McNary Dam Producing Power for Industries

Two generating units are making hydroelectric power at McNary dam, in the Columbia river, three miles east of Umatilla, Ore., and not far from Pasco, Kennewick and Richland, in Washington.

Each of the units now in operation is rated at 70,000 kilowatts of electrical power, or 140,000 kilowatts together. For short periods they can "turn up" more than that when enough water is available.

Construction of McNary dam was begun under supervision of the U. S. Army Corps of Engineers, in May, 1947. Today the dam is finished and the exterior of its powerhouse, which is 1,422 feet long, has been completed, although work still is being done inside.

On November 9, last, the first power-generating unit was complete and its operation was begun at that time. Its kilowatts were turned into the grid of the U. S. Columbia river power system, which supplies both industrial and domestic users. The last of December the second McNary unit was ready to turn and it was hooked up to the government grid, which is, incidentally, under the supervision of the Bonneville Power administration as far as marketing the power is concerned.

The third McNary power unit is being assembled at the present time. It is scheduled to begin producing electricity on Sunday, March 14, 1954. After that, if present schedules are carried out, installation of another generating unit will be completed every three months until all 14 units which are to go into the power house have been finished.

The surface of the pool created in the Columbia river behind McNary dam now is at 340 feet above sea level, the height which it attained on last December 1. There normally are five feet of pondage, between 335-foot and 440-foot elevations, available for power production.

Previous to the time the McNary power house began production of electricity, with one unit last November, other large amounts of power were reaching the Pacific Northwest grid from federally-built dams at Bonneville, Grand Coulee and the Hungry Horse site. A small amount was coming from Detroit dam, in the Willamette valley of Oregon and, furthermore, interconnections existed between the grid and utilities built and operated by private companies.

Power capacity at McNary dam is greater than at Bonneville dam, but it is less than at Grand Coulee,
FOUR NEW HARDY APPLES

Four interesting varieties of hardy apples introduced after more than 30 years of testing with literally hundreds of seedlings at the U. S. Northern Great Plains Field station, near Mandan, N. D., have been named and released for home orchard planting.

The Custer is a small apple which was developed from a cross of the Red Siberian variety and Wealthy. The fruit is striped with red, on a greenish-yellow background. It is roundish, mellow, juicy and sweet and the flavor is pleasant.

Then there is Prairie Gold, described as a small apple or a large crab, which came from a cross of Robin and Oldenberg varieties. Prairie Gold fruit is yellow, slightly ridged, flattened somewhat at the ends, firm, juicy, slightly tart and pleasing to one’s taste. The tree is semi-dwarf, spreading and very hardy.

The Heart River, a crab apple ranging from medium to large in size, is another new addition to the hardy apple list. The fruit is yellow, firm, and juicy with a mild but good flavor. It is said to be hardy to Zone 3 and has an average production of 1,000,000 bushels per acre in 20 years. The tree is semi-dwarf with a spreading habit.

(Close-up) Picture of a hardy apple tree in an orchard.

Rye seeded in North Dakota last fall totaled 341,000 acres, an increase of 45 per cent over the 235,000 acres seeded in the fall of 1952. It is the largest acreage since the fall of 1947, when 461,000 acres were sown. No other state has as much acreage in rye for 1954 as North Dakota. Minnesota farmers seeded 112,000 acres with this grain last fall, compared with 148,000 the year before.

Carnation Milk farms, King county, Washington, exhibited Holsteins at 11 major fairs and expositions in 1953 and won 83 blue ribbons, 11 junior championships and 10 grand championships.

