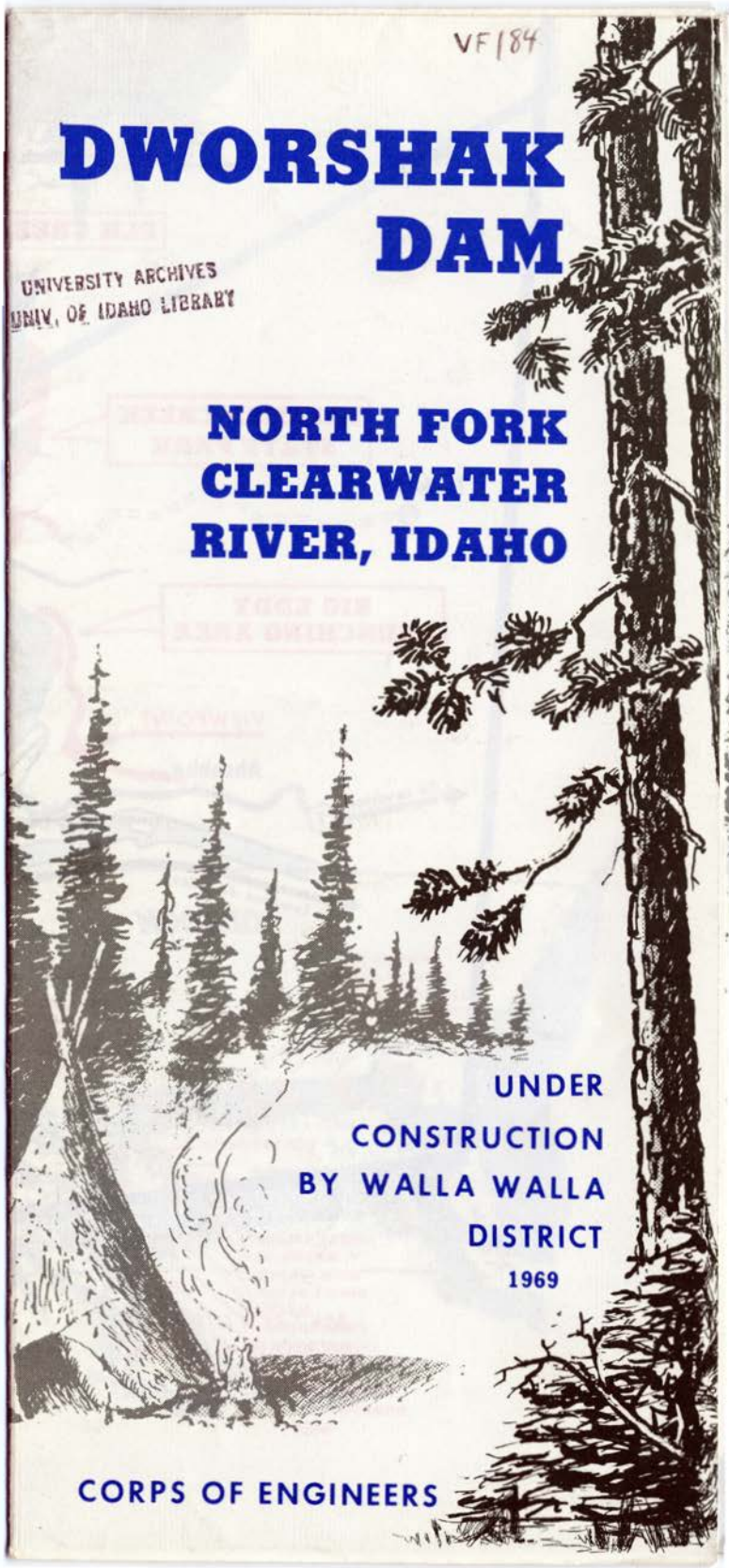
DWORSHAK DAM

NORTH FORK CLEARWATER RIVER, IDAHO



UNDER CONSTRUCTION BY WALLA WALLA DISTRICT

1969

CORPS OF ENGINEERS

WELCOME TO THE VISITORS' OVERLOOK

WATER STORAGE CAPACITY OF DWORSHAK RESERVOIR WILL BE 3,500,000 ACRE-FEET, OF WHICH 2,000,000 ACRE-FEET WILL BE USED ANNUALLY AND VARIOUSLY FOR FLOOD CONTROL AND POWER GENERATION. THE DEPTH OF THE POOL AT THE DAM WILL VARY 155 FEET IN THE FALL AND WINTER, FROM MINIMUM TO MAXIMUM POOL. DURING THE SUMMER RECREATIONAL PERIOD, THE RESERVOIR WILL BE MAINTAINED AS NEAR MAXIMUM LEVEL AS POSSIBLE.

