



DEPARTMENT OF THE INTERIOR

INFORMATION SERVICE

1349 - A Century of Conservation - 1949

Bureau of Reclamation
Hungry Horse Project

The Bureau of Reclamation's Hungry Horse Project—largest concrete dam now under construction in the world—will rise approximately one foot a day to a height of more than 250 feet during the 1950 construction season, C. H. Spencer, Construction Engineer, said today.

Under the construction schedule established by the Bureau of Reclamation on the basis of recent congressional action appropriating \$22,093,125.00 for Hungry Horse construction during the fiscal year ending June 30, 1950, General-Shea-Morrison, prime contractor for the dam and power plant, plans to place concrete at an average rate of 5,000 cubic yards per day. If this rate is maintained during the entire construction season from April through October, approximately 1,000,000 cubic yards will be in place by the end of the 1950 construction season.

Advance construction plans call for placement of another million cubic yards of concrete in 1951 and completion of the huge concrete barrier on the South Fork of the Flathead in northwestern Montana to its ultimate height of 564 feet in 1952. Hungry Horse will then be the third highest concrete dam in the world, exceeded only by Hoover Dam, 726 feet, and Shasta Dam, 602 feet.

The construction program for the year ending next June 30, contemplates that the prime contractor will earn approximately \$10,000,000.00 of the total construction appropriation of \$22,093,125.00. This will permit construction on the dam and power plant to proceed in accordance with the schedule called for in

the \$43,431,000.00 prime contract. Scheduled completion date on this contract is November, 1953. Under this schedule, the first 71,250-kilowatt generator will go on the line to help relieve the critical Northwest power shortage in October, 1952. The fourth and final generator is scheduled to go into operation in the fall of 1953.

On the basis of the construction schedule outlined for the year ahead, it is anticipated that employment by the prime contractor will reach 1,500 as compared with a peak of 957 during the past summer. Clearing and logging work in the 25,000-acre reservoir area probably will provide employment for an additional 700 to 800 men.

Other major expenditures during the 1950 fiscal year will include approximately \$1,000,000 for cement and \$1,714,000 on clearing contracts. Approximately \$4,000,000 will be expended on purchase and fabrication of major equipment, including turbines, outlet pipes, valves, electrical equipment and controls, etc. The balance of slightly more than \$5,000,000 will cover purchases of miscellaneous supplies, materials and equipment, land and land rights and all administrative expenses including payrolls and research.



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Hungry Horse Project

FOR IMMEDIATE RELEASE

Hungry Horse, Montana, March 16 -- Contract for completion of the Hungry Horse dam, power plant and high-voltage switchyard has been awarded to the Grafe-Shirley-Lane Company, Los Angeles, Calif., on a low bid of \$1,792,782.30, the Bureau of Reclamation announced today.

Major item covered by the new contract will be installation of the four giant 105,000-horsepower turbines that will harness the South Fork of Montana's Flathead River for production of 285,000 kilowatts of hydroelectric power.

In addition to turbine installation, the completion contract will cover installation of transformers and all electrical equipment, except the generators, in the powerhouse; installation of heating and ventilating equipment, pumps, fire protection equipment and elevators in the dam and power plant; installation of equipment in the high-voltage switchyard to be constructed downstream from the dam; laying of bonded concrete floors, and completion of all architectural finish work on the dam and powerhouse.

Work on the new contract will be started by mid-April. Primary work to be started this spring will be installation of the first two turbines which must be completed in time to permit installation and energization of the first two 71,250-kilowatt generators in October and December 1952. Generators 3 and 4 are scheduled to go on the line in August and November 1953.

Under this schedule the Hungry Horse power plant's full capacity of 285,000 kilowatts will be available to help meet the Pacific Northwest's rapidly increasing power requirements during the 1953-54 winter peak load period.

All work required under the completion contract awarded to the Grafe-Shirley-Lane Company is scheduled for completion within 1,100 days or approximately three years. Work to be accomplished under the completion contract is in addition to work being handled by General-Shea-Morrison, Seattle, under the \$43,431,000 prime contract for construction of the 564-foot high multiple-purpose dam and power plant.

Released by: Bureau of Reclamation
Department of Interior
Hungry Horse Project
Hungry Horse, Montana

FOR RELEASE SUNDAY, SEPTEMBER 11, 1949

Hungry Horse Mountaineers

Except for the hard hats and jackhammers which identify construction workers the world over, these men working high on the sheer rock face of the canyon wall that will form the right abutment for the Bureau of Reclamation's Hungry Horse Dam might be mistaken for mountain climbers scaling an Alpine peak. Suspended by their safety lines and belts on the almost perpendicular rock wall rising above the South Fork of the Flathead River in northwestern Montana, these jackhammermen are drilling holes that will be filled with dynamite to blast away surface rock and expose the solid bedrock that will support the world's fourth largest concrete dam. So steep is the canyon wall at this point that two men are required on each jackhammer.