R. F. Gunkelman & Sons, Fargo, N. D., won the championship on flaxseed (they exhibited a golden variety) at the International Grn’n & Hay show, in Chicago, during December. Other championships awarded included the following: bromegrass, Oscar Furnberg, Fargo; crested wheatgrass, North Dakota Agricultural college; Kentucky bluegrass, Leo Anderson, Fargo. New-day Seed company, Fargo, won first on for A. North Dakota grower, Palmer Dahlgren, Walsh county, exhibited the best durum wheat.
Settler Wants to Trade Beets for Bricks

As an investment, C. G. Lehnert and his wife bought 98 acres of land in the Columbia basin of Washington, in 1945, long before water had been brought to that area to irrigate it. At the time, they didn't intend to farm, but there they are, in 1954, with two years of experience on their farm behind them, along with a lot of physical exercise that they found necessary in taking the fields out of sagebrush, ditching them for water and putting them under the plow.

"Many of our friends and relatives thought we were crazy," Mrs. Lehnert said, recently, "when we spent our savings for this place. But we didn't agree. The country seemed uninviting if you looked only on the surface of the situation, but we thought the soil was good and we believed what it needed was water and work to make it bloom. That has proved to be right."

Lehnert approved of his wife's frank appraisal of the Columbia Basin Irrigation project.

"This will be a great country," he said, not long ago, as he looked across almost level fields, which were idle during the winter but which soon, with the advent of spring, in just a few weeks, will grow crops of sugar beets, beans, peas, alfalfa and grass. "You can grow almost anything here," he added.

Lehnert was a logger in western Oregon when he and Mrs. Lehnert bought their Columbia basin land. He might still be on the same job, but one day he was injured. That changed the outlook.

"We came up in 1952," Lehnert related recently, while he sat in an easy chair in his roomy, light, basement-type home on the Lehnert Columbia basin farm. "The water became available from the U. S. Bureau of Reclamation that year to irrigate our land. So, we have harvested two crops here. At first, we had to haul drinking water five miles, but now we have our own well and I am putting in a cesspool, too. The well is 170 feet deep. The drillers went through water four or five times before they reached that depth, but they drilled until they hit what seemed like a sure supply.

"We've built up this farm, you might say, from less than nothing, because we had to clear sagebrush off it first, and then plow and work it down to convert it into a seed bed. Fortunately we had little leveling to do, except on a small patch at one end of the place. Our basement home is comfortable and it has answered our immediate housing problem without requiring us to go heavily into debt for a house. We are much in hopes the sugar beets soon will bring in enough profit so we will be able to buy bricks to finish the dwelling which both Mrs. Lehnert and I and our two sons will use and enjoy."

Sugar beets, in fact, for the new factory of the Utah-Idaho Sugar company, located at Scalley, near Wheeler, on the Columbia Basin project, are important to many of the new settlers in that area. In 1953, Lehnert had 25 acres of beets. They averaged nearly 22 tons per acre. It was not a spectacular yield for that area, where some settlers got 28 tons, and others more than 30 tons, on land that had been farmed only a few years, but Lehnert's production was good. It made a total of about 550 tons. He didn't know, when he was discussing beets recently what his return per ton finally will be, since final payments will not be made until the exact level of prices for sugar sold from 1953 production is apparent, along with other factors not at that time fully known. However, it can be assumed that Lehnert will receive, in all, around $14 a ton, maybe $15, for his beets. A part of this sum already has been paid to him. Say it finally is $14. In that case, total beet income on his new farm for 1953 looks like $7,700, or $308 an acre. It is a sizable amount, to be sure. Remember, though, it isn't entirely gravy. The expense of producing sugar beets is considerable. The out-of-pocket cost varies from farm to farm, depending on the amount of work hired, the volume of fertilizer, the methods of thinning and blocking and the system of harvesting. However, in many cases, it comes to $100 an acre, or possibly $125. Even if you add to it depreciation on machinery and long-term interest on the invest-
ment in the land, a margin of profit still is apparent.

In addition to beets, Lehnert raised 40 acres of dry beans in 1953. One field went 25 sacks an acre, worth something under $200, but another field (12 acres) produced a lower yield. He had 10 acres of field corn, too. The previous year, his first on the project, he raised dry peas and corn in addition to 35 acres of beans, which yielded 21 sacks of beans per acre.

