

## Grand Coulee Dam Statistics and Facts



### Which dam generates the most electricity?

Grand Coulee Dam is the largest hydropower producer in the United States with a total generating capacity of 6,809 megawatts. It is the fourth largest producer in the world. The top producing dams are Three Gorges Dam in China at 20,000 megawatts, Guri Dam in Venezuela at 10,000 megawatts, and the Itaipu Dam on the border of Paraguay and Brazil with 12,500 megawatts.

### 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. You could build the Grand Coulee Dam, one of the modern wonders of the world.

### 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 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/>.

	Grand Coulee Dam	Hoover Dam
<b>Type of Dam</b>	Gravity Dam	Gravity-Arch Dam
<b>Operating Agency</b>	Bureau of Reclamation	Bureau of Reclamation
<b>Total Generating Capacity</b>	6,809 megawatts	2,078 megawatts
<b>Location</b>	Washington State	Nevada/Arizona
<b>Dates of Construction</b>	1933-1941	1931-1936
<b>Height of Dam</b>	550 feet	726 feet
<b>Length of Dam</b>	5,223 feet	1,244 feet
<b>Concrete</b>	11,975,521 cubic yards	3,250,000 cubic yards
<b>Purposes and Benefits</b>	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.	

<b>GRAND COULEE DAM</b>	<b>ENGLISH UNITS</b>	<b>METRIC UNITS</b>
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
<b>LEFT POWERPLANT</b>		
Main Unit Turbines G-1 through G-6	150,000 horsepower	111,855 kilowatts
Main Unit Turbines G-7 through G-9	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
<b>RIGHT POWERPLANT</b>		
Main Unit Turbines (9)	165,000 horsepower	23,040 kilowatts
Main Unit Generators (9)	125 megawatts	125 megawatts
<b>THIRD POWERPLANT</b>		
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
<b>PUMP GENERATOR PLANT</b>		
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 (6)	67,500 horsepower	50,335 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 megawatts	53 megawatts
<b>GENERATING CAPACITY (after rewind)</b>		
Pumping-Generating Plant	314 megawatts	314 megawatts
Left Powerplant	1,155 megawatts	1,155 megawatts
Right Powerplant	1,125 megawatts	1,125 megawatts
Third Powerplant	4,215 megawatts	4,215 megawatts
Total Generating Capacity	6,809 megawatts	6,809 megawatts
<b>FRANKLIN D. ROOSEVELT LAKE</b>		
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