DEPARTMENT OF THE INTERIOR

INFORMATION SERVICE

BUREAU OF RECLAMATION
Region 1 - Boise, Idaho

FOR RELEASE TO AM's of Sunday, May 21, 1950

BOISE, Idaho--Coordination of flood control operations of Bureau of Reclamation reservoirs in the Pacific Northwest to reduce potential damage from the spring run-off of the Columbia River and its tributaries, was announced today by Regional Director M. T. Nelson. The coordination will be achieved in conjunction with flood control measures of the Corps of Engineers.

Nelson said that he had given Frank M. Clinton, Assistant Regional Director, the responsibility of assuring maximum utilization of available Reclamation reservoir space for flood control consistent with local conditions and irrigation storage requirements. Clinton will compile a daily report of reservoir filling operations on the Yakima (Washington), Minidoka (Idaho), Boise (Idaho), and Columbia Basin (Washington) Projects.

Bureau reservoirs, built primarily for irrigation and power production, constitute the bulk of potential flood storage available in the Columbia drainage area at the present time.

Approximately 330,000 acre-feet of vacant space exists in the reservoirs of the Yakima Federal Reclamation Project in eastern Washington, and there are 220,000 acre-feet of vacant space in the American Falls Reservoir of the Minidoka Project in south central Idaho, which can be used to hold back flood waters contributing to the potentially heavy Columbia River run-off, Nelson explained.

There are approximately 930,000 acre-feet of vacant space in several other Reclamation reservoirs which may also contribute to a reduction of the crest on the main stem. Storage space in Jackson Lake in western Wyoming will be used to reduce flood peaks in the Jackson Hole country of Wyoming and the Heise-Roberts area in eastern Idaho. Cascade and Deadwood Reservoirs of the Boise Project in southwestern Idaho will be used to store flood waters which periodically damage property in the Payette Valley, and Anderson Ranch and Arrowrock Reservoirs of this project will be utilized to minimize floods in the Boise Valley. Should the storage of run-off in these reservoirs coincide with the flood crest along the main stem, these man-made lakes will make a contribution to alleviating the 1950 downstream spring flood condition.

Under an agreement with the Corps of Engineers and the Bonneville Power Administration, the Bureau has already drawn down Franklin D. Roosevelt Lake, the reservoir behind Grand Coulee Dam, by 900,000 acre-feet, Nelson said. Under a supplemental agreement with the Corps and the BPA, the Bureau this week agreed to provide an additional 375,000 acre-feet of space. The total Lake Roosevelt drawdown will cut a critical 1.4 feet off the Columbia River spring flood at Vancouver, Washington, if the proper timing of filling the reservoir is obtained and estimated peak discharges occur.

Superintendents of Reclamation projects will provide Clinton with day-by-day reports on inflow to and storage in the various reservoirs. The activity, as outlined by Nelson, constitutes another step in the joint program of the Corps of Engineers, Bonneville Power Administration, and the Bureau of Reclamation, for coordinating operations for maximum flood control.

Collectively the capture of flood waters at Franklin D. Roosevelt Reservoir at Grand Coulee Dam and the tributary reservoirs in Yakima and Snake River sub-basins is expected to accomplish a significant reduction of flood crests locally and down river. Operation of these reservoirs presages the day when major

Columbia Basin floods will be a thing of the past because of the completion of Hungry Horse Reservoir now under construction on South Fork of Flathead River, Palisades Reservoir on Upper Snake River, Albeni Falls Dam on Pend Oreille River, Libby Reservoir on Kootenai River, Priest Rapids and John Day Reservoirs on the Columbia River. The latter four projects were authorized in the Omnibus Bill signed by President Truman May 17 on his return to the White House from the dedication of Grand Coulee Dam.

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BUREAU OF RECLAMATION
Region 1 - Boise, Idaho

FOR RELEASE TO PM's of Thursday, May 25, 1950

BOISE, Idaho--A seven-man Bureau of Reclamation survey party this week began a reconnaissance study for the proposed Hells Canyon Dam in the spectacular Snake River Canyon on the Idaho-Oregon border as part of a program to gather additional data on the project now before Congress for authorization, Regional Director H. T. Nelson said today.

The men, detailed to the work from Palisades Dam in southeastern Idaho, which is awaiting re-authorization, will investigate routes of all possible access roads to the deep gorge in which the dam, the highest in the world, would be constructed, Nelson said. Both the Oregon and the Idaho sides of the rim are to be surveyed.