"The most aggravating things can happen," Lehnert reflected, while he related his experiences, "when you are trying to bend every effort toward getting a start on the farm. One that happened to me was a broken arm. One spring morning the battery on the tractor was fresh out of power. It wouldn't throw that motor over. I grabbed the crank and heaved to, but the engine started with a bang in the opposite direction. The result was a cracked bone for me. That was a blow. We went ahead, though. The family pitched in and later I cultivated beans, corn and beets while driving the tractor with one hand. When bean harvest arrived, I helped, driving the tractor again."

Just as Ruel Bodily, a young man who once lived in Utah, and several of his friends, early in January were beginning to put the final touches onto a new machine shed and shop at his farm, south of Moses Lake, on the Columbia Basin Irrigation project, in central Washington, two men came into his yard to ask about his experience farming his land, which was cropped under irrigation for the first time in 1953.

"The beauty of this building we are putting up is," Bodily explained to his visitors, "that it isn't costing much."

He pointed out that the secondhand ties with which the walls were sheathed had come from the old government-owned railroad that formerly was located in the bottom of Grand Coulee, where it extended a distance of some 28 miles from Coulee City, at which point it joined the Northern Pacific, to Coulee Dam, its northern terminal, where materials during the 1930's and 1940's were delivered for constructing and equipping Grand Coulee dam, the dam's power house, its irrigation pumping plant and a balancing reservoir that now occupies the Grand Coulee itself. The railroad was removed before the Coulee was permanently flooded on its being converted to use as a reservoir to hold irrigation water, from which the entire Columbia Basin Irrigation project draws its supply.

Bodily bought, at a bargain price, several loads of used ties and bridge timbers after they were removed from the railroad which was taken up before the Coulee was flooded.

"The shed contains, already, three carloads of fertilizer, although the roof isn't on yet," Bodily explained. "The fertilizer belongs to several of us neighbors. We bought it before January 1 not only to make certain of having our supply when we need it but, also, we have to think about income taxes," he added, giving his visitor a quizzical glance as he did so. "We thought it might work out better that way in our accounting. The neighbors had no place to keep their's until planting time. So, they offered to help me finish the building in return for a cover over their sacks of fertilizer between now and the time they need it."

Bodily is an example of one who has developed a new farm rapidly. He has 80 acres and his total investment in equipment, leveling and ditching and buildings is $35,000. He has a new house, a one-fifth interest in a well for domestic water and a machine shed and shop. Leveling, which he had a contractor do for him, cost $4,200, including $1,500 to fill a big hole on a two-acre patch.

"My farm was in dry-land wheat during 1952," Bodily reported. "It was a fairly good year, though, and the yield averaged 18 bushels an acre. But in 1953, I put it into irrigated crops. Thirty acres of sugar beets, with 800 pounds of ammonium nitrate per acre (it took a big shot of nitrogen to break down the wheat stubble) went 22 tons per acre. I think the beets would have gone four more tons an acre, except for the fact that I got them in late because I had to replant. Then, 30 acres were in Red Mexican beans, with the same amount of fertilizer as was applied on the sugar beets, and 31 bags of beans per acre were obtained. I was right pleased with the yield."

Watermelons were Bodily's third and only other crop last year. He had 10 acres of them, which he planted to obtain seed. A company in Oregon agreed to take the seed at from 35 cents to 45 cents a pound. This venture didn't work out well, he reported, because, while the melons grew large and were thick in the field, they failed to set any more than a moderate amount of seed.

This year Bodily will have 30 acres in beans, 25 acres in sugar beets and 20 acres of peas. Red clover will be planted with the peas. The clover will be plowed under after the peas have been harvested as seed.
Will Mix Chemical Fertilizer at Raugust

A fertilizer mixing plant on the Columbia Basin Irrigation project, in central Washington, has been built by the J. R. Simplot company at Raugust, on the Northern Pacific Railway.

