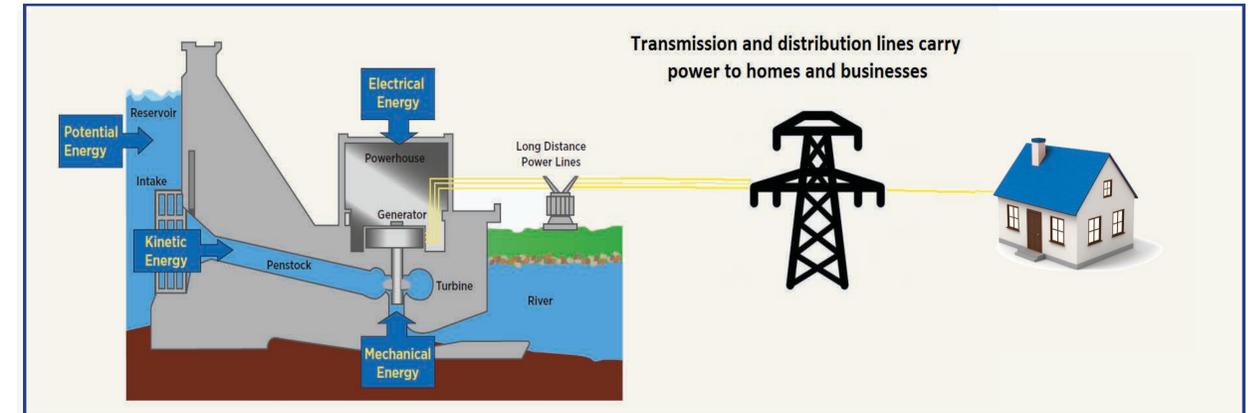




# Hydropower

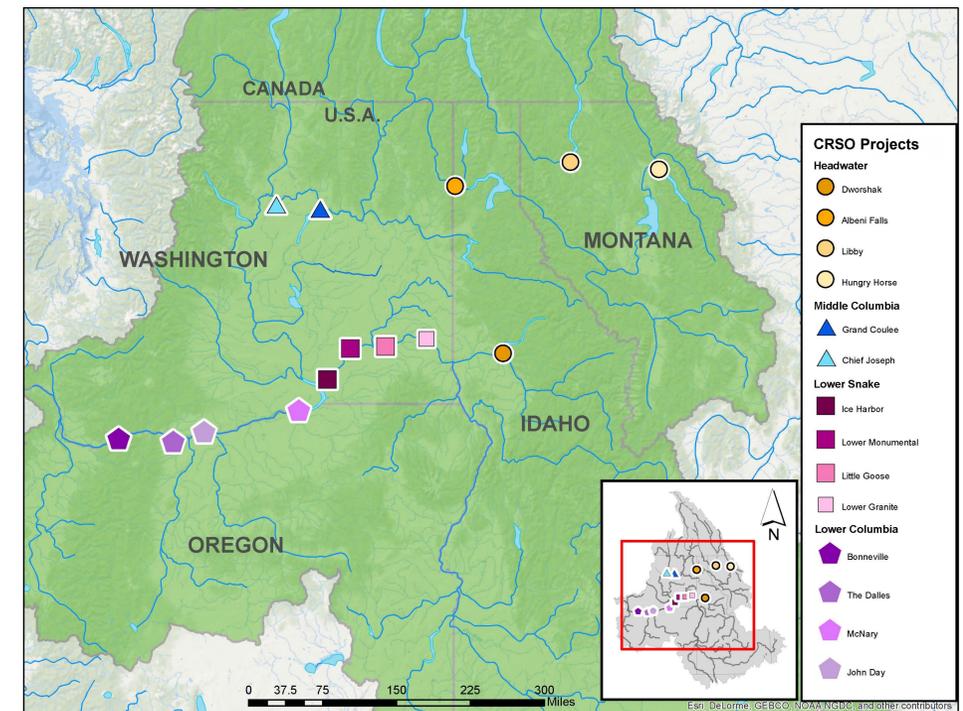
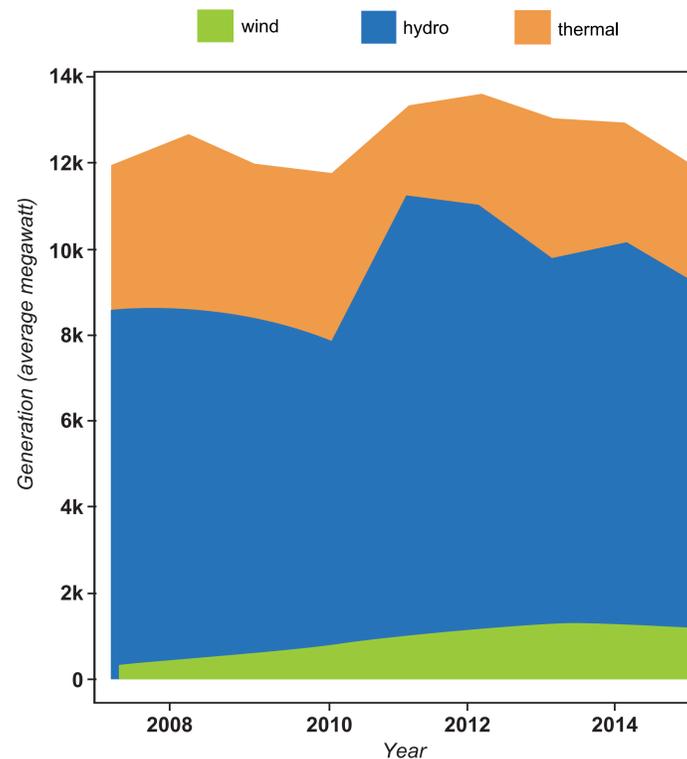
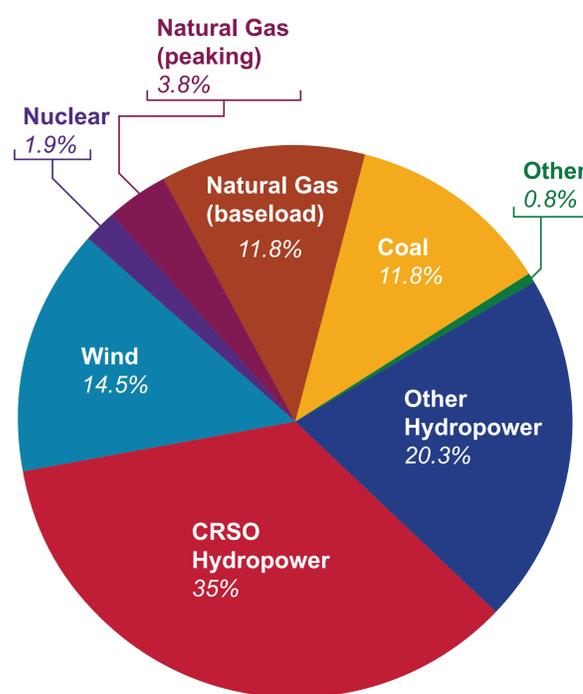
## Dams convert potential energy of stored water into electricity.

- ▶ Water moving through a turbine drives a generator that converts kinetic energy into electrical energy.
- ▶ Hydroelectric generation is determined by snowpack and rainfall, and varies from year to year. Seasonal variation in generation occurs due to the timing of snowmelt and rainfall.
- ▶ Storage projects allow some water to be stored for later use.



Power from the dams is delivered to local utilities via the transmission system and distribution lines. Local utilities then distribute the power to homes and businesses.

## Pacific Northwest Generating Capacity



Hydropower provides the bulk of generating capacity in the region. The Columbia River System Operations (CRSO) alone constitute about 35% of total regional capacity.

Almost of the CRSO generation is produced by 14 dams located in the Columbia River Basin. Because generation may not occur near homes or businesses, transmission lines carry power from the CRSO to population centers.

*In total, these dams generate enough electricity to power about 7 million homes.*

