

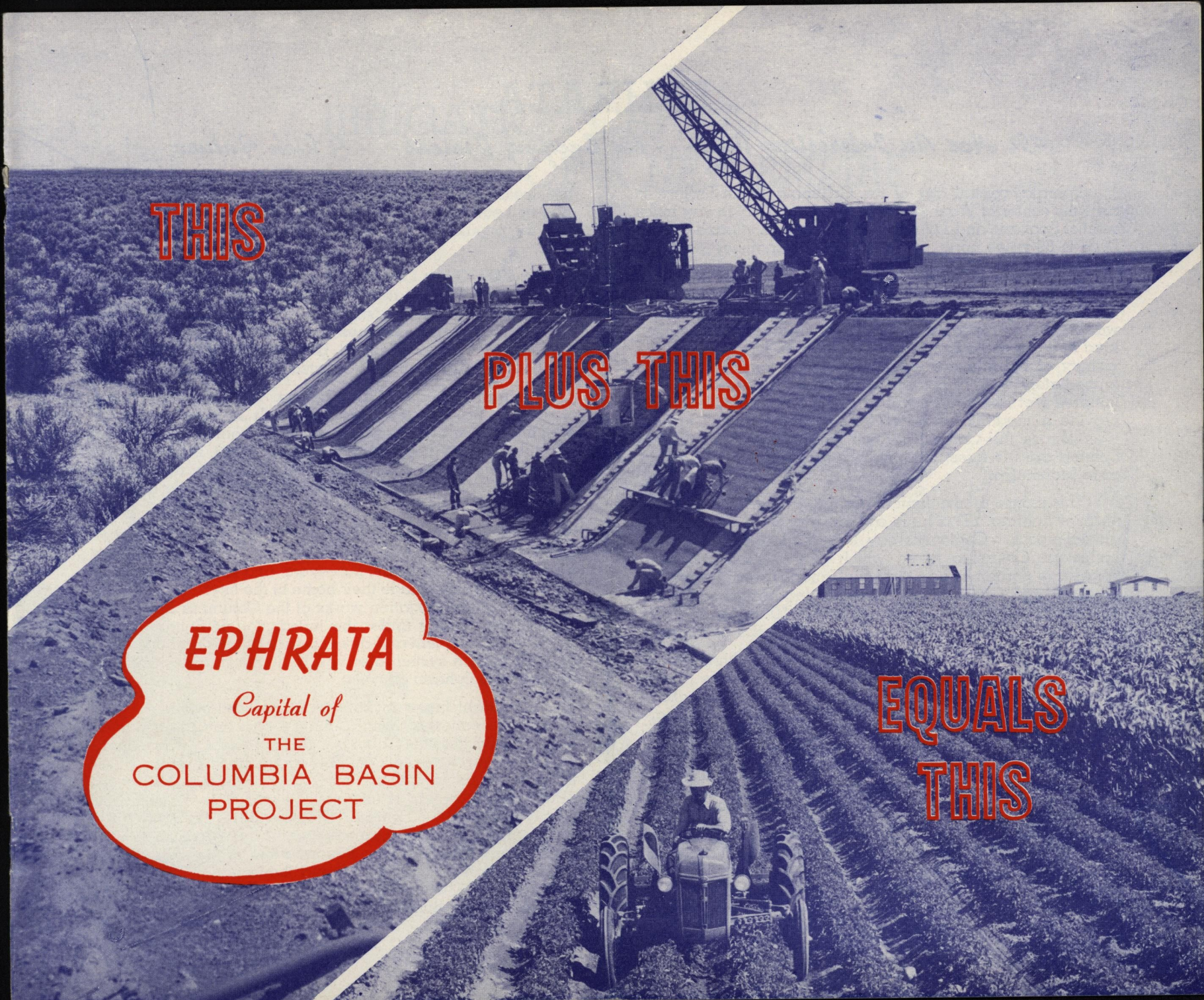
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PLUS THIS

EPHRATA

Capital of
THE
COLUMBIA BASIN
PROJECT

EQUALS
THIS



EPHRATA

It Has An Interesting Past - - - An Exciting Present - - - A Rich Future

Ephrata, capital city of the Columbia Basin Project, is near the center of Washington State. It is 127 highway miles west of Spokane and 177 miles east of Seattle. Grand Coulee Dam is 59 miles north, and the Hanford Engineer Works of the Atomic Energy Commission is 60 miles south.

Ephrata is at the western edge of the Columbia Plateau, which occupies most of south central Washington and which was created by repeated outpouring of great masses of molten lava in early geologic history. Basalt rock formations in the vicinity of Ephrata are evidences of this volcanic activity. Immediately west of Ephrata, the Beezley Hills rise several hundred feet above the level of the plateau to the east and provide a magnificent view of the adjacent area. Farther west across the Columbia River and within 100 miles of Ephrata are the forest clad, snow-capped peaks of the Cascade Mountains.

The mouth of the famous Grand Coulee is five miles north of Ephrata. This huge canyon was created during the glacial epoch. Geologists say that a glacier blocked the prehistoric Columbia River, which at that time drained a very large portion of what is now Canada, near the present site of Grand Coulee Dam. The rushing water, seeking a new channel, carved the Grand Coulee, 50 miles long, five miles wide, and up to 1,000 feet deep out of solid basalt rock.