"The J. R. Simplot company, which has its main office in Idaho, will mix any formula at Raugust that growers require," O. R. Lovins, Washington manager of Simplot Produce company, said recently. "We expect to do a general fertilizer business, serving both wheat farmers and irrigation farmers, or anyone who can use the product. Also we will distribute liquid nitrogen fertilizer."

Lovins pointed out that the firm he represents primarily is engaged in buying and selling table potatoes.

"Our operations in the state of Washington began with the purchase of potatoes raised on the new Roza division of the Yakima Irrigation project," he explained. "These have been handled through a warehouse we have at Whitstran, on the Northern Pacific. Now we will buy also through our plant at Raugust, from Columbia basin growers. This plant, in other words, will be headquarters for our potato buying in that area as well as a location for mixing fertilizer."

Construction of a building (60x180) for the Simplot operations at Raugust was begun last July. It was completed in the fall. In addition to accommodating the fertilizer department, it has space for 4,000 to 5,000 bags of potatoes. Immediate plans at Raugust do not include extensive storage of potatoes by the Simplot company.

"The long growing season in the Columbia basin is a wonderful advantage," Lovins stated. "The outlook is for good yields and high quality. My idea is that if you are a grower you have to use good practices in all of your farming to be successful with potatoes and that these farms in the basin really produce better spuds after they have been lifted a year or two."

A. J. Kamel will manage the fertilizer unit at Raugust.

With the addition of its activities in Washington, the Simplot company has three potato merchandizing units—one operating in eastern Idaho, one in western Idaho and Oregon and one in Washington. The company has a fertilizer manufacturing plant at Pocatello, Idaho, and it owns phosphate mines in southern Idaho and in Wyoming.

New Wheat Resists 15-B Rust

The first release of a hard red spring wheat that carries resistance to 15-B, the stem rust which caused serious losses in 1953 and 1952, has been announced.

The new wheat, named Selkirk, for Thomas Douglas, the Fifth Earl of Selkirk, who headed a Scotch and Irish colony in the Red River valley of Manitoba, beginning in 1811, is a beardless variety that was developed at the Dominion Cereal Breeding Laboratory, in Winnipeg, but it is, nevertheless, of importance to growers in the U. S., where resistance to races of rust now prevalent is a crying need.

Developed by crossing a selection from McMurachy-Exchange with Redman wheat and then backcrossing with Redman three times, Selkirk has shown resistance to race 15-B of stem rust at moderate temperatures. While its resistance tends to lessen somewhat under high temperatures, according to plant breeders at North Dakota Experiment station, who have tested it, it is the best variety available, they say, from the standpoint of tolerance for stem rust. It also is moderately resistant to leaf rust. Yields have been satisfactory under experiment station conditions.

Selkirk has been approved for milling in Canada and it has received preliminary approval in the United States.

Dominion authorities have 150,000 bushels for distribution in Canada. They are sending also 2,500 bushels to North Dakota, 2,000 to South Dakota and 1,500 bushels to Minnesota, all for increase in 1954. In addition, 500 more bushels will be on hand at planting time in North Dakota from supplies sent there earlier from Canada for increase. Growers hope that in another two to three years enough seed will become available to stem the present tide of rust losses until such time as even better varieties can be perfected and increased.

Four New Hardy Apples

(Continued from page 2)
Kennewick Project Will Add Farms on New Land

Work on the Kennewick division of the Yakima Irrigation project, first announced in The Northwest in August, 1952, was 17 per cent finished on January 1, 1954, judged on the basis of money actually spent up to that time for construction and for equipment which will be installed as a permanent part of the irrigation facilities.

Being built under supervision of the U. S. Bureau of Reclamation and the Kennewick Irrigation district, the new division is designed to furnish water to nearly 15,000 acres of new land, now in sagebrush, located near Kennewick, Wash., in the central part of the state.