Approximately 350 feet below the workmen the South Fork River disappears into the solid rock of the canyon wall and flows around the damsite through a 36-foot diameter, 1180-foot long diversion tunnel.

Excavation work at the big Bureau of Reclamation multiple-purpose dam is nearing completion and final preparations are being made for placement of the first concrete in the dam about October 1. Concrete now being placed in the river channel is part of the foundation treatment necessary before placement of concrete in the dam itself can be started.

Released by: Bureau of Reclamation
Department of Interior
Hungry Horse Project
Columbia Falls, Montana

FOR RELEASE SUNDAY, October 16, 1949

This latest picture of the Bureau of Reclamation's Hungry Horse Project shows the huge concrete foundation blocks of the world's fourth largest and third highest concrete dam rising in the deep canyon of the Flathead River's South Fork in Northwestern Montana. More than 16,000 cubic yards of concrete are now in place, and General-Shea-Morrison, prime contractor for the multiple-purpose dam and powerhouse, is shooting for 50,000 cubic yards before cold weather forces suspension of concrete operations for the winter. Scheduled for completion in November, 1953, the 564-foot high dam will rise to the level of the top wooden bridge shown at the head of the excavated keyway for the dam.

Released by: Bureau of Reclamation
Department of the Interior
Hungry Horse Project, Montana

FOR RELEASE TO PMS OF WEDNESDAY, NOV. 9, 1949

Silhouetted in the glare of giant starlights spanning the Flathead River's south fork are the foundation blocks for the Bureau of Reclamation's Hungry Horse Dam. Working around the clock in a race against the Montana winter, General-Shea-Morrison, prime contractor for the 564-foot high dam, has placed more than 50,000 cubic yards of concrete since the first pour was made on September 7. Concrete operations will be shut down within the next few days for the balance of the winter, and will be resumed as early as possible next spring with a goal of one million cubic yards for the 1950 construction season.

Released By: Bureau of Reclamation
Department of Interior
Hungry Horse Project

FOR RELEASE IN AMS OF FRIDAY, NOV. 25, 1949

Although cold weather has forced suspension of concrete placing operations at the Bureau of Reclamation's Hungry Horse dam, a small crew will continue excavation work through the winter. Standing in water almost hub-deep in the old river bed of the Flathead River's south fork, this 10-cubic yard dump truck is being loaded with rock excavated from the canyon wall to provide space for the powerhouse at the world's fourth largest and third highest concrete dam.

(Bureau of Reclamation Photo)

Released by: Bureau of Reclamation
Department of The Interior
Hungry Horse Project, Montana

ADVANCE—FOR RELEASE TO FMS, THURSDAY, FEB. 23, 1950

Hungry Horse, Montana—Except for new generators scheduled for installation at Grand Coulee dam, the Hungry Horse Power Plant, pictured here by the artist's pen, will provide the first large source of new hydroelectric capacity for the power-hungry Northwest. The first of four 71,250-kilowatt generators, to be installed at the big Bureau of Reclamation dam now being constructed on the Flathead River's south fork in northwestern Montana, will go on the line in October 1952. Present plans call for the plant's full capacity of 285,000 kilowatts to be available by the fall of 1953.

(Bureau of Reclamation Photo)

Released by: Bureau of Reclamation
Department of the Interior
Hungry Horse Project, Mont.

FOR RELEASE TO PMS OF THURSDAY, MARCH 9, 1950

Hungry Horse, Montana.--As winter loosens its grip on Northwestern Montana, preparations are being made to resume full-scale construction at Hungry Horse dam--the largest concrete dam now being built in the world. The 139-foot high concrete mixing plant, shown in this view taken from high on the canyon wall of the Flathead River's South Fork, began operation again this week as workmen started filling fault zone treatment shafts with concrete. Large scale hiring at the big Bureau of Reclamation Project will start in April when major concrete placing operations are scheduled to start. It is anticipated that the local labor supply will be adequate to meet the Project's needs.

With approximately 1,000,000 cubic yards of concrete scheduled to be placed this year, the dam will grow in height at the rate of about one foot a day during the 1950 construction season and will be one-third complete by next fall.

Released by: Bureau of Reclamation
Department of the Interior
Hungry Horse Project, Mont.

FOR RELEASE TO AMS OF FRIDAY, MARCH 9, 1950

Hungry Horse, Montana -- An amazing land clearing scheme, rivaling the legendary feats of Paul Bunyan, will be tried this spring in the 25,000-acre Hungry Horse reservoir area. Hooked together with heavy logging chains, these giant 8-foot diameter steel balls will be used by Wixson and Crowe, Inc., and J. H. Trisdale, Redding, California, clearing contractors, to snag down brush and small trees on the steep hillsides in the reservoir. In the ingenious mechanized clearing operation, big diesel "cats" will be used to drag the 4-1/2-ton steel balls down the hillsides with up to 30 feet of chain between them. Purpose of the balls is to hold the chain at a constant elevation of four feet above the ground so that it will not hang up on large stumps that have been left in logging operations.