DWORSHAK DAM WAS STARTED IN 1965, WITH CONSTRUCTION OF A DIVERSION TUNNEL THROUGH WHICH THE NORTH FORK CLEARWATER IS NOW FLOWING. THE MAIN DAM IS BEING BUILT BETWEEN TWO COFFERDAMS IN THE FORMER BED OF THE STREAM.

SEE THE USA

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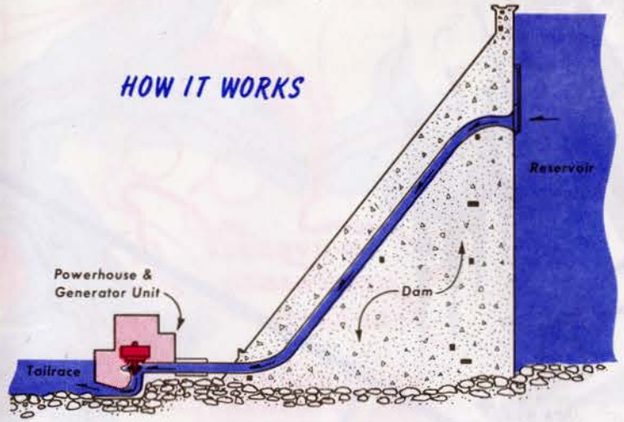
HOW IT WORKS



SECTION THRU DAM & POWERHOUSE

A PEAK DAY'S OUTPUT OF ELECTRIC POWER FROM DWORSHAK DAM WOULD PROVIDE ELECTRICITY FOR 1,000 AVERAGE AMERICAN HOMES FOR AN ENTIRE YEAR.

COLORFUL DENT BRIDGE, LONGEST AND HIGHEST SUSPENSION SPAN IN IDAHO, WILL OPEN UP VAST RECREATION AREAS ON THE DWORSHAK RESERVOIR

Fish Facilities

FISH TRANSFER DURING CONSTRUCTION

THE NORTH FORK CLEARWATER SUPPORTS A SIZEABLE RUN OF STEELHEAD TROUT. THESE RUNS WILL BE MAINTAINED DURING THE DAM CONSTRUCTION PERIOD BY TEMPORARY PASSAGE FACILITIES. DURING LOW RIVER FLOWS, THESE FISH SWIM THROUGH THE DIVERSION TUNNEL. DURING HIGHER FLOWS, THE FISH ARE TRAPPED AT THE MOUTH OF THE DIVERSION TUNNEL, AND TRUCKED UPSTREAM AROUND THE CONSTRUCTION AREA.

THE LARGEST STEELHEAD FISH HATCHERY IN THE WORLD IS BEING BUILT BY THE CORPS OF ENGINEERS AT THE CONFLUENCE OF THE NORTH FORK AND MAIN CLEARWATER RIVERS, AND WILL BE OPERATED BY THE U. S. FISH AND WILDLIFE SERVICE.

THE RIVER DIVERSION TUNNEL, 40 FEET IN DIAMETER, WILL BE CLOSED A YEAR IN ADVANCE OF MAIN DAM COMPLETION TO START FILLING THE 53-MILE RESERVOIR BEHIND DWORSHAK DAM.

