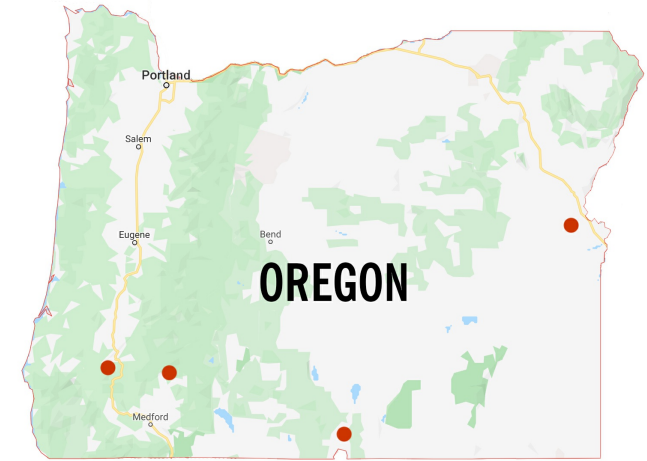


WATER RESOURCES PROJECTS OREGON

Roller compacted concrete (RCC) has been used to construct large dams (dams over 50 feet high) in the United States since the first one was constructed in the early 1980's. Progress in design and construction over the ensuing decades have solidified RCC as an economical and resilient method to build large dams. See below for examples of successful large dam projects that have been completed in the state. Learn more by visiting [PCA's Dams Page](#).

● A red dot indicates RCC Dam project 50' and higher



Name	City	Date	Max Height (ft.)	Length (ft.)	RCC Volume (cy)	Cement (lb/cy)	Flyash (lb/cy)	Upstream Facing	Total Project Cost (\$ Millions) (2)	RCC Unit Cost (\$/cy) (2,3)	Owner	Designer	Contractor	River
Willow Creek	Heppener	1982	169	1,780	433,000	88 (average)	32 (average)	Precast Concrete Panels	14.1	19.00	US Army Corps of Engineers, Walla Walla District	USACE, Walla Walla District	Eucon Corporation	Willow Creek
Galesville	Azelea	1985	163	950	210,000	89	86	Formed Conventional Unreinforced Concrete w/ External Liner (see comments)	12.8	21.49	Douglas County	Morrison-Knudson Engineers	Venture Construction Co	Cow Creek
Comments:	Upstream facing included sprayed-on asphaltic coating.													

Name	City	Date	Max Height (ft.)	Length (ft.)	RCC Volume (cy)	Cement (lb/cy)	Flyash (lb/cy)	Upstream Facing	Total Project Cost (\$ Millions) (2)	RCC Unit Cost (\$/cy) (2,3)	Owner	Designer	Contractor	River
Elk Creek (halted; see comments)	Medford	1988 halted	83 249	1,197 2,580	348,000 1,041,000	118	56	Formed Conventional Unreinforced Concrete	62.8 (as bid)	19.56	US Army Corps of Engineers, Portland District	USACE, Portland District	Ohbayashi Corporation	Elk Creek
Comments:	Dam never completed; breached September 2008 due to environmental concerns related to fish passage. There were no structural issues with the RCC.													
Bullard Creek	Lakeview	1999	52	360	9,160	250	75	Formed RCC	1.9	107.61	Natural Resources Conservation Service (NRCS)	URS-Greiner-Woodward-Clyde	Stimpel-Wiebelhaus Associates	Bullard Creek

Notes:	
1.	The information contained herein was compiled by the Portland Cement Association and published for informational purposes only. The user of this information is responsible for confirming the accuracy or completeness of the information.
2.	RCC unit costs do not include mobilization costs.
3.	Cost information shown is nominal.