The surveyors, headed by Ivan M. Teuscher, engineer-in-charge, will headquarter at Halfway, Oregon. Much of the survey work will cover areas inaccessible by roads, forcing the engineers to use pack horses. Aerial inspection of the rough terrain will also be undertaken this summer.

The proposed dam, which will provide 900,000 kilowatts of hydroelectric energy for the power-hungry Pacific Northwest, will be situated in a steep-sloped gorge 6,000 feet deep, virtually unsettled and almost inaccessible, about midway between Weiser and Lewiston, Idaho. The structure will be 740 feet high, slightly higher than Hoover Dam, contain 6,200,000 cubic yards of concrete, and create a reservoir of 4,400,000 acre-feet capacity.

In addition to power production, the project will make a substantial contribution to the upstream storage needed to control devastating Columbia River floods. It will also improve navigation in the downstream Snake and Columbia through river regulation and provide financial assistance to irrigation projects in the Columbia River Basin, either under the proposed Columbia Basin pooling plan or as an individual project.

BUREAU OF RECLAMATION
Region 1 - Boise, Idaho

FOR RELEASE TO AM's of Sunday, June 11, 1950

BOISE, Idaho--The Bureau of Reclamation during its 48th year of operation ending June 17 completed five irrigation projects in the Pacific Northwest, involving approximately 100,000 acres of new land, and increased the hydroelectric capacity of the power-hungry area by 324,000 kilowatts, Regional Director H. T. Nelson said today.

In noting the anniversary, Mr. Nelson said that "open house" would be observed on the Columbia Basin Project in eastern Washington and Hungry Horse Project in northwestern Montana next Saturday to acquaint visitors with Reclamation activities. President Theodore Roosevelt signed the Reclamation Act on June 17, 1902.

During the past year's operation, the Bureau of Reclamation has brought to substantial completion the 50,000-acre North Unit of the Deschutes Project in central Oregon, the 27,000-acre gravity unit of the Roza Division of the Yakima Project in eastern Washington, the 25,000-acre Black Canyon Unit of the Boise Project in southern Idaho, the 900-acre Big Flat Unit of the Missoula Valley Project in western Montana, the rehabilitation of the Ochoco Dam in the Crooked River Basin of central Oregon, and the 1000-acre Hayden Lake Unit of the Rathdrum Prairie Project in northern Idaho.

The Bureau advanced construction on the million-acre Columbia Basin Project toward a goal of irrigating 87,000 acres of land in 1952, on the Hungry

Horse Project in northwestern Montana to make initial power available in 1952 from the 285,000-kilowatt plant, and on the Lewiston Orchards Project in mid-western Idaho to provide water supply for 3,750 acres and a domestic water system for 4,000 people.

In the power-production field, the Bureau has increased the installed capacity of the Grand Coulee Dam in the past year by 324,000 kilowatts, bringing the total installation to ~~1,296,000~~ 1,404,000 kilowatts, largest in the world. A power-house was virtually completed at Anderson Ranch Dam of the Boise Project, with installation of the first of three 13,500-kilowatt generating units being under-way on the anniversary date.

Project investigations moved ahead during the past year under a basin-wide integrated Interior-Army plan for full utilization of the water and land resources of the Columbia River Basin. These studies involve both individual projects and entire river basins.

The acreage in the Northwest which the Bureau of Reclamation has served a full or supplemental supply of water since initial irrigation was begun in 1906 has produced crops valued at 2-3/4 billion dollars, Mr. Nelson said. This is equivalent to 4½ times the Federal investment in the 19 projects operated or constructed by the Bureau in this region - $600,000,000. A large part of this expenditure, nearly all of which is to be repaid, is in projects like the million-acre Columbia Basin Project, Hungry Horse Project, and other developments still in the construction stage.

"While the development of land and water resources in the Pacific Northwest for irrigation, power, navigation, and flood control is significant, it is but the beginning of a much broader expansion of agriculture and industry that is possible through full utilization of the Columbia River and tributaries," Mr. Nelson said.

"The irrigated acreage now served by the Bureau can ultimately be

tripled. Only a tenth of the potential hydroelectric capacity of the Columbia River has been harnessed by the Bureau, other Federal agencies, and private and public utilities. There is an abundance of water available for both irrigation and power. The Northwest run-off - 205,000,000 acre-feet - exceeds that of all other rivers in the West combined. This tremendous water supply, plus fertile land and an adequate growing season, forecast a tremendous new development in Reclamation in the decades ahead."