Logging Operations

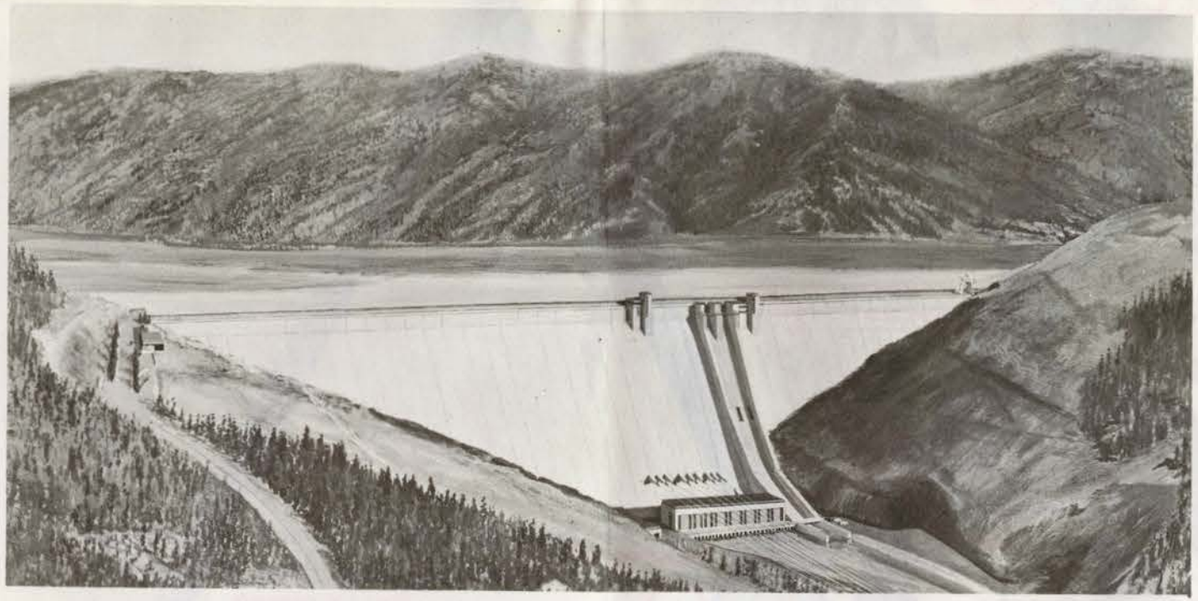
"WANIGAN" COOK-BOAT ON OLD LOGGING DRIVE

NORTH FORK CLEARWATER IS AN HISTORIC TRANSPORTATION ROUTE FOR SPECTACULAR LOG DRIVES ORIGINATING IN FORESTED AREAS OF THE BASIN. AT PRESENT, 50 TO 60-MILLION BOARD FEET OF THE ANNUAL TIMBER HARVEST IS FLOATED DOWN THE RIVER TO PROCESSORS.

BACKWATER FROM DWORSHAK DAM WILL PROVIDE ACCESS TO REMOTE AND OTHERWISE INACCESSIBLE TIMBER AREAS, ENABLING HARVEST OF THIS VALUABLE NATURAL RESOURCE. PERMANENT LOG-HANDLING FACILITIES WILL BE BUILT AT THE DAM, ALLOWING THE REMOVAL AND TRANSFER OF 115-MILLION BOARD FEET OF LOGS ANNUALLY AROUND THE DAM STRUCTURE.

DURING THE CONSTRUCTION PERIOD, LOGS WILL BE FLOATED THROUGH THE CONCRETE-LINED DIVERSION TUNNEL.

ANNUAL LOG DRIVE PASSES THROUGH DIVERSION TUNNEL



ARTIST'S CONCEPT OF DWORSHAK DAM

DWORSHAK DAM WILL RISE 717 FEET FROM BEDROCK TO CREST, WITH A CREST LENGTH OF 3,300 FEET. THE DAM BASE WILL BE 525 FEET WIDE, TAPERING TO A CREST OF 30 FEET IN WIDTH, PROVIDING TWO TRAFFIC LANES ACROSS THE TOP OF DAM.

PENSTOCKS (WATER FLOW-WAYS TO THE TURBINES) WILL BE IMBEDDED IN THE DAM.

