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The Columbia Basin Project, Yesterday and Tomorrow

Forty years ago, when Senator Dill and some of his colleagues in Congress picnicked here with more than a thousand Inland Basin boosters, they saw from this site a dusty, brown expanse of sagebrush and prairie. Some in that group, however, including the Senator and a number of others here today, saw a vision--of green fields, fruit-laden orchards, sparkling lakes, thriving communities, and, miles to the north, a gigantic dam which would make these things possible.

The vision has become reality. And if we look more closely with our minds' eyes, we can see what wrought this miracle. It was Nature's gift of the Columbia River, transformed by man's ingenuity and perseverance into the bounty and beauty we view today. If we look even more closely, we may see another vision, one of the future--in which all these blessings of 1967 are multiplied for an even better tomorrow. I am confident that the Basin is on the threshold of an era of greater progress and prosperity than it has ever known.

Aladdin of the Arabian Nights had his genie of the lamp to grant his every wish. The Northwest has the Columbia River, which provides not only the necessities of life but the pleasures. We are told in the old tale that Aladdin had but to rub his lamp to call up the genie to do his bidding. The people of the Basin have had to do a good deal more than rub a lamp to bring about their miracle. And yet our genie, the River, is with us always; it does not fade back into a mysterious oil vessel, but continues to meet our primary needs for food, electric power, transportation, and the enjoyment of nature. Everything considered, I believe the Columbia is a more satisfactory genie than Aladdin's.

The pioneers who came to the Columbia Basin in the nineteenth century occasionally dug ditches to carry water from the river to their gardens and fields. But the fertile land of the Northwest had a far greater potential than could be developed by utilizing the erratic rainfall, supplemented with simple irrigation diversion. And the settlers soon realized this. When the Federal Reclamation Act was enacted in 1902 they eagerly turned to it as the key for opening the door to the riches they glimpsed in the fast flowing waters of the Columbia. Inland Basin farmers dreamed of lifting water from the river in its deep canyon up onto their thirsty plains. A few practical visionaries pictured a concrete plug inserted into the river near the Grand Coulee to impound water that could then be pumped up into the coulee and stored there for distribution to the dry lands of the basin.
In 1918 the idea was first publicly proposed in the *Wenatchee Daily World* by Editor Rufus Wood, and from then on there was a crusade. Many of you here recall the long, hard struggle of those early supporters to have their daring idea accepted.

It was not until 1933 that Grand Coulee Dam was authorized. In 1941, virtually completed, it stood astride the river, with the first of its 108,000-kilowatt generators producing electricity; the remainder of the 2 million kilowatt capacity was installed in its two powerplants during the following decade.

Although conceived and built primarily to store water for growing crops on the arid acres of the Basin, Grand Coulee Dam gained its greatest fame and made its first significant contribution to the Northwest and the Nation as a producer of electric power for defense industries during World War II. Electricity generated at Grand Coulee helped manufacture aluminum for airplanes. It powered the region's shipyards, sawmills, factories, and military bases, and also supplied the electric energy for operation of the Hanford Atomic Energy plant.

The peace-time role of the dam and its facilities has been more impressive. Most of the war-born industries in the Northwest have burgeoned and are contributing to its economy. Also, low-cost power has brought in new industries by the score, among them metallurgical and chemical plants, food processing facilities, and textile plants. To date Grand Coulee's hydropower operation has produced more than a quarter of a trillion kilowatt hours of electricity to light the homes of the Basin, to turn the wheels of the multi-industry, and to pump water from Roosevelt Lake behind the dam into Banks Lake in the Grand Coulee. The cumulative income from this energy totals about 600 million dollars.

Such statistics denote outstanding achievement. However, the future prospect for this power operation dwarfs all that has gone before. Last year, under the sponsorship of your Congressional delegation, a third powerplant was authorized for Grand Coulee, to increase its 2 million kilowatt capacity to 5.6 million. The Bureau of Reclamation is already at work on preliminary construction for the facility, which is expected to start producing electricity in 1973.

Two recent events set the stage for this milestone development. They are the treaty negotiated in 1964 with Canada for joint development of the river, and the Pacific Northwest-Southwest Intertie, which will facilitate an interchange of power between the two regions of the western United States.

The treaty unlocks the door to full development of the Columbia River, both in the United States and Canada. Three storage dams to be built in Canada will even out the flow and thus control flooding in the tributary Kootenai and the Columbia itself, as well as make feasible installation of additional power capacity at Columbia River dams downstream in the United States.
The third powerplant will provide peaking power capacity for the system's hydroelectric and thermal generating plants which will be needed to meet future power requirements in the Pacific Northwest. These requirements are doubling every decade. The new Grand Coulee installation will also provide capacity to fill the critical power needs of the Southwest for the next few years. This will be possible by means of the Northwest-Southwest Intertie, which the Federal government and public and private utilities are constructing jointly to tie together electric systems in 11 Western States.

However, we are looking even farther into the future than the mammoth 3.6 million kilowatt third powerplant. Original blueprints for the structure called for installing twelve 300,000-kilowatt generating units. But, as a result of special research, the turbine and generator manufacturers have determined that they can build 600,000 kilowatt units at a considerably lower per kilowatt cost. So Secretary of the Interior Udall has decided to have the 3.6 million kilowatt capacity of the new powerplant installed in six 600,000 kilowatt units and the forebay, which will soon be under construction at the dam, made large enough to supply water for six additional generators. They can then be added at some future date, bringing the capacity of Grand Coulee powerplant up to 9.4 million kilowatts, including 200,000 which will be contained in reversible pump turbines in the remaining six units to be installed in the pumphouse. It should be noted that due to the economy realized through doubling the size of the generators to be built now, the enlarged forebay can be constructed within the limits of the existing cost authorization for the third powerplant.