Mr. Nelson explained that on its 48th anniversary the Bureau was seeking authorization for projects which will provide for the irrigation of 295,000 acres of new land and provide supplemental water to 740,000 acres currently inadequately irrigated. Altogether there is in the imminent future the prospect that 1,310,000 acres of new land will be developed and that a million acres of land will receive supplemental supplies through projects under construction or authorized.

In addition to its irrigation program, the Bureau is seeking authorization for power installations that would have a combined installed capacity of 1,075,000 kilowatts.

The Bureau of Reclamation initially began work in the Pacific Northwest in 1903 when investigations were undertaken for the Minidoka and Boise Projects in southern Idaho.

Federal Reclamation projects in the Pacific Northwest include: Columbia Basin, Yakima, and Okanogan in Washington; Boise, Minidoka, Lewiston Orchards, and Rathdrum Prairie in Idaho; Baker, Burnt River, Deschutes, Stanfield, Westland, Umatilla, and Vale in Oregon; Bitter Root, Frenchtown, Missoula Valley, and Hungry Horse in Montana; Owyhee on the border of Idaho and Oregon.

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BUREAU OF RECLAMATION
Region 1 - Boise, Idaho

FOR RELEASE TO AM's of Tuesday, September 26, 1950

BOISE, Idaho - Demonstrating the tremendous markets for non-western products created by Western Reclamation development, a tabulation of 1949 freight movements made by the Union Pacific Railroad Company for the Bureau of Reclamation shows that 72 per cent of the value of all shipments into the Boise Valley was for products originating in the Midwest, East, and South.

The survey reveals that 20,476 carloads, valued at $127,643,405, were received at Boise Project stations from non-Idaho points. Approximately 8,122 carloads of this total originated in areas east of the Rocky Mountain region or contained products shipped from points in the Rocky Mountain and Pacific States but manufactured or produced farther east. These shipments were valued at $92,180,595.

An analysis of a cross-section of the incoming carloads by the Bureau of Reclamation indicates that a substantial portion of the manufactured products from the Rocky Mountain and Pacific States was originally produced in non-western plants. These goods were shipped to western wholesale and distributing centers like Denver, Salt Lake City, Spokane, Portland, Seattle, San Francisco, and Los Angeles, and re-shipped to Boise Project stations.

Much of the freight originated in the great manufacturing centers of the Midwest. From this area came automobiles, tractors, tires, farm equipment, food supplies, refrigerators, furniture, building materials, etc. From

the South came lubricants, fertilizers, fresh or frozen fruit, tobacco, baskets, floor covering, lumber, etc. The East found a western market for furniture, canned goods, household goods, candy, electrical goods, pipe, farm supplies, paper products, refrigerators, steel products, beverages, etc.

The Boise Project is fairly typical of the market Reclamation projects throughout the West afford for non-western manufactured and other goods, Bureau officials said. The purchasing power of the Boise area due to Reclamation development is about 5 per cent of the west-wide total directly attributable to the program.

BUREAU OF RECLAMATION
Region 1 - Boise, Idaho

FOR RELEASE TO PM's of Thursday, September 28, 1950

BOISE, Idaho - Because of local sentiment against the project, the Bureau of Reclamation is discontinuing investigative work on the proposed 19,000-acre Sequim irrigation development, near Port Angeles, Washington, it was announced today by H. T. Nelson, Regional Director for the Bureau of Reclamation. The study was originally requested by local interests.

The Bureau's decision, Mr. Nelson said, is based on the recommendation of R. J. Newell, former Regional Director, who was employed by the Bureau as a consultant to study the expression of local opinion as presented in testimony at the August 11, 1950, public hearing in Sequim. The hearing revealed a preponderance of opposition at this time to development of the proposed project, which would have made more effective use of water from the Dungeness River by providing sprinkler irrigation for existing irrigated land and an expansion of the irrigated area.

As recommended by Mr. Newell, no other activities or expenditures will be carried on in connection with the project until such time as there is certain evidence of widespread demand and support by the landowners, Regional Director Nelson said. He said, however, that all data collected in the course of the investigation and all project studies, plans, and estimates evolved therefrom would be pulled together in a completed report and placed on the shelf for possible future reference.