Ephrata's climate is one of the most healthful in the nation. Extremely low humidity and an abundance of sunshine keep residents feeling fit. The city is 1,280 feet above sea level. Fog is almost unheard of in Ephrata. Winters are mild, and the average annual precipitation, including that received as snowfall, is less than eight inches. The temperatures in July, the warmest month, average 77 degrees Fahrenheit; those of January, the coldest month, average 26 degrees. Throughout the year nights are cool for comfortable sleeping.

Ephrata was founded in 1901. In that year the first town plat, embracing a total of three blocks was laid out and dedicated. The post office was established the following year when the new town had a population of five persons. The population gradually increased until, in 1940, the city had

950 residents. Then a period of unprecedented expansion had its beginnings. By 1945, the population was 1,873. Today the population is 3,300, nearly a four-fold increase since 1940.

In 1909, Grant County, the fourth largest in the State of Washington was created with Ephrata as its seat. Today Grant County has an estimated population of 20,000 who transact their county business at Ephrata. There are seven state offices and two federal branch offices, in addition to the Bureau of Reclamation, located in the city.

Ephrata is a city of fine homes. Slums are unknown. Visitors to the city are impressed with its cleanliness and well-ordered arrangement. Since 1941, home builders have all struggled to keep pace with the great influx of new Ephratans. As a result the proportion of shiny new houses in Ephrata is far above the average. Every single house in Ephrata has electricity.

In 1939 the Bureau of Reclamation established irrigation headquarters for the Columbia Basin Project in Ephrata. Since that time engineers, surveyors, and land classifiers by the hundreds have made their home in the city. Construction of almost all the irrigation works of the Columbia Basin Project will be directly under the jurisdiction of Ephrata headquarters. Settlement and development of land and operation of the irrigation system also will be under the jurisdiction of the bureau's Ephrata office.

The bright future of Ephrata is due in large part to its being the location of Grant County's seat and the irrigation headquarters for the Columbia Basin Project. The county embraces approximately 650,000 acres of some of the finest irrigable lands in the project. These lands will soon be settled by thousands of new settlers who will transact their county business at Ephrata. Settlers from throughout the entire million acres of the project will have occasion to visit the Bureau of Reclamation headquarters in the city. These are the reasons for calling Ephrata the irrigation capital of a new empire. There can be little doubt that Ephrata's future will bring expansion and further prosperity.

IRRIGATION CAPITAL OF A NEW EMPIRE

For further information call 186 or write to the
Ephrata Chamber of Commerce, Ephrata, Wash.



STATE LEGISLATURE TOUR

October 25-26

OCTOBER 25

9:00 a. m. EPHRATA—Leave from ERC building.

9:30 a. m. SUN LAKES STATE PARK—Here you can see for yourself the much discussed and publicized State Park Washington's finest location to invest in the fabulous tourist industry.

11:15 a. m. GRAND COULEE DAM—This dam contains ten and one-half millions cubic yards of concrete, is 4,173 feet long, 500 feet thick at the base, and 550 feet high above lowest bedrock. It weighs approximately 21,600,000 tons. Water impounded by the dam forms Lake Roosevelt which extends 151 miles from the dam to the Canadian border. The lake has 600 miles of shore line and averages 4,000 feet in width. Water not needed for the six generators now installed in the West power house is discharged over the 1,650 foot central spillway section of the dam. It forms a waterfall more than twice the height of Niagara.

GRAND COULEE DAM POWER PLANT when completed, will be the largest in the world. It consists of two powerhouses, capable of serving a total of 18 large generating units. The West powerhouse also has capacity for three smaller station—service units, to meet local power demands. The West powerhouse has six large units in operation now, and the seventh eighth, and ninth units are being installed. They are rated at 108,000 kilowatts, each, and are driven by 150,000—h. p. turbines

GRAND COULEE DAM PUMPING PLANT is designed for 12 centrifugal pumps. Each pump has a capacity of 1600 d.f.s. and is driven by 65000 h.p. electric motor. Initial installation will be 6 pumps, capable of providing sufficient water for 600,000 acres.

1:00 p. m. LUNCH AT GREEN HUT CAFE.

2:00 p. m. FEEDER CANAL, 1.6 miles long, 16,000 c.f.s., is a seasonal work project being built by government forces. It will carry Columbia River water from Grand Coulee dam pumping plant discharge pipes to the 27—mile equalizing reservoir in the Grand Coulee.

NORTH DAM is the north barrier of the equalizing reservoir and will have a maximum height of approximately 115 feet and crest length of about 1400 feet.

SOUTH DAM. This dam is of earth and rock fill construction, like North dam. It is being built under a \$2,771,887 contract. It will be approximately 10,000 feet long, 450 feet wide at the base and have a maximum height of 65 feet.

NORTHERN SECTION OF MAIN CANAL has first 2,400 feet included in South Dam contract. Excavation for remaining 7.7 miles begun recently, under contract for \$1,548,060. Bacon Siphon and tunnel are part of this section of Main Canal, but are being built under separate contract. Main Canal capacity is 13,200 second-feet, sufficient for serving 1,029,000 acres.