In fact, 3,950 acres in the division already are watered and cropped intensively as a result of previous construction of irrigation works. This developed area is known as the Kennewick Highlands. The present work, therefore, really is an extension of the project.

While the irrigation benefits are to be apparent in the Kennewick area, and west of there for several miles, the present activity of construction crews centers nearer Prosser, which is 37 miles from Kennewick. That is because water to irrigate the project will be taken out of the Yakima river at a point near Prosser.

To understand what is occurring now, it is necessary to review local history briefly. Water at present is diverted from the river at Prosser into a canal on the north side of the stream. Two miles downstream, this flow is used at a small power plant on the canal to produce 2,400 kilowatts of electricity, and there the water is turned back into the river. The power generated at the Prosser plant is used in the summer to pump water for the irrigation of the Highlands unit. This occurs at a pumping plant located on a canal on the south side of the Yakima river, near Kennewick, which carries, in addition to water for the Highlands, the main supply for another project below Kennewick.

The plan of the current construction program calls for enlargement of the present power canal, which begins at the Prosser diversion point, and its extension eight more miles downstream to Chandler, where a power plant capable of producing 12,000 kilowatts will be built. Water from this power canal will be carried, in a 99-inch concrete pipe, under the Yakima river at Chandler, and under the Northern Pacific main-line tracks and up the side of the river canyon, a lift of 101 feet, where it will be discharged into the Kennewick main canal, which is to be built, starting at that point. In the future, the Highlands area will receive its water from a lateral extension of this main canal and the pumping plant near Kennewick which now lifts water for the Highlands will be abandoned.

At the Chandler plant, a kind of hydraulic pumping installation rarely seen will be used to push water from the power canal under the river and up to the main canal. That is, in effect, the water (during the irrigation season) will be split into two segments. One segment will propel water-driven turbines,
Farm and Home Opportunities

You may select from this listing of typical farms or ask us for other propositions suited to your needs. Additional information, including addresses of owners or agents, furnished on request.

MINNESOTA

M-210—120 acres, sandy loam soil, 90 acres under plow, 30 in pasture; nine miles from Verndale, 12 from Wadena; two-story, four-room house; barn, 28x40, cement floor, 15 stanchions, drinking cups. Hog house, poultry house, garage and other service buildings. REA, milk and cream route, school bus service at the door. A good place to get started with a limited cash outlay. Price, $3,500 and can be handled with $1,900 down. Easy terms and reasonable interest on balance.

M-211—320 acres in Clay county. 209 acres under cultivation, with fair set of buildings. Would make a good grain and stock farm. Price, $49 per acre.

M-212—80 acres, four miles from Wadena, one-half mile from black-top highway. 76 acres in high state of cultivation; remainder, building site; dwelling, 26x20, with part basement, hardwood floors and tile bath. Built-in cabinets in kitchen; two barns, 18x36 and 10x16, cement floor; granary, 16x32; poultry house, 14x24; garage, 10x20; brooder house. $816; two corn cribs, each 5x16. Buildings located in a grove. $4,000 spent recently in remodeling buildings. Productive soil. Price, $8,500; $2,500 cash, balance on terms, with yearly payments.

M-213—97-acre equipped farm, mostly tillable, borders Mississippi river, soil suitable for raising soybeans, corn, grain and alfalfa. Includes tractor, cultivator, plow, drill, corn planter, mower, trailer, grain tank and drag. Three-room home, overlooks Mississippi river, electricity available; granary, 88 acres tillable, remainder, woodland, four-strand barb wire fencing, three years old; few fruit trees. On paved state highway, all pickup routes, eight miles to a busy town. $4,500, $1,500 down. 30-day possession.

NORTH DAKOTA

N-112—320-acre improved farm, in northern Barnes county, on gravel road, two miles to state highway. 240 acres under cultivation, 80 pasture. House, 16x20x10; addition, 16x20x10; barn, 24x28x12; addition, 16x28x12; granary, 16x16x8; brooder house, 8x12x7; poultry house, 12x16x7; 1000-bushel steel granary. Price, $13,000, $6,800 cash, balance on terms, four and a half per cent.