BUREAU OF RECLAMATION
Region 1 - Boise, Idaho

FOR RELEASE after 11 a.m., Friday, November 17, 1950

SPOKANE, Washington - Lack of agreement in the Pacific Northwest concerning the so-called "basin account" or some other acceptable formula for repaying the Federal investment in land and water resource development constitute a major road block against expansion of irrigation in the region, H. T. Nelson, Regional Director for the Bureau of Reclamation, told the National Reclamation Association today.

Nelson said that the costs that must be repaid to the Federal Treasury from all Northwest Reclamation projects that may conceivably be authorized by 1970 total $441,000,000, of which the water users can reasonably be expected to repay only 25 percent, or $110,000,000, in 50 years. The remaining 75 percent, or $331,000,000, must be derived from a basin account or other source to make the projects economically feasible.

Under the recommended basin account revenues from the sale of power from all present and future Federal powerplants in the Pacific Northwest, including the interest on the unpaid investment allocated to commercial power (popularly called the "interest component"), would be credited to one account. The revenues would be used to repay that part of the cost of bringing water to the land which is beyond the ability of the water users on existing and future projects anywhere in the Columbia River Basin to repay in 50 years.

"With all of our background of successful irrigation enterprises, with all our tremendous resources for future development, and with an approved

engineering plan (the comprehensive Interior-Army program), it would seem that irrigation in the Northwest should be on the high road to destiny," Nelson declared. "But somewhere along the way Reclamation has piled up on a road block as effective as any in all Korea."

He said that the projects recommended in the comprehensive plan for development of the Columbia River Basin for early construction by the Corps of Engineers had been authorized while those recommended for construction in the near future by the Bureau of Reclamation had not yet been approved by the Congress.

"Lack of irrigation authorizations today is undeniably due to a lack of agreement with the Northwest concerning establishment of a basin account and concerning the extent to which the interest component should be credited to such an account," Nelson said.

He declared that the basin account was a subsidy proposal for Reclamation but that it was in keeping with the traditional and wholly desirable payment requirements of the Federal Reclamation laws. He went on to say that Federal Reclamation has rested on a firm foundation in the past and the Bureau of Reclamation would be the last to become a party to an unsound policy if its present recommendations are so judged.

Nelson pointed with pride to the repayment record of existing Northwest irrigation developments. Of a total Reclamation investment of $635,000,000 in the Northwest today, $121,000,000 has already been returned to the Treasury. Less than one percent of the amount directly due from water users is delinquent.

"We are striving for an equitable repayment mechanism for existing irrigation districts, some of which must pay for periods of years ranging from 40 to as high as 99 years under contracts individually approved by the Congress", Nelson declared. "We are striving, too, for rules of the game

that will permit a continuation of sound reclamation development at a rate compatible with the best of interest of the Northwest and the Nation."

"The road block in the way of Reclamation in this region will remain in place until a basin account procedure or some other acceptable formula is developed and authorized by the Congress," Nelson emphasized. "For want of that vital formula, water resources waste to the sea. Several areas remain arid, and the day is further delayed when magnificent projects like Hells Canyon Dam - in itself feasible by any criterion - can contribute to the National strength and security. The Northwest development program is being unbalanced as time runs out on existing authorizations."

BUREAU OF RECLAMATION
Region 1 - Boise, Idaho

FOR RELEASE TO AM's of Tuesday, September 26, 1950

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BUREAU OF RECLAMATION
Region 1 - Boise, Idaho

FOR RELEASE TO AM's of Sunday, June 25, 1950

SEDIMENTATION TESTS SHOW RECLAMATION RESERVOIRS HAVE CENTURIES OF USEFULNESS

Washington, D. C.--New and dramatic scientific research reveals that Hoover Dam, on the Colorado River, has a useful life of at least 275 years regardless of river-carried silt deposits, Secretary of the Interior Oscar L. Chapman said today. The case history study of the Nation's greatest reservoir exposed many uninformed estimates of Lake Mead siltation as extravagant and groundless. Similar findings are resulting from studies on other Federal Reclamation reservoirs.

However, Secretary Chapman added, silt, washed down from eroding mountains, grazing lands, forests and farms is a menace that should be met with sound, vigorous watershed conservation measures if full economic benefits from water conservation dams are not to be diminished.

In Boise, Idaho, Regional Director H. T. Nelson said that accumulation of silt in Reclamation reservoirs in the Pacific Northwest is not a major problem. The Arrowrock Reservoir on the Boise River in Idaho, one of the few in the Northwest which has a minor silt problem, has lost less than 3 percent of its capacity in 32 years of operation, and at the present rate would require more than 1,100 years to fill.

