levels. The maintenance of the lake at the proposed elevation through the summer may augment slightly the Spokane Valley irrigation supply and reduce pumping lifts for a part of the season. However, this eventuality is too uncertain to constitute a specific objective. In view of the indefinite nature and limited extent of possible benefits, irrigation is not considered to be a purpose of the project.

61. *Investigations, field.*—The principal investigations for this project, conducted on the ground, were:

- (a) Topographic surveys made at the site, and soundings taken in the immediate vicinity of the proposed structures, as indicated on plate 10.¹
- (b) Sub-surface site investigations made by means of 9 exploratory drill holes at the dam and powerhouse sites, and seismic investigations consisting of 74 lines along the channel between Albeni Falls and Pend Oreille Lake.
- (c) Seepage-loss investigations at the south end of Pend Oreille Lake.
- (d) Surveys to determine flowage costs, including relocations of highways, railroads, and other utilities, and effects on agricultural lands and production and on local tax revenues.
- (e) Geological reconnaissance of the site and reservoir banks to determine the possible effects of the project upon existing structures.
- (f) Water-surface elevations at 16 points along the channel between Sandpoint and the site, taken throughout the high-water period of the 1943 season.

62. *Office investigations.*—Studies constituting the bases for this report include:

- (a) Estimate of future irrigation developments in the United States and Canada, together with their water requirements, the probable amounts and distribution of return flow, and the effects upon stream discharge.
- (b) Backwater studies, preparation of backwater curves, water-surface profiles for various flows between Pend Oreille Lake and the dam site, and hydraulic studies of spillway capacities.
- (c) Calculation of the effects of channel improvement to various extents at evident controls between Pend Oreille Lake and the dam site, together with estimates of quantities of costs.

¹ Not printed.

6 months
of normal pool
2062.5

maximum draw-down
just before spring
floods - June - May
currently October

fowl hunting are exceptional, as are the varieties of fishing afforded by the tributary streams and the lake itself. Some of the largest and gamiest varieties of trout on this continent have been introduced with such success that catches from Pond Oreille Lake are conspicuous in the national records. The area is strategically situated with respect to east-west and north-south rail and highway routes linking other popular tourist destinations. It lies approximately in the center of a circle that includes the Canadian national parks, and Glacier, Yellowstone, Crater Lake, and Rainier national parks in this country; Seattle, Victoria, Vancouver, the Olympic Peninsula, and San Juan Islands of the Puget Sound area; the high Rockies, the Cascades, and the primitive area of central Idaho. All of these and many other attractions bring touring vacationists to, or within easy driving reach of, this locality.

Funding
Recreational development plan
Riley Creek
Spiny Point
Trestle Creek
Cedar Creek projects
all other corp projects
use these funds

Funding of
municipal
improvements

101. Sandpoint, Idaho, is the focus of activity on the lake. The town and the Federal Government, through the Works Progress Administration, have invested substantial sums in the improvement of boat moorings, benches, bathhouses, and water-front access. The opportunities for recreational use of the lake will be greatly expanded by the maintenance of the project pool level through the summer season, in contrast with the rapid recession of lake levels that now occurs through July and August. Such stabilization of the lake level is a primary objective in the earlier of two congressional authorities under which this report is submitted. Recognition of the attendant recreational opportunities and inclusion of their development as a part of multiple-purpose improvement projects is required by existing legislation.

102. At such time as the Albeni Falls project is authorized by Congress, the further development of basic recreational facilities at Sandpoint and other localities on the reservoir will be an important part of the project, requiring a carefully prepared and detailed recreational plan. Preliminary consideration for the instant report suggests several features that might be advantageously incorporated in such a plan. Dike construction on the Sandpoint water front, necessitated by prolonged maintenance of the lake level at 2,062.5, may be combined economically with excavation for a small-boat basin. The existing municipal beaches and their improvements must be restored at the higher level and, in the process, could be extended and provided with adequate bathhouses, parking and picnic grounds, recreational equipment, landscaping, and access. Mooring facilities at Priest River and other points might be included.

103. Certain other improvements may be desirable at Sandpoint or other places on the reservoir, not only in connection with recreational development, but in the interest of public health as well. The existing Sandpoint municipal septic tank may require overhauling and enlargement to provide more complete treatment of sewage before it is discharged into the lake. The slough that now forms the outlet of Sand Creek would become a lagoon throughout the summer. If further improved by deepening and realining as an extension of the boat basin, with suitable landscaping of the banks, it would become a substantial asset adjoining the business districts, rather than the swampy, littered nuisance it now is.