APPROXIMATELY 7-MILLION CUBIC YARDS OF CONCRETE WILL GO INTO THE DWORSHAK PROJECT. A QUARRY ACROSS THE RIVER FROM THE VISITOR'S OVERLOOK WILL PRODUCE ALL AGGREGATE NECESSARY FOR THE CONSTRUCTION. RAW QUARRY ROCK, DROPPING 500 FEET THROUGH A "GLORY HOLE" INSIDE THE MOUNTAIN, REACHES THE CRUSHERS AND, BY CONVEYOR BELTS, THE MIXERS.

THE CONCRETE WILL BE DELIVERED TO THE DAM ITSELF BY OVERHEAD CABLE-WAYS. UNIFORM COOLING OF THE CONCRETE MASS WILL BE ACCOMPLISHED BY MILES OF IMBEDDED PIPE THROUGH WHICH COLD WATER WILL BE PUMPED.

DWORSHAK DAM WILL BE THE HIGHEST STRAIGHT-AXIS CONCRETE GRAVITY DAM IN THE UNITED STATES WHEN IT IS COMPLETED IN 1972, AND THE LARGEST CONCRETE DAM EVER CONSTRUCTED BY THE CORPS OF ENGINEERS.

IT IS A VITAL UNIT IN THE COMPREHENSIVE DEVELOPMENT OF THE WATER RESOURCES OF THE COLUMBIA-SNAKE RIVER DRAINAGE AREA. THE DWORSHAK DAM WILL SERVE TO REGULATE THE ANNUAL FLOODWATERS OF THE NORTH FORK CLEARWATER, AS WELL AS ADDING IMPORTANT PEAKING ELECTRICAL GENERATION TO THE PACIFIC NORTHWEST POWER COMPLEX.

LOCATED ON THE NORTH FORK CLEARWATER RIVER NEAR ITS CONFLUENCE WITH THE MAIN CLEARWATER, THE SITE WAS FORMERLY CALLED BRUCES EDDY. IT WAS RENAMED TO HONOR IDAHO'S LATE SENATOR HENRY C. DWORSHAK.

About the Project

GENERAL

Drainage area (square miles)	2,440
River flow, minimum (cfs)*	250
River flow, mean (cfs)	5,638
River flow, maximum (cfs)	100,000
Cost, estimated	$ 248 Million

*Cubic feet per second

RESERVOIR

Normal pool elevation (msl)	1,600
Minimum pool elevation (msl)	1,445
Gross capacity (acre-feet)*	3,453,000
Usable capacity (acre-feet)	2,000,000
Length of reservoir (miles)	53
Shore line (miles)	183
Pool area at elevation 1,600 (msl) (acres)	17,000

* 1 acre of water a foot deep

DAM

Height of dam, foundation to crest (feet)	717
Length of crest (feet)	3,300
Power Generation	
3 initial units, total KW	400,000
6 ultimate units, total KW	1,060,000
Concrete, approximate (cubic yards)	7,000,000
Construction time (years)	7
Power-on-line, estimate	1972

