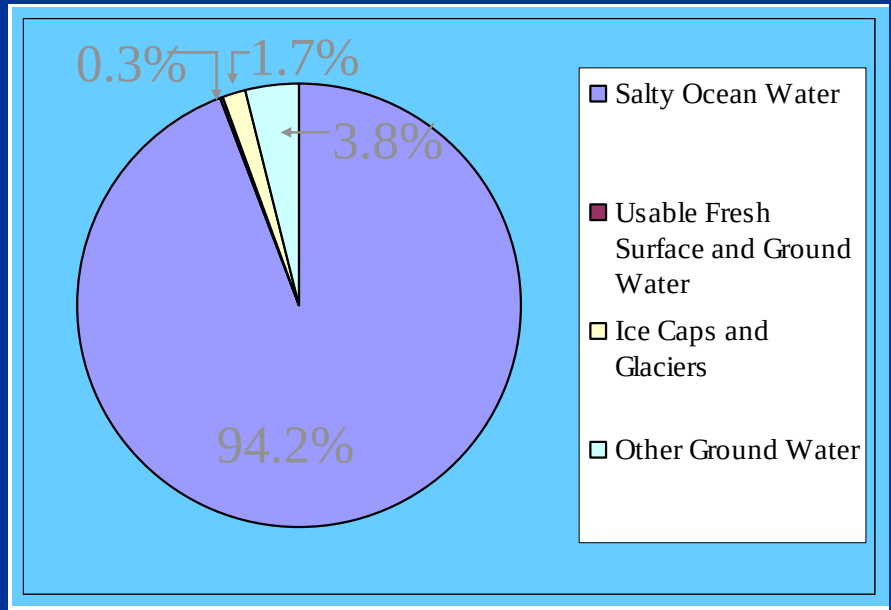
USGS
science for a changing world

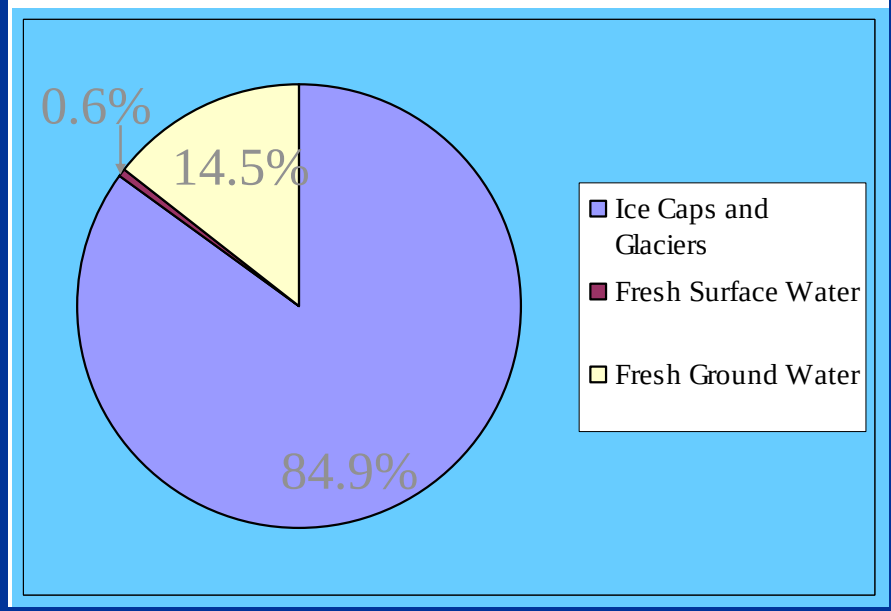
Water Availability and Use in the West

U.S. Department of the Interior
U.S. Geological Survey

Total Water on the Planet

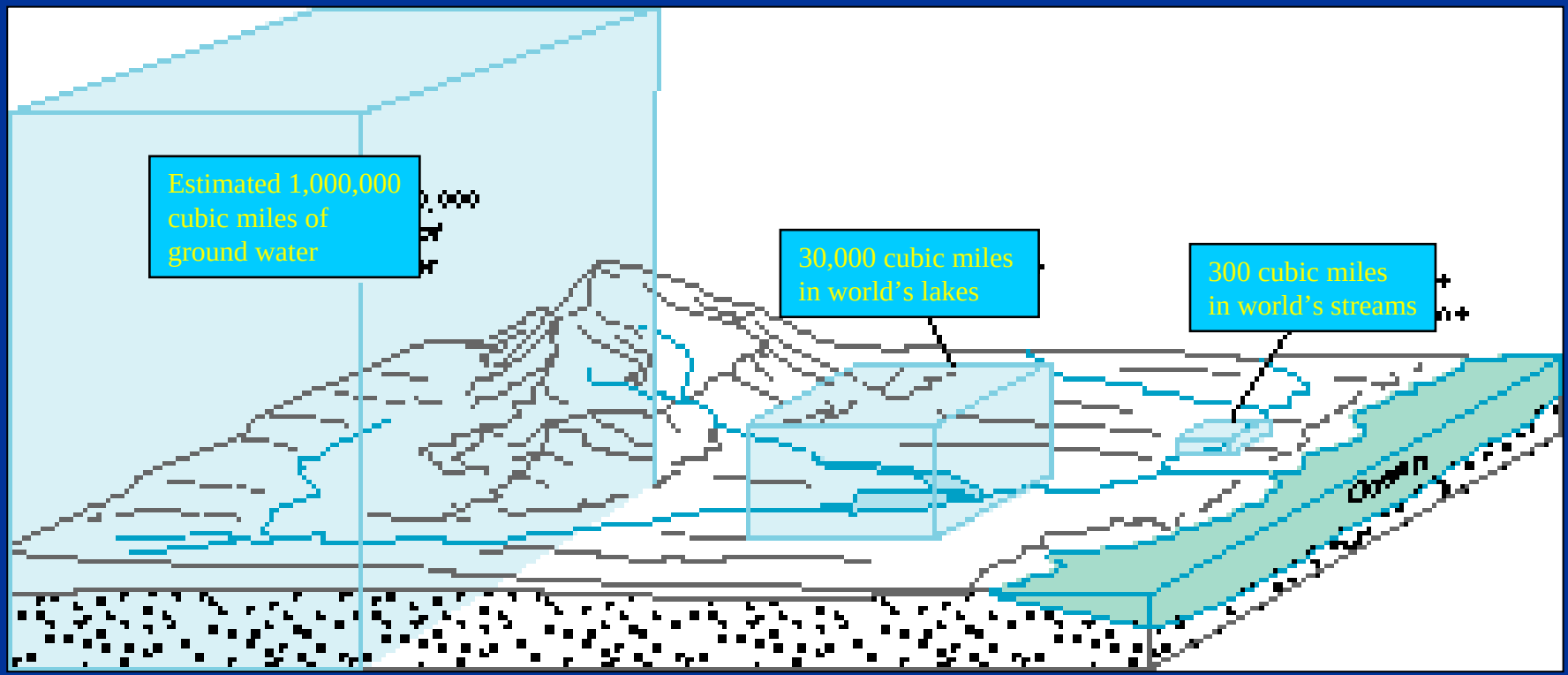