2:45 p. m. COULEE CITY-BACON SIPHON AND TUNNEL are a part of the Main Canal. The Tunnel is nearly 2 miles long and 23 ft. and 3 inches in diameter, and the concrete Siphon is approximately 1,000 feet long, under a \$3,494,420 contract. Access roads have built and a semicircular pilot tunnel 19 feet in diameter has been drilled for 3,571 feet from the outlet portal of the Bacon Tunnel. A full faced tunnel is being drilled from the inlet portal.

4:00 p. m. LONG LAKE DAM construction under a \$1,770,592 contract. The dam will be 1,900 feet long, with a maximum height of 111 feet of earth and rock fill. It will save 5-½ miles of costly construction for Main Canal.

4:30 p. m. SOUTHERN SECTION OF MAIN CANAL extends 6.6 miles its headworks at Long Lake Dam to the bifurcation works for the West Canal and the East Low Canal, about 5 miles east of Soap Lake. This section of the canal carries 9,700 cubic feet to water per second. The excavation for this section of the canal has been completed under a \$619,900 contract. No lining contract has been let.

WEST CANAL is 88 miles and serves 291,000 acres. It carries 5,100 cubic feet of water per second. The first 6.2 miles of the canal, including two 25 feet diameter siphons, is being constructed under a \$2,871,796 contract.

EAST LOW CANAL is 130 miles long and is designed to serve 252,000 acres. It carries 4,500 cubic feet of water per second. A contract for \$3,997,136 for construction of first 12.3 mile section from the end of Main Canal has been awarded. This contract also covers three siphons, each 19 feet 4 inches in diameter, with a total length of approximately 5,400 feet.

5:30 p. m. EPHRATA *6:00 to 6:45 PM. Cocktails at American Legion Club.*

7:00 p. m. DINNER AT BELL HOTEL COFFEE SHOP

October 26

9:00 a. m. EPHRATA—Leave from ERC bldg.

10:00 a. m. POTHOLE DAM is the fourth longest dam in the United States being built on a contract for \$9,359,011. This earth and rock fill dam near the center of the project, will extend about 3-½ miles across ancient river channels creating a 47 square mile reservoir to impound run-off water from the northern part of the project for irrigating 270,000 acres in the southern portion. The dam's maximum height will be approximately 200 feet and 9,190,000 c. y. of earth and rock will be used to construct it, nearly a great a volume as that of Grand Coulee Dam, would's largest concrete structure.

11:30 a. m. DEVELOPMENT FARM NO. 1. Development farms are being established to aid project settlers in problems dealing with the application of water, the efficient use of water, fertilizer requirements, rotations, green manure and cover crops, crop adaptability, and many other matters. These farms are apart of the Bureau's over-all program to assure successful settlement and development to the project.

This farm is located in 80 acres of Class 2 soil of the Ephrata sandy loam type, with very flat topography.

1:00 p. m. MOSES LAKE FOR LUNCH.

2:30 p. m. EPHRATA. — Return to Recreation Center.

3:00 p. m. EPHRATA CLUB—Cocktails and 'Tid-bits'.

A Dream---

Born In Ephrata---Comes True

Thirty years ago a small group of men in Ephrata gave birth to an idea that was destined to capture the imagination of engineers, economists, and other scientists throughout the world. The little group considered the mighty Columbia, second largest river in the United States, winding in a deep gorge through Washington State and pouring billions of gallons of pure, clear water from the ice fields of the Northern Rocky Mountains unused into the sea. They also thought of the vast acreage of rich but parched land which borders the Columbia for 80 miles north of its confluence with the Snake. Like others before them, they tried to think of a way in which the waters of the Columbia could be used to irrigate the desert, to convert it into a lush agricultural area. Then it came to them! Why not build a giant dam to harness the tremendous water power of the Columbia? Why not use some of the electric power generated at the dam to pump irrigation water up to where it could be distributed over the thirsty acres? Why not make the Columbia River thus veritably lift itself by its own bootstraps up out of its deep gorge to pour its waters over a new irrigated empire which they called the Columbia Basin Project? Why not indeed? So they asked the army engineers and the Bureau of Reclamation of the Department of the Interior. Yes, they were told, it could be done; but there were many ifs. If the great sums of money needed were made available. If there developed huge new markets for surplus hydroelectric power to provide the revenues needed to make the project financially feasible.

No one had the answers to these ifs, so the idea languished for 15 years—languished in the minds of most men. But not in the minds of the little group who had created it in Ephrata. Those men kept it alive despite many discouragements and scoffers.

Then came depression and a national policy of building huge public works. The Ephrata group was ready with its plan. It was rewarded with an initial appropriation out of P. W. A. funds of 63 million dollars in 1933. Thousands of

men and hundreds of huge machines began to work in the first and key step in realization of the Ephrata dream—the great Grand Coulee Dam. Around the clock they worked, overcoming obstacles unheard of in the annals of engineering. For eight years they worked, until, in 1941, the magnificent structure was completed. Even before Grand Coulee Dam was finished, electricity had started to flow from one of its two powerhouses to markets in other parts of the Pacific Northwest. In the years that followed, the first flow of power became a torrent of electrical energy that helped spell the doom of Hitler and the Jap warlords in the war industries of the region.