The Secretary explained that new and revealing information on silt was being obtained primarily from investigations for the Bureau of Reclamation by the U. S. Geological Survey, with the aid of the Navy Department, on Lake Mead, the large artificial lake behind Hoover Dam. For the past two years, these agencies have been probing the bottom of the lake, using various wartime Navy techniques developed to locate submarines and sunken ships and to chart the ocean floor.

Preliminary results of the investigations, Mr. Chapman said, show that silt has been deposited in the reservoir at an annual rate of 105,500 acre-feet since water storage was started in 1935. The actual measurement, after 15 years operation, establishes deposits approximately as the Bureau of Reclamation calculated before it built the dam. Lake Mead has a storage capacity of 31,142,000 acre-feet.

"Some misinformed people say it is wasteful to build big dams, such as Hoover, because they will soon be ruined by silt," Secretary Chapman said. "That is just simply not true.

"Though we should take most vigorous conservation measures to keep the silt on the land, where it belongs, Hoover Dam is not in jeopardy from silt. At the present rate, it would take until the year 2225 for Lake Mead to fill up with silt. The compaction of sediment into a smaller area as tons of new silt pile up on it over the years will extend this date to the year 2380, according to the estimate of Geological Survey technicians. However, even that deadline will never come in the foreseeable future because dams still to be built upstream from Lake Mead will stop its siltation.

"And in the meantime, the dam's earnings will repay costs within the next 57 years. Furthermore, Hoover would still remain a great run-of-the-river power producer even though the reservoir should fill up with silt, a condition which certainly will not occur for generations even if nothing is done.

"The construction of other upstream dams, as now proposed, would trap much of the silt and permit the water to flow into Lake Mead comparatively clear. Also, systematic efforts of stockmen and Government agencies to conserve the upstream range lands, erosion of which is a major source of silt, should retard the loss of soil.

"Our encouraging findings at Hoover Dam are being borne out elsewhere in the West where silt studies are being made. The reservoir behind Elephant Butte Dam on the Rio Grande River, another bad silting stream, too, will not fill up at the rate predicted by some people who have challenged the wisdom of building dams on silt-carrying rivers. The worst sedimentation is occurring in the Guernsey Reservoir on the North Platte River in Wyoming. Even at the present rate, the dam would last well beyond the payout period. However, the sedimentation will be cut 87% by construction of the Glendo Dam, just as more upstream dams on the Colorado will reduce the sedimentation in Lake Mead.

"Immediate economic necessity demands that we keep on building dams and reservoirs in the West despite the silt, but we should and have recognized and measured the silt problem for what it is--and it is a matter of national concern. We should take forthright measures to deal with this problem right across the board--to keep every possible ton of the soil on the land and to minimize the destructive effects of the silt which we cannot keep out of the streams."

Reclamation Commissioner Michael W. Straus said that Reclamation engineers knew that the muddy Colorado was one of the Nation's worst silt-carrying rivers, when they designed Hoover Dam. He explained that the joint Geological Survey-Navy investigation, which was the first of its kind on a great reservoir and was undertaken at Reclamation's request, confirmed the estimates of Bureau engineers in designing the dam so as to provide space to accommodate the sedimentation.

"Storage space was provided for siltation in order to retain the structure's usefulness long after construction costs had been repaid," Commissioner Straus said. "As a matter of fact, our engineers, in the Weymouth report, issued in 1924, came extraordinarily close to hitting it right on the nose. They estimated an average annual sediment deposit of 105,000 acre-feet per year and the Geological Survey report shows an annual deposit of only 500 acre-feet more than this.

"The Colorado River Board raised the estimate of the Bureau engineers to 137,000 acre-feet of sediment per year and the final storage computation at

the time the dam was built was worked out on that figure. What the long term rate of sedimentation will be cannot be positively fixed at this early date in the life of the reservoir, but it is clear that it will be useful for water storage and power production for centuries to come.

"We recognize silt and the erosion which causes it as a threat of national import to our land and water resources. We firmly advocate measures to keep silt on the land. But the further development of our water resources must not be delayed pending this long range program of watershed control. The West's needs for water resources development to sustain its growth demand this continued progress.

"Our great dams are paying rich dividends, even counting the cost of silt protection. This clearly demonstrates that the Federal Government is in no danger of losing its investment because of sedimentation and that Reclamation works will continue to make a major contribution to our national economy long after the funds invested have been repaid to the Federal Treasury."