Total Fresh Water on the Planet



USGS

Distribution of the Earth's Fresh Water



USGS

Water withdrawals by category

Livestock

Less than 1 percent

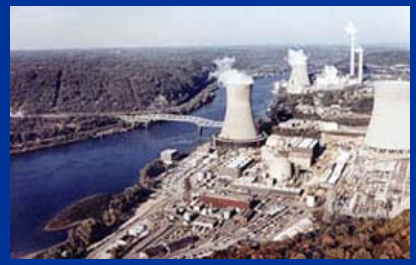
Domestic

Less than 1 percent

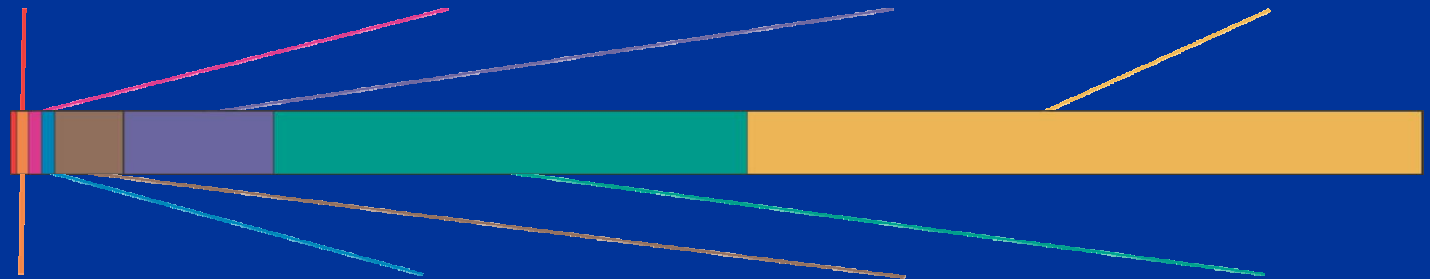
Public Supply