While Grand Coulee Dam was rising from the bed of the Columbia, the irrigation system which is to use the water it makes available was not neglected. Directed from the Ephrata headquarters of the irrigation division, crews of the Bureau of Reclamation made topographic surveys and classified the land of the Columbia Basin Project as to its fitness for irrigation. Others laid out preliminary locations for canals. A program of economic investigations, coordinated from headquarters in Ephrata, was carried by hundreds of experts representing governmental agencies and private enterprise.





With the conclusion of World War II, the order was given for full speed ahead on construction of irrigation facilities, suspended during hostilities. Construction crews and their machines returned to the project.

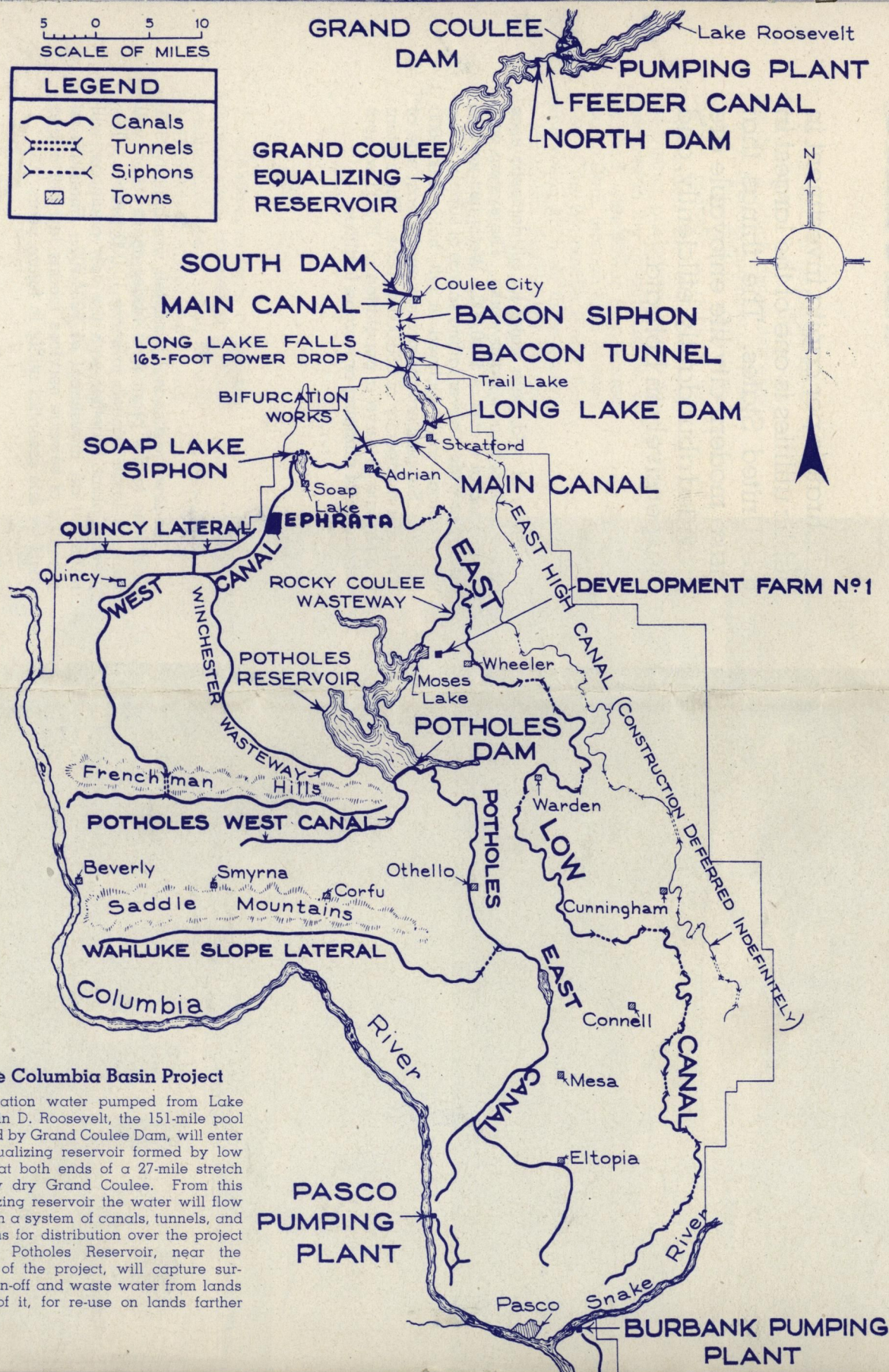
The scoffers were silent and the ifs were forgotten in the face of a power shortage in the new electrical economy of the Pacific Northwest.

In the years ahead the Ephrata dream will approach its rich, full realization. As the new irrigated empire takes form, with Ephrata as its capital, the men of vision who created the idea, their neighbors and their children will see their dream come true in new farms, new homes, and new industries.

