THE NATIONAL SIGNIFICANCE OF RECLAMATION

An Address by Goodrich W. Lineweaver, Director, Branch of Operation and Maintenance, Bureau of Reclamation Washington, D.C., at the Kennewick, Washington, Grape Festival, September 19, 1947

This is a great day in Kennewick. I only wish Assistant Secretary of the Interior William E. Warne and Commissioner of Reclamation Michael W. Straus could be here to join you in this inspiring crop festival. They surely appreciated your friendly invitation to attend but the press of official business elsewhere made it impossible for them to be here. I extend to you their greetings. I am sure they will come another day.

Every efficient business takes an inventory at the end of its calendar or fiscal year. We of the Bureau of Reclamation, Department of the Interior, in effect, do likewise. In the case of Reclamation, however, a more effective way of evaluating the assets of this national program of water and land resource development is to appraise it from a long-range point of view.

This we can do very effectively this year, for 1947 is the one hundredth anniversary of modern irrigation in the United States. The Bureau has been in business the last 45 years of this period. It was in 1847 that the followers of Brigham Young broke desert land in the Salt Lake Valley of Utah, diverted waters from what is now City Creek, irrigated their land, and planted potatoes.

Today 21,000,000 acres of once unproductive desert in the 17 Western states have been transformed through private initiative and the Bureau of Reclamation into fertile farms. In the wake of this development have

grown hundreds of thriving cities and towns, with thousands of industries and other businesses. As an empire builder, water has reigned supreme.

In the last 100 years, the checkerboard of Reclamation projects in the West, has contributed untold national wealth to the well-being of the Nation. I can think of no finer example to illustrate this fact than the Valley of the Yakima. Here you can see first hand the results of the artificial application of water to the soil. Here sagebrush has been removed and burned, and crops made to grow where none would grow before. Here the land served a full or partial supply of water by the Bureau of Reclamation in 1946 yielded crop returns totaling 876,000,000, an average of \$217 per acre - nearly twice the average per-acre crop value of all the projects in the West.

This city, with its busy grapejuice plant, its cannery, its modern service stations, its hotels, its fine park, would not be here as we see it today but for the harnessing of the Yakima River, which flows by not far from where we now stand. No need to talk in generalities about Reclamation benefits. Here in Kennewick you can see the program at work. You are living it.

To carry my illustration of the far-reaching benefits of irrigation development a bit further, let me point out that many of you beoble employed at the Hanford plant which made the world's first atomic bomb and ended World War II months early would not be here today were it not for the utilization of water resources in the Pacific Forthwest. For it was hydroelectric power produced in the world's second largest power plant at Grand Coulee Dam on the Columbia River that made this devastating weapon of war possible. This power was produced on what we call a multiple-purpose project. Many of these have been constructed on Western rivers.

On this type of development, stream run-off is impounded for several purposes, including irrigation, power production, improvement of navigation, and control of damaging floods. Without the Federal Reclamation development at the head of the Grand Coulee the atomic bomb could not have been produced here.

Hennewick and the Northwest from the East, Middle Test, and South -- lately or years ago. Your former neighbors at these distant points share with you the benefits of the Western Reclamation program. For in the construction of dams and canals and in the development of irrigated farms and project cities and towns a vast market is created for goods produced in non-western areas -- for automobiles from Lichigan, tobacco and cotton from Mississippi, electric ranges from New York, radios from Pennsylvania, and farm and construction tools from Connecticut.

This vast purchasing power of irrigation farmers here and elsewhere is created through dependable crop production, unaffected by the vagaries of weather. Last year the five million acres of land irrigated by the Bureau of Reclamation produced more than half a billion dollars in crops. This single year's return, please note, exceeds the cost of building the irrigation works serving the land.

No less significant as a product of Reclemation development is hydroelectric power. Bureau of Reclemation plants on the West Coast provided at
least half of the energy used in building planes, ships, guns, and tanks
manufactured in that part of the country. Less spectacular, but equally
important has been the role of Reclamation generators in delivering lowcost power for pumping water, driving industry, lighting homes and easing the
drudgery of farm life.

In my evaluation of the Bureau of Reclamation's phase of the first 100 years of U. S. irrigation, I want to point out that the appropriation of Federal funds for reclamation development is a most prudent use of the public money. About a billion dollars have already been invested. Every cent spent for irrigation and multiple-purpose projects, except small allocations to flood control and navigation, is returned to the Treasury through payments by water users and the sale of hydroelectric power. That is not all the Government receives. In addition to the return of its investment, it reaps a vast sum in taxes from wealth-producing lands and business activity in project cities and towns. For example, the people of Yakima and Benton Counties alone have paid more than a hundred million dollars in Federal income taxes. This is $2\frac{1}{2}$ times the cost of bringing water to the land of the entire Yakima Project, all of which - let me emphasize - will be repaid by the farmers.

In connection with the repayment of construction costs it is important to note that power plays a major role. It helps make economically feasible projects which otherwise could not be authorized by repaying that portion of the project costs which is beyond the ability of water users to repay. The sale of power lowers the cost of water to the irrigationist.

In taking inventory of our resource development on the hundredth anniversary of modern irrigation in this country, it is wise to look to the future and analyze the expansion that is possible in the 100 years ahead.

In short, the potentialities are great. Approximately 22,000,000 additional acres of land, now desert, can be irrigated and made to contribute to the economic stability of the Mation. This acreage, you will remember, is approximately equivalent to the area now irrigated. In the dams to be constructed to store the water for this potentially irrigable area, many of which will also make possible the production of hydroelectric power, and provide navigation, flood control, and recreational benefits, lies the hope of the Mest for a sound, integrated industrial and agricultural growth.

