



Grand Coulee Dam Statistics and Facts



How much electricity does Grand Coulee Dam produce annually?

Grand Coulee Dam is the largest hydropower producer in the United States, generating more than 21 billion kilowatt-hours of electricity each year. That’s enough power to supply about 2 million households with electricity for one year. Power from Grand Coulee Dam is supplied to 8 western states—Washington, Oregon, Idaho, western Montana, and parts of California, Nevada, Utah, Wyoming, and Canada.

How big is Grand Coulee Dam?

Grand Coulee Dam is one of the largest concrete structures in the world. It contains nearly 12 million cubic yards of concrete.

What could you build with 12 million cubic yards of concrete?

You could build a sidewalk four feet wide and four inches thick and wrap it twice around the equator (50,000 miles). You could build a highway from Seattle, Washington to Miami, Florida.

What are the holes in the face of the dam?

Those little holes are 8.5 feet in diameter—you could fit a standard-size truck in any one of them. They are used to discharge water through the dam when the elevation of the water in the lake is lower than the drum gates at the top of the spillway.

For more information

For more information call the visitor center at (509) 633-9265 or visit <http://www.usbr.gov/pn/grandcoulee>.

Two Dams Compared:	Grand Coulee Dam	Hoover Dam
Type of Dam	Gravity Dam	Gravity-Arch Dam
Operating Agency	Bureau of Reclamation	Bureau of Reclamation
Total Generating Capacity	6,809 megawatts	2,080 megawatts
Location	Washington State	Nevada/Arizona
Dates of Construction	1933-1941 1967-1974 Nathaniel "Nat" Washington Powerplant	1931-1936
Height of Dam	550 feet	726 feet
Length of Dam	5,223 feet	1,244 feet
Concrete	11,975,521 cubic yards	3,250,000 cubic yards
Purposes and Benefits	Purposes and benefits of both dams include flood control and river regulation, water storage and delivery (including irrigation), power generation, recreation, and fish and wildlife.	

GRAND COULEE DAM	ENGLISH UNITS	METRIC UNITS
Total Length of Dam (axis)	5,223 feet	1,592 meters
Length of Main Dam	3,867 feet	1,178 meters
Length of Forebay Dam	1,170 feet	356 meters
Length of Wing Dam	186 feet	56 meters
Height Above Bedrock	550 feet	167 meters
Height Above Original Streambed	401 feet	122 meters
Spillway Width	1,650 feet	503 meters
Total Concrete Content	11,975,521 cubic yards	9,155,944 cubic meters
Original Dam, Power and Pumping Plants	10,585,000 cubic yards	8,092,815 cubic meters
260 feet (79.2 meters) of Dam Removed	30,942 cubic yards	23,657 cubic meters
Forebay Dam and Wing Dam	663,939 cubic yards	507,618 cubic meters
Third Powerplant and Miscellaneous	757,524 cubic yards	579,169 cubic meters
Total Excavation, Common	38,574,503 cubic yards	29,492,329 cubic meters
Total Excavation, Rock	7,062,629 cubic yards	5,399,768 cubic meters
Maximum Concrete Pour, 1 month	536,364 cubic yards	410,080 cubic meters
LEFT POWERHOUSE		
Main Unit Turbines G1–G6	150,000 horsepower	111,855 kilowatts
Main Unit Turbines G7–G9	165,000 horsepower	123,040 kilowatts
Main Unit Generators	125 megawatts	125 megawatts
Station Service Turbines	14,000 horsepower	10,440 kilowatts
Station Service Generators	10 megawatts	10 megawatts
RIGHT POWERHOUSE		
Main Unit Turbines G10–18 (9)	165,000 horsepower	123,040 kilowatts
Main Unit Generators G10–18 (9)	125 megawatts	125 megawatts
NATHANIEL "NAT" WASHINGTON POWER PLANT		
Main Unit Turbines G19–G21 (3)	820,000 horsepower	611,753 kilowatts
Main Unit Generators G19–G21 (3)	600 megawatts	600 megawatts
Main Unit Turbines G22–G24 (3)	1,053,900 horsepower	786,209 kilowatts
Main Unit Generators G22–G24 (3)	805 megawatts	805 megawatts
JOHN W. KEYS III PUMP-GENERATING PLANT		
Pump to Lift to Feeder Canal	280 feet	85 meters
Pumps (6)	65,000 horsepower	48,470 kilowatts
Pumping Capacity	1,605 cubic feet per second	45 cubic meters per second
Pump-Generators (2)	67,500 horsepower	50,335 kilowatts
Pump-Generators (4)	70,000 horsepower	52,199 kilowatts
Pumping Capacity	1,948 cubic feet per second	55 cubic meters per second
Generating Capacity (2)	50 megawatts	50 megawatts
Generating Capacity (4)	53.5 megawatts	53.5 megawatts
GENERATING CAPACITY		
John W. Keys III Pumping-Generating Plant	314 megawatts	314 megawatts
Left Powerhouse	1,155 megawatts	1,155 megawatts
Right Powerhouse	1,125 megawatts	1,125 megawatts
Nathaniel "Nat" Washington Power Plant	4,215 megawatts	4,215 megawatts
Total Generating Capacity	6,809 megawatts	6,809 megawatts
FRANKLIN D. ROOSEVELT LAKE		
Area	82,300 acres	33,306 hectares
Length	151 miles	243 kilometers
Length of Shoreline	600 miles	965 kilometers
Total Capacity	9,386,000 acre-feet	11,577,460,550 cubic meters
Active Capacity & Joint Use Capacity	5,185,000 acre-feet	6,395,603,340 cubic meters
Maximum Elevation Above Sea Level	1,290 feet	393 meters