5 0 5 10
SCALE OF MILES

LEGEND

-  Canals
-  Tunnels
-  Siphons
-  Towns



The Columbia Basin Project

Irrigation water pumped from Lake Franklin D. Roosevelt, the 151-mile pool created by Grand Coulee Dam, will enter an equalizing reservoir formed by low dams at both ends of a 27-mile stretch of now dry Grand Coulee. From this equalizing reservoir the water will flow through a system of canals, tunnels, and syphons for distribution over the project lands. Potholes Reservoir, near the center of the project, will capture surface run-off and waste water from lands north of it, for re-use on lands farther south.

PUBLIC

Ephrata's per capita investment in public utilities is one of the largest in the United States. The things that make modern city life enjoyable are provided abundantly, efficiently, and inexpensively in Ephrata.

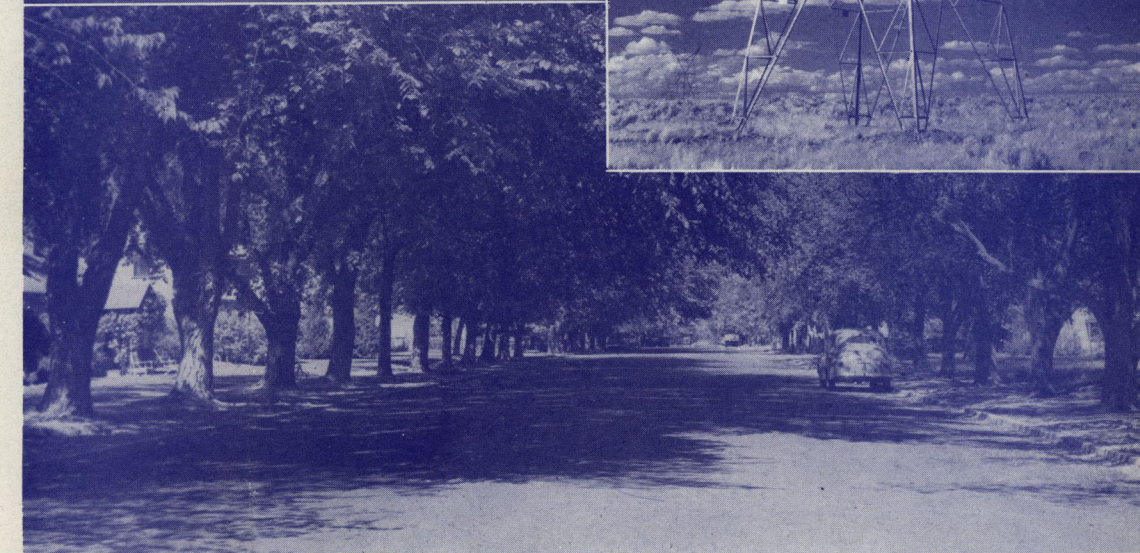
Plenty of cold, pure water for all domestic uses comes from Ephrata's water works. The system was constructed at a cost of \$230,000. Wells just west of the city provide a never failing source of supply. The main storage tank, pictured at left, holds 1,000,000 gallons. Supplementary storage on the east side of town has a capacity of 350,000 gallons. The system is adequate to serve a population of 10,000 without expansion of pumping or storage facilities.

The sewage disposal plant, left, was built in 1939. Additions to the plant now under construction will make it large enough to serve 10,000 people. The present plant, together with the new additions, will represent an investment of \$294,700. Foresight in planning of sewage services means low per capita costs for this essential utility in future years.

UTILITIES

"Power at Cost" is the slogan of Grant County Public Utility District No. 2 which distributes electricity in Ephrata and most of Grant County. The Ephrata office of the District, pictured at right, is the headquarters for its operations. The District, publicly owned by the residents in the area it serves, is supplied with power from Grand Coulee Dam, through high voltage lines of the Bonneville Power Administration such as those shown at far right. Residential electric rates of the District average only .012 per kilowatt hour, 35 per cent of the national average.

Street improvements costing \$442,000 were completed in 1947. Twelve miles of city streets as well as six miles of alleys are paved, and 24 miles of sidewalk have been laid. Modern street lights, curbing, and trunk storm sewers were included in the recently completed street improvement program.



IRRIGATION

One of the major activities in Ephrata stems from the location in the city of headquarters for the Irrigation Division of the Columbia Basin Project. These headquarters have been in Ephrata since 1939. Before 1946, the activities of the Division were concerned with surveys and investigation.