The two clearing contractors will start work this spring on clearing the last 14,695 acres of land in the reservoir area. Wixson and Crowe, Inc., will clear 6,840 acres under a \$2,446,850 contract, and J. H. Trisdale will clear 7,855 acres under a \$2,484,360 contract. The two Redding contractors are approximately 95 percent complete on a \$1,733,880 clearing contract covering an estimated 7,210 acres.

Released by: Bureau of Reclamation
Department of the Interior
Hungry Horse Project, Montana

FOR RELEASE SUNDAY, APRIL 2, 1950

Hungry Horse Project -- The electronic brain shown here, which is installed in the concrete mixing plant at the Hungry Horse Project, won't compute your income tax or unravel a complicated atomic formula, but it will help build the fourth largest and third highest concrete dam in the world. Incorporating the latest and most accurate equipment of its type ever built, the automatic batching and recording system insures that every one of the 3,000,000 cubic yards that will be placed in the 564-foot-high dam meets the rigid specifications set by the Bureau of Reclamation. The weight of sand, gravel, cement, pozzolan and water in each batch of concrete is automatically controlled and a permanent record is made by the pens on the paper recording roll at the left. Plant superintendent, Vern Nichols, is making final adjustments in preparation for full-scale concrete operations scheduled to start early in April. (Bureau of Reclamation Photo)

Released by: Bureau of Reclamation
Department of Interior
Hungry Horse Project, Montana

FOR IMMEDIATE RELEASE

Hungry Horse, Montana -- With 1950 concrete placing operations now under way at the Hungry Horse Project, construction on the big Bureau of Reclamation project is continuing on a 24-hour-a-day schedule. Goal for the year is 1,000,000 cubic yards--approximately one-third of the total volume of concrete to go into the 564-foot high dam.

(Bureau of Reclamation Photo #H-2273)



Bureau of Reclamation
Hungry Horse Project

DEPARTMENT OF THE INTERIOR INFORMATION SERVICE

5-50

FOR IMMEDIATE RELEASE

Hungry Horse, Montana, May 25.—Approximately 142,000 kilowatts of power from two Hungry Horse generators will be available by December, 1952, to help meet Pacific Northwest winter peak loads, as the result of an accelerated powerhouse construction program now going into effect at the Hungry Horse Project, C. H. Spencer, Construction Engineer at the big northwestern Montana dam, said today.

Speed up of the powerhouse construction schedule, which is being accomplished under an amendatory agreement just signed by the Bureau of Reclamation and General-Shea-Morrison, prime contractor for the multiple-purpose dam and power plant, will save nearly one year on installation of the first two 71,250-kilowatt generators, and will result in a net return to the Federal Treasury of more than \$145,000. Although the accelerated construction program will increase the cost of the project by about \$155,000, this increase will be more than offset by additional power revenues in excess of \$300,000.

Major item in the accelerated powerhouse construction schedule will be the use of structural steel for powerhouse wall columns, roof girders and crane rails instead of reinforced concrete. A metal roof deck will also be used instead of a reinforced concrete roof. These changes will permit erection of the framework for the powerhouse superstructure during the winter of 1950-1951 when it would be impossible to place reinforced concrete due to cold weather.

Under the new construction schedule the two 290-ton traveling cranes in the powerhouse will be installed and ready for use by July 1, 1951. This will make it possible to start installation of the first two turbines in the summer of 1951. The third and fourth turbines will be installed in 1952. The four 105,000-horsepower turbines are being furnished by the Allis-Chalmers Manufacturing Company under a \$2,150,000 contract. Invitations for bids covering installation of the turbines will be issued next winter by the Bureau of Reclamation.

Installation of the first two turbines is scheduled for completion by the spring of 1952, which will permit installation of the first two generators to be started at that time. The first generator will be ready for operation in October 1952, and the second is scheduled to go on the line in December, 1952. The third and fourth units are scheduled to start production of power in August and November, 1953. This will complete the power installation at Hungry Horse Dam, giving the plant a total capacity of 285,000 kilowatts. The four generators will be manufactured and installed by the General Electric Company under a \$4,397,650 contract.

Completion of the Hungry Horse powerhouse will bring the total rated capacity of hydroelectric power plants constructed by the Bureau of Reclamation to more than 3,700,000 kilowatts.



HH 1633

PHOTOGRAPH BY
BUREAU OF RECLAMATION
HUNGRY HORSE PROJECT, MONTANA



HH 1795

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