

Addressing the **ENERGY-WATER** Nexus

Most energy technologies are water intensive

Thermoelectric Power Plants—primarily coal, nuclear, and natural gas—withdraw **136 billion gallons of freshwater each day** to produce our nation's electricity.

40% of U.S. freshwater withdrawal goes directly to electricity production.

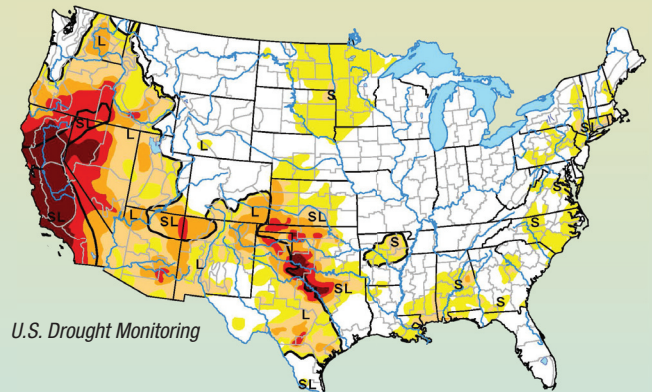


U.S. population growth is primarily in areas with water scarcity

By 2060:

Population in the **southwest** will increase by **43%**

Population in the **southeast** will increase by **32%**



Related energy technologies—oil refineries, shale oil production, biofuels, and even carbon capture and sequestration—are water intensive activities, too.

How can we reduce consumption of freshwater for **electricity** production?

Use wastewater and brackish water in power plants

—University professor

Link the electrical grid with water utilities so that waste from one sector feeds the needs of the other

—Industry executive

Increase production of Wind Power and Photovoltaic Solar Panels, energy technologies that consume no water

—National lab researcher

Better coordinate how energy and water systems are connected

—Congressional staffer