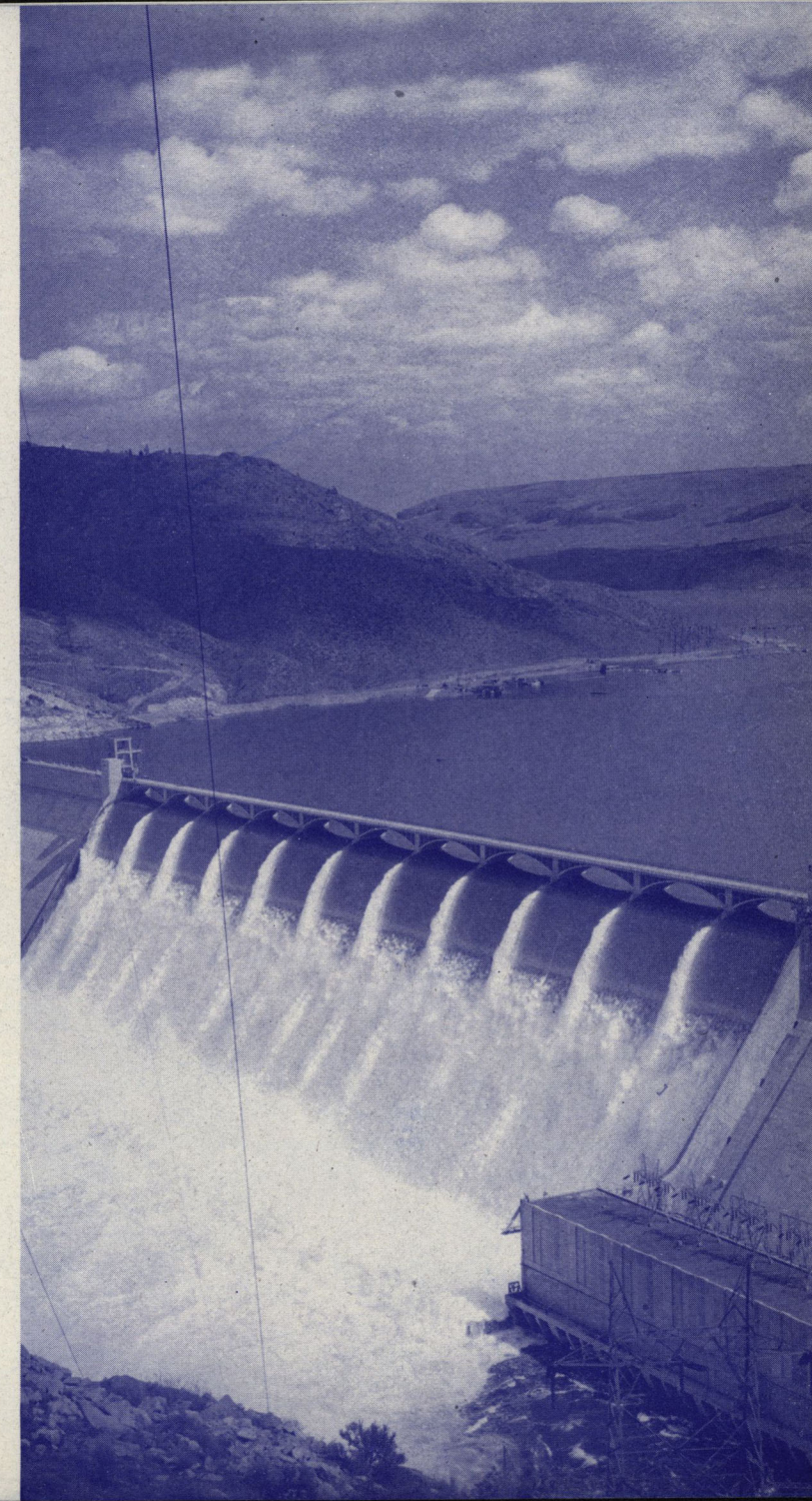
HEADQUARTERS

With the awarding of major construction contracts on the irrigation system, however, contractors and their organizations turned Ephrata into a booming construction center. The Bureau of Reclamation has taken over most of the Ephrata Army Air Base and filled its huge warehouses with construction material. The Winston-Utah Company, contractors for some of the canal construction, has established its headquarters at the air base.

The Irrigation Division is responsible for all construction in the Columbia Basin Project below the South Dam of the equalizing reservoir (See Map p. 3). This will include 4,000 miles of main canals and hundreds of miles of laterals as well as tunnels, siphons, and two large earth filled dams—Long Lake and potholes.

At the height of construction activities in 1947, 2,400 workers, including forces employed by contractors as well as by the government, were under the jurisdiction of the Irrigation Division. Included in the Division is the project development subdivision which will guide the settlement of the land and operate the irrigation system after it is constructed.

The building pictured at the top on the page opposite, completed in 1947, is the field office in Ephrata of the Irrigation Division. The picture, lower left, on the opposite page is the architects drawing for the new building which the Bureau of Reclamation will build in Ephrata in the near future. It will house the main irrigation offices of the Columbia Basin Project. The present field office will be turned over to designers and draftsmen now housed in temporary quarters. The picture immediately to left is a construction scene at Long Lake Dam, 15 miles northeast of Ephrata. At the right is shown Grand Coulee Dam, world's king of concrete dams.



PUBLIC

The seat of municipal government in Ephrata is the city hall, shown at upper left. It also houses two of the most modern fire trucks, manned by an efficient volunteer fire department. The training and good record of the volunteers is reflected in the city's low fire insurance rates and extremely low fire losses.

Grant County's government is housed in the attractive court house shown at lower left. The building, together with its large, well shaded lawn, occupies an entire city block just a few steps from the main business section of Ephrata.