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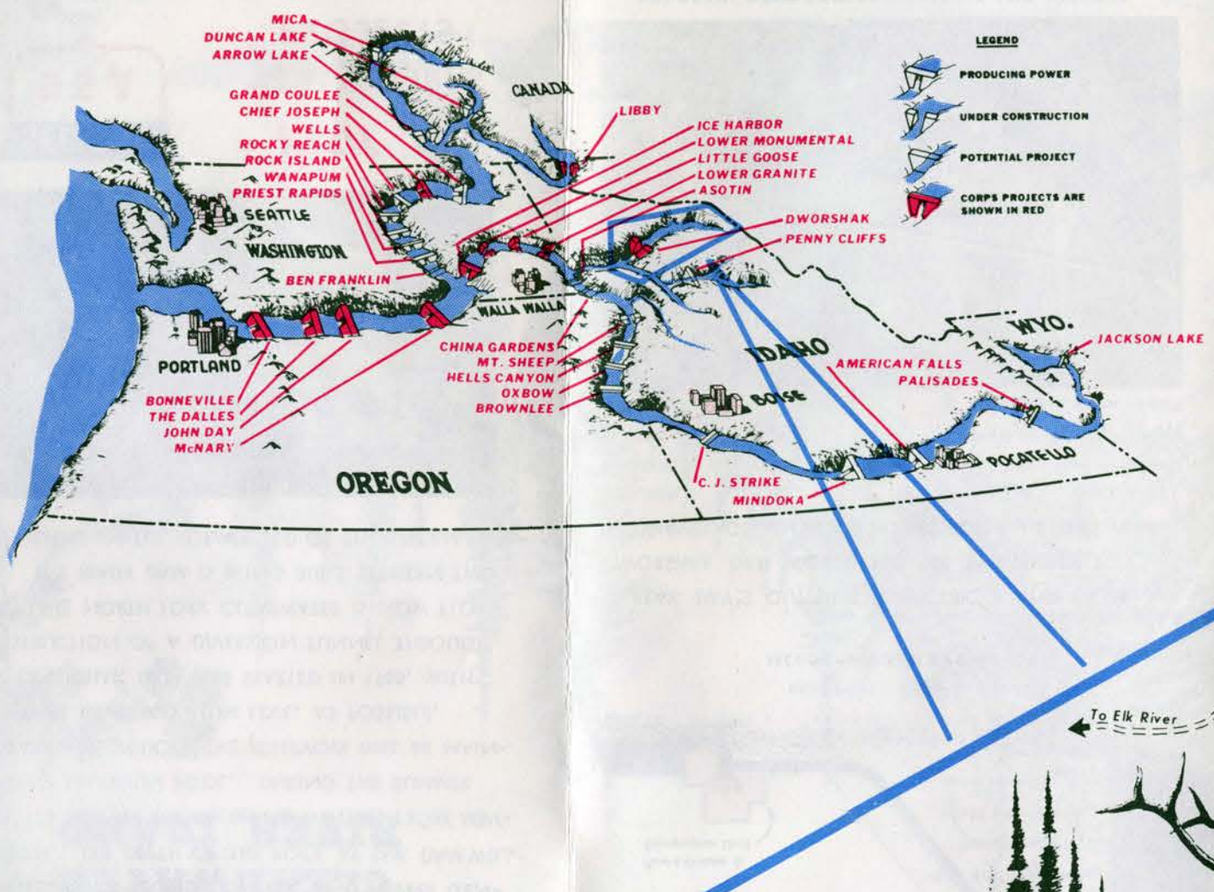
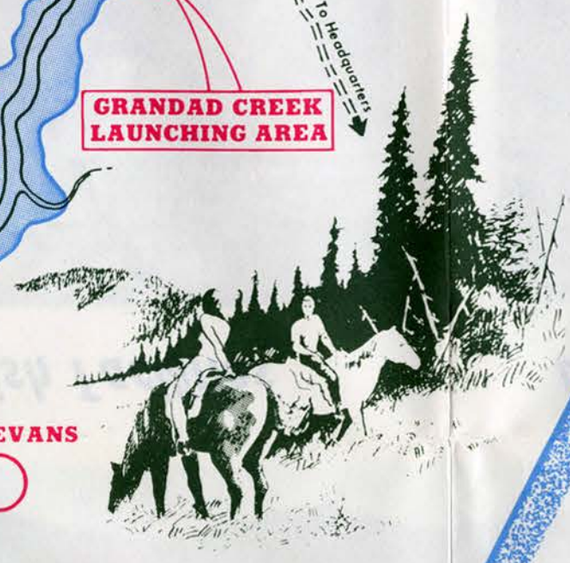


WELCOME-

We hope you enjoy your visit. You are invited to come to the viewpoint often and become a "sidewalk superintendent" on the highest dam in this country.



North Fork Clearwater basin, site of the Dworshak Project contains some of the most magnificent stands of timber in the Northwest. Man-made fires can destroy this natural asset in a day, with all the wildlife it contains.

PLEASE SAVE THE FORESTS FOR FUTURE GENERATIONS!

Observe all forest fire precautions. Know what they are!

DWORSHAK RESERVOIR

NORTH FORK CLEARWATER RIVER

IDAHO

U. S. ARMY CORPS OF ENGINEERS

DON'T BE A LITTERBUG! DISPOSE OF ALL REFUSE IN TRASH CANS.

Recreation activities are regulated by the Code of Federal Regulations, Title 36, Chap. III, Part 311