N-113—480-acre combination grain and livestock farm in western Ransom county. Fair buildings, on good road. 300 acres are under cultivation. Price, $30 per acre, with one-half cash, terms on balance.

MONTANA

S-132—800 deeded acres, Big Timber area, of which about 300 acres are under irrigation. Improvements consist of 13-room frame house, housing store and post office; two-room log house, milk house, shop, granary, chicken house, barn and fair set of corrals. Carrying capacity at present about 60 head of beef cows. Price, $25,000. Terms, $11,400, insurance loan can be assumed, balance cash.

S-133—40-acre irrigated farm, all seeded to pasture and hay. Fair improvements. Not far to Billings. Electricity, mail route, school bus. Price, $18,500.

IDAHO

I-110—100 acres, approximately 30 acres under cultivation, 18 acres of which are in alfalfa hay; farm has an extra good set of buildings. Three-bedroom modern home, two barns, hog house, calf barn, hay shed, root cellar, dairy loafing shed, brooder house and hen house; fences are good; hay in barn; two miles to good town. Price, $13,000. Livestock and machinery may be purchased if desired. Terms.

I-111—560 acres, Orofino area, 100 acres under cultivation. Seven-room house. Electricity, water and a good orchard. A stock ranch. Price, $14,500.

I-112—10-acre irrigated tract, six miles north of Coeur d'Alene. Eight-year-old house having seven rooms (four bedrooms), with basement and furnace. Single garage; shed, 16x32; fruit and shade trees. Price, $7,500.

WASHINGTON

W-219—20-acre farm, two and a half miles from Grandview, off old Prosser highway, between Grandview and Prosser. Irrigation water in 1953 cost $52; county tax, $80. Ten acres Concord grapes, tonnage of which should increase considerably in next few years; one acre pasture; 50 peach trees, remainder open for alfalfa, pasture or other crops. 1853 grape crop worth between $4,000 and $5,000. Modern eight-room house and bath, three-section chicken house, shop for tractor and equipment, deep well, swimming pool, cement driveways. All, including pool, have electric lights. Shrubbery and trees, about thirty rose bushes. Price, $18,000, $11,500 down, balance $1,000 per year at five per cent interest. Reason for selling, ill health.

W-220—20 acres, Seattle area, six acres cleared, good well, three-fourths acre strawberries, 20 young peach trees. Large unfinished six-room house. One and one-half miles from shopping center. Illness forces sale. Price, $9,000. Terms.

W-221—95 acres near Redmond. Proposed second Lake Washington bridge would bring all Redmond-distict properties within 10 to 15 miles of down town Seattle. Rolling land, fronting on county road; electricity, small second growth trees; soil suitable for stock, poultry or berries. Price, $110 per acre.

W-222—40 acres, Winlock area, 25 acres cleared and 10 in second growth timber. Four-bedroom modern house, with pressure water and electricity. Chicken house for 200 hens; brooder house; barn with stanchions for six head; two garages. Price, $6,800, about $1,500 will handle.

OREGON

O-127—80 acres, about four miles southwest of Redmond, on gravel road, RFD; electricity, school bus and phone service. 31 acres have water right under the Central Oregon Irrigation project. Five-room house with cold water in house. Barn, chicken house, stock shed. Price, $10,500; $3,500 down.

O-128—120 acres, Corvallis area, small stock farm; 10 acres cultivated, remainder brush and timber pasture, good soil, some saw timber; automatic water system. Four-room, old house; barn, 30x40, with 13 stanchions and 20-ton hay storage; new chicken house; electricity; fruit; fences, fair to poor; gravel road, two miles from store, post office, paved road. Price, $5,000. Half cash.