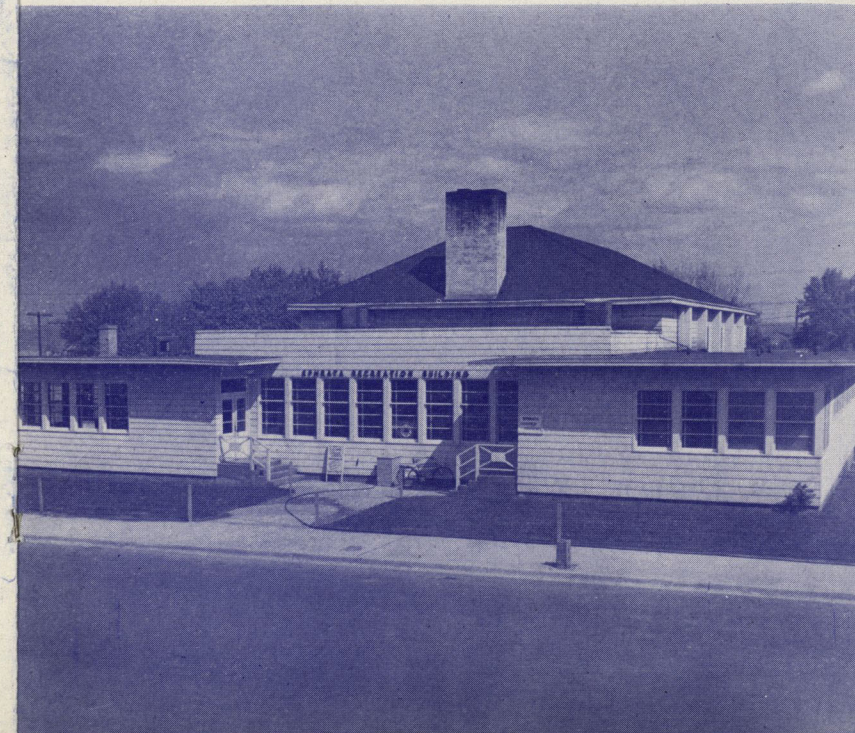
The heart of Ephrata's civic affairs is the municipally owned recreation center, pictured immediately to the right. It was constructed in 1943, and contains a large auditorium, a big, friendly lobby, and facilities for cooking and dining. The recreation center was a mecca for servicemen stationed at the Ephrata Air Base during World War II. It is made available at very low rates to house the social functions of any Ephrata organization. On Friday nights, well-chaperoned school dances make the center a merry place. The Chamber of Commerce maintains an office in the building.

Ephrata's well administered school system, with both grade and high schools, has 30 teachers and an enrollment of 670 pupils. The two modern school buildings, valued at \$505,000, are community centers for many civic events. Parents of Ephrata and vicinity can be assured that their children will receive top-notch education whether in preparation for college or for entrance after high school into the business world. The high school is pictured at top right.

Ephrata is one of the few cities of its size to boast a modern, well equipped hospital. The city's Columbia Basin Hospital, pictured lower right, represents an investment of more than \$40,000 in furnishings and equipment alone—all provided by civic groups. The hospital has 25 beds and is staffed by seven trained nurses. The city's six doctors, together with the Columbia Basin Hospital provide adequate and up-to-date medical service for the community.

INSTITUTIONS

Seven churches contribute to the spiritual welfare of Ephrata's population. Church-going and attendance at Sunday school are popular and account in large part for the high level of citizenship and the almost complete absence of crime in Ephrata. The churches also are centers for many community building social activities.



TRANSPORTATION

Few cities in the nation, of Ephrata's size, have as good transportation facilities. It is on the main line of the Great Northern Railway. Frequent bus service is provided to points in all directions. The excellent highway system of Central Washington makes driving to and from Ephrata effortless and pleasant. A fine airport, at the city's edge, gives Ephrata convenient access to the nation's airlines.

The streamlined train pictured at the top of the opposite page is the new Empire Builder of the Great Northern Railroad. Ephrata is one of 21 stops between Seattle and Chicago on the Empire Builder's schedule. Travel time on the Empire Builder from Ephrata to Chicago is only 41 hours, to Seattle 5½ hours, and to Spokane 2 1/3 hours. In addition to the eastbound and westbound Empire Builders, six other main line passenger trains stop at Ephrata every day. Freight service is good.

Modern, air-conditioned buses of the Northwest Greyhound Lines such as that pictured on the opposite page are a familiar sight in Ephrata. Ten buses arrive at Ephrata every day from points north, south, east, and west. Some of them carry mail, for Ephrata is a central postal distributing point for a wide area in Central Washington.

Private motorists as well as buses have a wide choice of fine highways in traveling to and from Ephrata. Primary State Highway No. 7, shown on the opposite page, passes through the city and connects with federally numbered routes which cross the state 28 miles north and 30 miles south of Ephrata. A paved county road 20 miles long also provides connection with the latter route. Ephrata residents have a choice of three fine highway routes to Spokane and two to Seattle.

For air travelers, the Ephrata air park, just east of town, pictured at bottom of opposite page, provides charter plane service to all points. The airport was developed many years ago by the C. A. A. as an emergency land field. During World War II, the Army Air Forces enlarged the field and built a huge air base where bomber and fighter plane crews were trained. Back in civilian status, the Ephrata airport is used for private flying instruction as well as charter service. The field is an alternate unit in the northern transcontinental airway of the C. A. A. It is almost entirely free of fog the year around and has three 7,200-foot runways.