The Bureau estimates that by using all of the available vater for beneficial purposes the population of the 11 most western states could be doubled; in other words, increased from about 15,000,000 to 30,000,000. The irrigation of 22,000,000 acres of new land would create 400,000 new farms and expand existing towns and cities or bring about the establishment of new ones. The enormous quantity of electrical energy would open up new vistas for individual enterprise and initiative which otherwise would remain closed.

As a land of opportunity, the basin of the Columbia River exceeds that of all other streams in the West. At least 3 3/4 million additional acres of dry but potentially productive land can be turned into cases of irrigation - double the area we have today. Some 10,000,000 kilowatts of power capacity - five times the existing hydroelectric development - can be installed. Vast timber and mineral resources, outstanding recreational opportunities and scenic attractions, as well as fishery industries and navigational assets, make the Columbia "the Gem of the Mation".

In looking ahead, Secretary of the Interior Krug and Commissioner of Reclamation Straus enthusiastically advocate moving forward with a rapid, orderly development of Western land and water resources. During the past year they made strong representations to the Congress in support of that policy. They emphasized the words of a former President, who said "Every drop of water that runs to the sea without rendering a commercial return is a public waste", and those of another President, who said "Our people as a whole will profit, for successful homemaking is but another name for upbuilding of the Nation".

The West and the Mation needs such projects as the Mennewick Highlands, the Roza, and the Columbia Basin in Washington, the Hungry Horse in Montana, and the Anderson Ranch, Palisades, and Cascade Dams in Idaho, and the Deschutes Project in Oregon.

Only through such developments - sound as a dollar - can adequate settlement opportunities be made available for worthy veterans and other qualified persons seeking to undertake irrigated farming. Only through expansion of irrigated areas can we replace the production on 500,000 acres in the United States which are ruined each year through erosion, and replace the yields on an additional million acres which annually reach a state of impoverishment.

Cur rapidly expanding population, together with the world food shortage, demands an enlargement of our crop-producing acreage. It is predicted that in the next 24 years this country will have to support an additional 18,000,000 people. With the West increasing in population 25 times the national rate, the major portion of the population growth will occur in irrigated areas. One of your own Congressmen a few days ago predicted that in 25 years the state of Washington would have a

population of 4,000,000 instead of 2,000,000 as it has today, and I think he is right. Surely the Nation faces West in its march of progress.

Long cognizant of the significant economic problem involving national expansion, the Eureau of Reclamation has set as its seven-year objective - water for 10,000 farms for veterans and others seeking settlement opportunities in this land-hungry Nation. The program would create additional means of livelihood for tens of thousands of other people in business activities near the farms. On the new projects 25 million kilowatts of hydroelectric power capacity would be installed to meet growing power needs of the Mest. This involves a billion and a half dollar construction program, and in my estimation we are selling the West short if we fail to make this investment.

The Bureau of Reclamation has already begun to move toward the goal. It is engaged in the biggest annual construction program in its history. For the current fiscal year \$202,000,000 are available. About one quarter of this sum, or \$51,000,000, will be used for construction in the Pacific Northwest.

The appropriations were obtained only after the hardest sort of a struggle in Congress. It found the West united as never before. Your Senators and Representatives and the Governors of the Northwest can take a large share of the credit for the success achieved in getting Reclamation appropriations for the current fiscal year. Tribute should also be paid to hardworking local people, such as the Kennewick Project Committee, for their telling support. I am sure that the road ahead will have fewer obstacles because of the effective efforts of Westerners in high and low stations on behalf of sound Western resource development.

Aside from getting the money for this important work - vital to every one of you - the test to which your legally-elected representatives were put was extremely valuable from yet another standpoint. It brought on a national debate, which drew the attention of the East to the Reclamation program as no other one thing has done since the Eureau of Reclamation was established by the Congress in 1902.

Focusing down to analyze the future of the Kennewick area, I want to predict that resource development, both land and water, will create at this junction of the Columbia, Snake, and Yakima Rivers, a thriving metropolis that will rival or exceed the city of Yakima in size.

This section is one of the natural gateways to the million-acre Columbia Basin Project. You are about to see thousands of people in the act of building an empire at your doorstep. This gigantic development - the greatest ever undertaken in the United States - will bring with it a bonanza of farming and business opportunities for yourselves, and your sons and daughters. If the same spirit, enthusiase, and energy that has made possible these annual Grape Festivals prevails in building your community - and I am sure it does from the bulldog tenacity that you have shown in connection with bringing about the Kennewick Highlands development - you will extend your horizons in all the fields of private initiative beyond your fondest hopes. In that I wish you every success.

In conclusion, let me congratulate you people of the Yakima Valley upon the noteworthy progress you have made in creating this fine section in the arid West. You have done a splendid job - one that serves as an inspiration for many other regions. This "showplace of irrigation", that you have fashioned out of dusty soil and sagebrush, and which you are

continually expanding, is a graphic refutation for the skeptics and the short-sighted who say America is no longer a land of opportunity. These men have never looked West across the Mississippi, and that is where they should look.

In the words of Commissioner Straus: "The world is filling up and there remain no new lands as new frontiers for our sons in the broader scheme by which we live. There no longer remain new and distant lands in which to establish American communities under the American flag. But there remains our last frontier into which we, as a Fation, can expand. That expansion, which none may challenge, is into the great - and arid - spaces of our West.

"There is opportunity ahead if we desert the men of doubt and join forces with the men of courage and faith to go forward."