Property Described on This Page Is Subject to Sale Without Notice
**Chips Formerly Wasted Now Make Kraft Pulp**

When the Weyerhaeuser Timber company opened a new plant at Everett, Wash., located near the mouth of the Snohomish river, it became the fifth mill in the company’s pulp division. Capable of making 250 tons of bleached kraft pulp every 24 hours, the mill employs about 200 people, who will be paid approximately $1,000,000 annually.

The raw material for this modern plant, Weyerhaeuser officials have stated, consists almost entirely of fir chips which are made from leftover trimmings and edgings of sawed wood salvaged in four of the firm’s sawmills — two located in Everett, one in Enumclaw and one at Snoqualmie Falls, all in Washington. Chips are cooked in large digesters, in a chemical concoction, and the cellulose fibers in the wood are recovered, in the form of pulp which, in turn, is the raw material for many kinds of paper and paper products, rayon, cellophane, smokeless powder, lacquers, container materials and other chemicals.

At one time, several years ago, sawmill leftovers were chopped into “hog” fuel, which was used to fire mill boilers, but which also sometimes was burned as waste merely to get it out of the way.

Like the meat packers, who utilize all of a pig except the squeal, lumber manufacturers now endeavor to waste none of the tree.

Each of the four sawmills, a recent Weyerhaeuser announcement said, which furnish chipping material for the kraft plant is supported by tree farms which, barring disaster from fire, disease or invasion by harmful insects, are capable of producing timber harvests forever.”

The new pulp mill is served exclusively at Everett by the Northern Pacific Railway.

Kennewick Project Will Add New Farms

(Continued from page 6)

which will power direct-connected pumps that are to lift the other segment of the water furnished by the power canal up the side of the canyon so it can be used to irrigate land. In other words, hydraulic power will pump the water, but the usual intermediate step (converting the energy into electricity to do the pumping) will be eliminated.

In the fall and winter, when no irrigation is required, water in the power canal will be diverted through two generating units at Chandler, each with a capacity of 6,000 kilowatts. This power is to be turned into the federal Pacific Northwest grid, from which it will be marketed by the Bonneville Power administration. Originally it was expected that the Prosser power plant would be discontinued. Reclamation people at Kennewick report, however, that there is some thought now that it may be retained. Power revenues in excess of the cost of plant operation, either at Prosser or Chandler, will be used to repay the cost of power facilities and, in addition, it is expected funds from this source will be available to help repay the cost of irrigation features of the entire project.

Construction crews have excavated for eight miles of power canal, between the Prosser plant and the site of the Chandler plant, and a quarter of a mile of concrete lining was placed last fall before winter weather set in. A steel coffee dam has been installed just recently in the Yakima river at Chandler. This will fence out the river while the contractor is excavating and building the power house.

Work has begun on the discharge line which will carry water under the river and up the other side. Also crews have begun working on two miles of the 43-mile main canal, south of the Northern Pacific main line.

Congress appropriated $1,500,000 for the Kennewick division, for use in the fiscal year 1953. That’s when work was begun. In the present fiscal year, funds totaling $3,473,000 are available. A request has been submitted for $4,430,000 to be used in the next fiscal year.

Two pumps will be put in at Chandler, but a place will be left for another. If a third one is installed later, it will lift water for another 6,000 acres which may be watered some day.

The land in the division currently being developed lies in a strip which extends just below the main canal all the way from Chandler almost to Kennewick, where it widens somewhat and then reaches past the city as far as Hover, Wash. The ownership of this land is widely disbursed. In addition to holdings of individuals, there is in the Kennewick division irrigable land owned by the state of Washington, the federal government, the Kennewick Irrigation district and the Northern Pacific Railway.

The land ranges from nearly flat to steeply sloping and rolling. It is actually located on the stream terraces flanking the Yakima and Columbia rivers and on the narrow river flood plain of Badger draw.

At the moment no definite statement should be made as to when construction will be finished so that water can be delivered to the land. However, when this stage has been reached, it is expected that 350 new farm units will be available.

**TRAVEL BY RAIL**

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