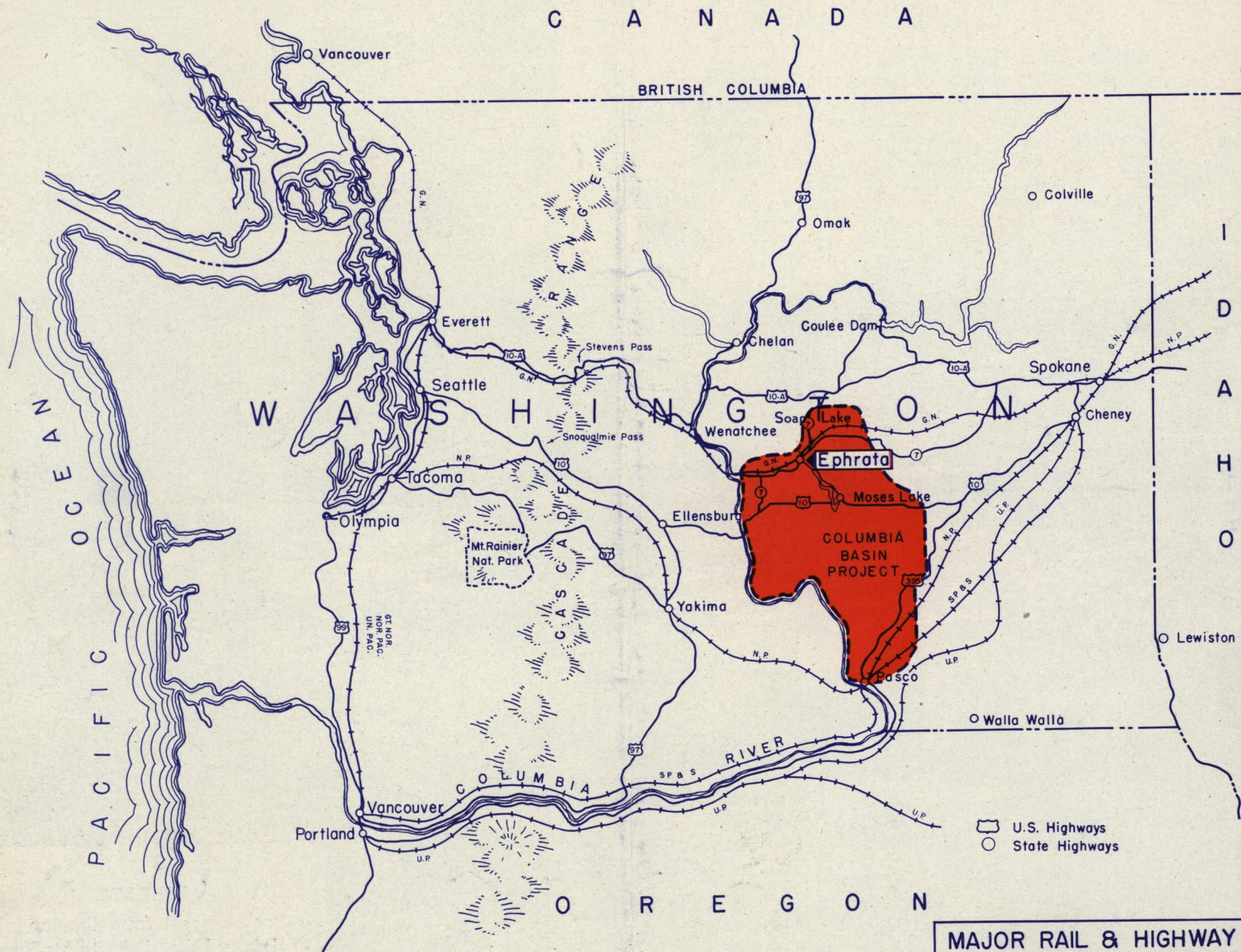
RECREATION

Many kinds of recreation are easily available to Ephrattans. The central location of Ephrata in the glorious vacationland of the Pacific Northwest offers residents a choice of mountain scenery, sea shores, and clear, cool lakes all reached in less than a day's easy driving. Within thirty miles there are seven lakes. The closest is Soap Lake, top left, five miles to the north, whose famed medicinal waters are nationally known for their curative characteristics. Moses Lake, lower left, third largest in Washington, is less than ten miles to the southeast. A chain of lakes on the floor of the nearby lower Grand Coulee provides swimming, boating, and fishing in a magnificent setting. On the shores of one of the lakes of the lower Grand Coulee, pictured below, a fine new 9-hole golf course, 25 miles from Ephrata, offers golfers, while playing, a close-up view of the famous Dry Falls of the prehistoric Columbia River. For the huntsman, the territory around Ephrata abounds in pheasants, ducks, and other game birds. Fine big game hunting is available in the mountainous areas north and west of Ephrata.



EPHRATA

Looking east from the top of Beezley Hills. Ephrata Air Base in right background.



MAJOR RAIL & HIGHWAY
ROUTES TO EPHRATA