Director W. E. Wrather of the Geological Survey said the results of the Lake Mead survey afford a factual basis for viewing future prospects of sedimentation in the basin. He characterized it as the most comprehensive investigation of sedimentation in reservoirs yet to be made. Of particular significance, he said, was the rate of deposit in various sub-basins inundated by the Lake.

"Lake Mead, the largest artificial reservoir in the world, now has an actual storage capacity of 29,827,000 acre-feet, compared with an original capacity in 1935 of 31,142,000 acre-feet," Mr. Wrather said. "About 95 percent of the total deposition of sediment has been contributed by the Colorado River and is in the main lake with 80 percent of reservoir volume. Less than five percent has been supplied by the Virgin and Muddy Rivers. The Overton area of the lake, with 20 percent of the reservoir volume, has only about five percent of the sediment accumulation. It receives the entire discharge of the Virgin and Muddy Rivers.

"Thus it is clear that principal erosion control measures must be centered in the critical areas which produce the major part of the sediment. Other large reservoirs proposed by the Bureau of Reclamation, such as Bridge Canyon, Glen Canyon and the Little Colorado and San Juan developments, will each retain a share of the silt.

"On the other hand, records of the Geological Survey show that the sediment load of the Colorado River varies greatly from year to year. Larger loads occurred at times before Hoover Dam was built and there is no reason to believe that the potentiality for sediment production is not as great as indicated by these records. Sedimentation continues to be a serious problem, requiring careful and repeated observation on which to guide operations of Lake Mead and to plan for other large reservoirs in the Colorado River Basin."

The survey showed a very favorable finding as far as sediment is concerned. The old river channel of the Colorado was filled with silt all the way from the head of the reservoir to the dam. Above the old river bed, where the lake spreads out until at the surface it is eight miles wide in some places, there is very little sedimentation except near the head of the reservoir.

Even at the head of the reservoir, the silt deposits are not serious.

Core samples showed, too, that the sediment is packing down much more tightly than was originally anticipated, thus taking less of the usable storage space for a greater tonnage. Coarse gravel and sand are settling rapidly, while the lighter silt is carried farther into the body of the reservoir before it settles. The engineers and geologists taking part in the survey anticipate that eventually, as the storage space declines and the water moves through the lake more rapidly, a considerable amount of the finer silt will flush out through the turbines and outlets.

A summary of the investigation is now in preparation and will be published in booklet form within the next few months.

Commissioner Straus said Bureau of Reclamation hydrologists have been keeping a close check on siltation in other Federal Reclamation reservoirs and their findings, like the results of the Lake Mead test, show the useful life of the reservoirs will extend well beyond the payout period.

"The Guernsey reservoir, on the North Platte River in Wyoming, has the highest rate of siltation of any Federal Reclamation installation," he said. "Thirty-three percent of the capacity of this reservoir has been lost in 20 years. Even at this rate, it would have a useful life well beyond the 40-year payout period. However, construction of Glendo Dam on the North Platte River above the Guernsey reservoir is awaiting discussions between Wyoming, Colorado, and Nebraska. It will intercept water from 87 percent of the drainage area now pouring silt into Guernsey, thus cutting Guernsey's rate of sedimentation to less than one percent per year. In designing Glendo, storage space was provided to take care of sedimentation for 100 years before other functions of the multi-purpose structure are affected in any way."

Mr. Straus said that the Elephant Butte Dam on the Rio Grande in southern New Mexico has lost 16½ percent of its capacity in 32 years. At this rate it is good for about 160 years more.

Among the more recently developed reservoirs, the Bureau surveyed the Altus on the North Fork of the Red River in Oklahoma. This reservoir has lost roughly five percent of its capacity in eight years and at the end of the 40-year repayment period will still have 73 percent of its capacity. In the meantime, conservation measures are being undertaken on the watersheds draining into this reservoir and local project officials believe this sedimentation rate will be materially reduced.

Commissioner Straus concluded:

"These reservoirs will serve mankind just about as long as water runs downhill."

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Editors: A photo diagram of the methods used in the Lake Mead sedimentation study and photographs of the Lake, Hoover Dam and the actual operations are available. A scientific summary of the methods used in the sedimentation study is also available.