Even though the original purpose of Grand Coulee Dam to bring irrigation to the lands of the Inland Basin was side-tracked by World War II and its energy requirements, the settlers here did not sit with their hands folded during those months of conflict. Even before Japanese bombs fell on Pearl Harbor on December 7, 1941, landowners had formed three irrigation districts. This, of course, was necessary under Reclamation law before Basin farmers could receive water from the Grand Coulee impoundment. In 1943 the Columbia Basin Project Act was enacted, providing that irrigable lands in the project be developed by blocks, divided into family-size farms. Thus at the close of the war the stage was set for construction of a canal and lateral system to carry irrigation water to an ultimate 1,029,000 acres.

In 1948 a pumping plant on the river near Pasco brought water to serve Block 1 containing about 5,400 acres. In the meantime, the giant 65,000 horsepower units of the Grand Coulee Pumping plant were being installed at the dam to lift water from Franklin Delano Roosevelt Lake behind the dam up into the Coulee. In late 1951 these pumps began operations, and the following spring the long-awaited water flowed through the canals and ditches to nourish crops on about 66,000 acres of farmland.

Today about half a million acres are receiving project water. Present Bureau of Reclamation plans call for extension of the irrigation system to approximately 200,000 additional acres within the next 10 years. By 1995
the entire 1,029,000 acres are scheduled to be irrigated by water carried from Banks Lake to the fields by means of 4,500 miles of canals and laterals.

Because of the great drain placed on the Federal Treasury by the war in Vietnam, currently costing in excess of $2 billion a month, recent development funds for the project have been less than we would like. Also, previously a lack of enthusiasm among some of the landowners had been a deterrent to full development of the highlands east of the presently irrigated project area. But this situation has recently changed. Within the past few years owners of about 70% of the irrigable land in the East High area have petitioned for inclusion in the East Irrigation district. So when our overseas commitments taper off, I believe we can expect an acceleration of work on the project's irrigation system.

During its short life the developed lands on the Columbia Basin Project have already grown crops valued at more than one-half a billion dollars. These crops -- chiefly vegetables, forage, sugar beets, and fruits -- have attracted a large variety of processing plants and other industries to the area, and these, in turn, have attracted more settlers, with the result that the small frontier communities of the region have become modern, prosperous cities.

A study recently concluded by the Bureau of Reclamation and the Washington State University Cooperative Expansion Service illustrates the impact of irrigation on the potentially rich lands of the Columbia Basin. Comparing the economic development of 10,000 acres in the project with that of a neighboring dryland farming area, the study found that the project land is supporting 17 times as many people as the adjacent dryland section.

The number of farms on the project area has more than quadrupled since 1949, while it has diminished in the unirrigated area. One measure of the project's impact on the area economy is provided by a comparison of tax payments. Federal income tax payments generated by the project in 1963 and retail sale tax collections were both 17 times greater than they were in the dryland area, and collections of business and occupation taxes 19 times greater.

The study revealed substantial growth in every major economic indicator in the irrigated area, while showing that the growth of the same indicators in the dryland area were either nominal or had decreased.

This particular study does not evaluate in detail two of the most important benefits of the Columbia Basin Project, its recreation and fish and wildlife enhancement aspects. Harder to measure than crops values and tax collections, they nevertheless play significant roles in the lives of Washingtonians and of the increasing thousands of visitors who come for the express purpose of enjoying outdoor sports and the beauties of nature.

Roosevelt Lake, which stretches 151 miles from the dam to the Canadian border and has 600 miles of shoreline, is a magnet for nature lovers from all corners of the Nation and from abroad. Each year almost a million visitors
frequent the lake which, with its surrounding terrain, comprises the Coulee Dam National Recreation Area. They come to sightsee, swim, fish, boat, or to look at the awesome structure of the dam itself and its spectacular waterfall.

But it is not just to see the big, spectacular attractions that outdoorsmen come to the Inland Empire. All through the area ponds, seeps, small lakes, canals, and quiet wooded sections entice the hiker, the angler, the hunter, and the nature buff to, quite literally, "re-create" their spirits away from the clatter and clutter of today's everyday life.

An ancient Persian poet long centuries ago advised: "If thou hast two pennies, spend one for bread. With the other, buy hyacinths for thy soul." Hemmed in ever more closely by all the trappings of a technological society, increasing numbers of people are seeking their hyacinths in beautiful, healthful areas of outdoor playgrounds such as the Columbia Basin Project. And, of course, they are spending their "pennies", too, to bring another element of prosperity to the region in a skyrocketing tourist trade.

As we look in our crystal ball this afternoon to try to discern the outlines of the Inland Empire's future, we see the role of outdoor recreation expanding, along with farming, power generation, and industrial development.

The agricultural development which the future will bring gains a new significance with the impending world food shortage. The global population escalation, coupled with the shrinkage of available acreage for cultivation, has raised the specter of hunger in many areas. Far from fearing to add to food surpluses, which concerned us the past few decades, we now worry that the world may not be able to keep up with the demand for food. The Inland Basin, with its fertile soil, will be called upon in the years to come to increase its crop production substantially.

In the immediate future we may expect accelerated activities accompanying the building of the third powerplant. During the peak construction years, the total working force at the site, including government, contractor, and subcontractor employees, will number about 3,000. These people and their families, with a healthy payroll, will be a powerful stimulant to the region's economy.

As we look ahead to the next 40 years we envision nearly as much progress beyond today's level as those picnickers of 1927 contemplated would ensue from plugging the Columbia at Grand Coulee and diverting its waters to this Inland Basin.