BUREAU OF RECLAMATION
Rogion 1 - Boiso, Idaho

FOR RELEASE TO PM's of Thursday, August 3, 1950

BOISE, Idaho - Irrigation has created one business establishment for each 160 acres of desert waste land transformed into productive farms in the Payette-Fruitland-New Plymouth area in southwestern Idaho, an article in the August issue of The Reclamation Era, official Bureau of Reclamation magazine, reports.

The 55,000 acres of irrigated land in this section, which without irrigation would support only a few sheepherders and highway and railroad workers, have created a net income for townspeople supported by the project that averaged $107 per year per irrigated acre according to the article written by M. E. Marts, geographer in the Regional office of the Bureau in Boise.

Marts states that the net income to farmers and farm workers--known as direct benefits--averaged $84 per irrigable acre per year. This figure, plus the net income to townspeople--known as indirect benefits--brings the total benefits resulting from transforming sagebrush land into fertile farms through irrigation to $191 per acre per year, or $10,526,000 for the entire trade area of Payette.

"It is not surprising that, with net income of this magnitude, that there is one business establishment for each 160 acres of irrigated land within the trade area," the magazine states.

Marts prepared the story on the basis of a study he made for the Bureau of Reclamation with the advice and assistance of economists of the University of Idaho. The community studied included Payette and the surround-

ing area which depends on Payette for goods and services. This includes the two small towns of New Plymouth and Fruitland. The area is too dry for dry farming and possesses no known mineral and timber resources. Irrigation was necessary for a local economy to develop.

With irrigation, the area supports 1,170 farms, intensively cultivated. Farms are small, the majority of them 40 acres or less, and the major crops are alfalfa, apples, prunes, potatoes, sugar beets, vegetables, and small grains. The total population of the trade area in 1940 was 11,000, of which the farm population was approximately 4,300 and the non-farm population, 6,700.

The net income to farmers and farm workers of the project in 1946--the year used as the basis for the study--was established at $4,635,000. Net income is meant to be monies available for family living; for food, housing, recreation, and education. It does not include the cost of operating farms or businesses. The net income to farm operators was found to be $3,683,000, and the wages of farm labor, $952,000.

To estimate the income of the townspeople--the indirect benefits--Marts selected at random some 125 of the local business establishments and interviewed their owners, asking them questions about their net income and payrolls. The answers he got amounted to a 36 per cent sample of the 345 local business establishments. He found the net income of the townspeople to be $5,891,000 in the year studied.

Marts points out that of even greater significance than the total benefits resulting from irrigation in the Payette area is the relation of the urban income to the farm income. The urban income--indirect benefits--exceeds farm income by a ratio of 1.27 to 1. If he could have traced out and added the urban income resulting from the operation of Payette farms which flows into Boise, Salt Lake City, Portland, and other cities of the Nation, the indirect benefits would exceed the direct by an even greater ratio, Marts declares.

"Even with the figures for the local area, it is clear that irrigation projects are income-generating developments of the first order," the article states. "Their value is not merely in providing more farm home and farm products, but in creating and sustaining entire new segments of our national economy within which people in all walks of life can find satisfactory opportunities to earn livings and raise families."

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BUREAU OF RECLAMATION
Region 1 - Boise, Idaho

FOR RELEASE TO PM's of Friday, September 15, 1950

BOISE, Idaho - The largest annual program of water resources development in the history of the Pacific Northwest - involving a potential expenditure of $92,000 000 - is in full swing, Frank Clinton, Assistant Regional Director for the Bureau of Reclamation, said today.

The Congress last week made available to the Bureau an $80,000,000 fiscal year appropriation for construction of irrigation and multiple-purpose projects in the Northwest, Clinton said. In addition, the Bureau had a carry-over from the previous fiscal year totaling $12,000,000. This unexpended balance was partly due to lowered prices received on bids for construction, shortened work schedules on the Columbia Basin and Hungry Horse projects due to the extremely severe winter, and other reasons.

The largest previous program carried out by the Bureau was that of the past fiscal year, which ended on June 30, 1950, involving an expenditure of $89,400,000.

With the moneys available, the Bureau will complete two projects - Anderson Ranch Dam and Lewiston Orchards, each in Idaho - make available 361,000 kilowatts of additional hydroelectric energy for the power-hungry region, make substantial progress toward irrigation of 87,000 acres of land on the Columbia Basin Project in eastern Washington in 1952, and add 900,000 cubic yards of concrete to Hungry Horse Dam in northwestern Montana, scheduled to produce initial power in 1952.