11 percent

Thermoelectric power



48 percent



Less than 1 percent

Mining

Less than 1 percent

Aquaculture

5 percent

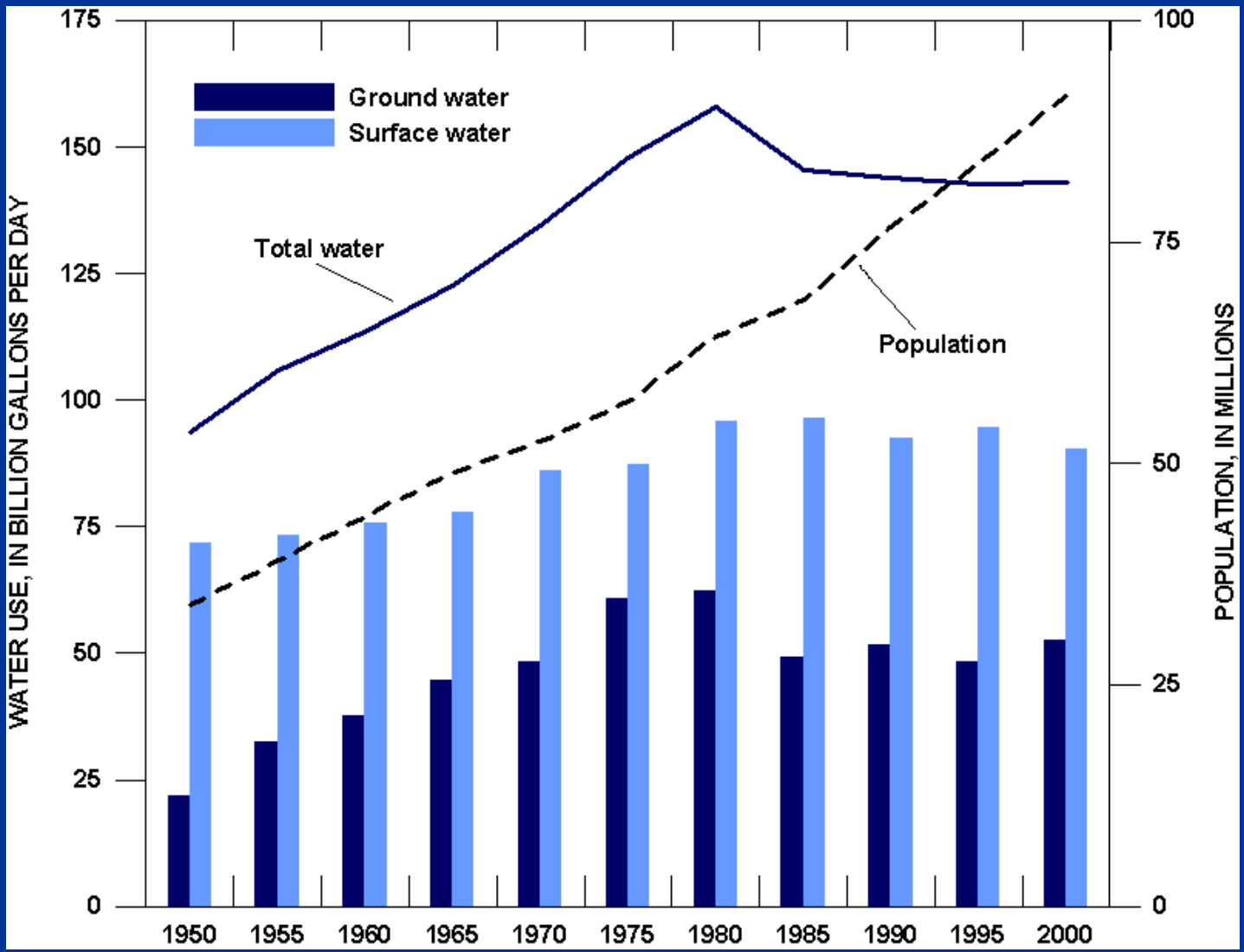
Industrial

34 percent

Irrigation

USGS

Water use and population in the West



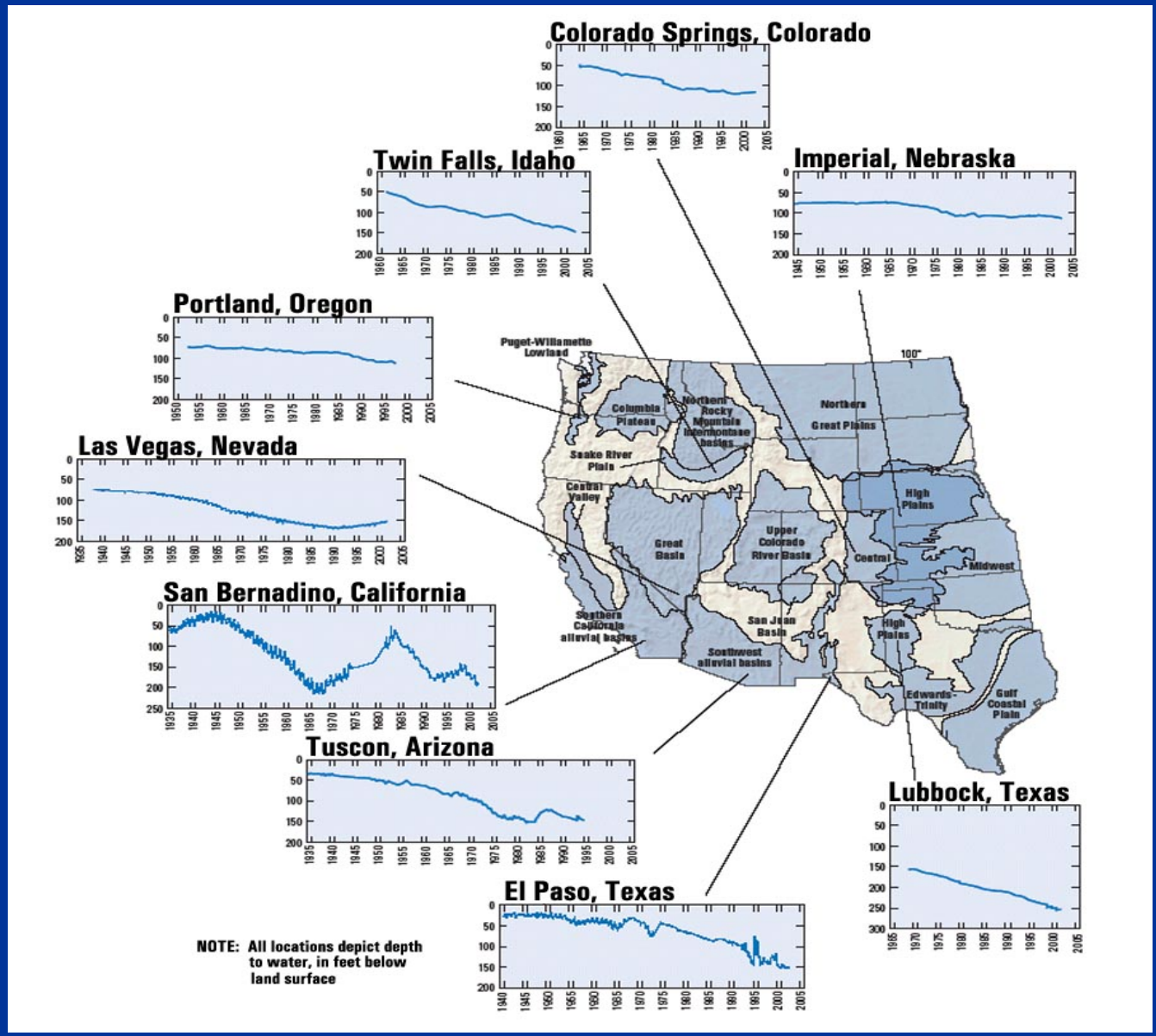
USGS

Changes over the last 30 Years

- Leveling off of water use
- Increased impacts of ground water use
- Increased importance of instream flow (ecosystem services)
- Recognition of the role of climate change
- Changes in technology (irrigation methods, water reuse)

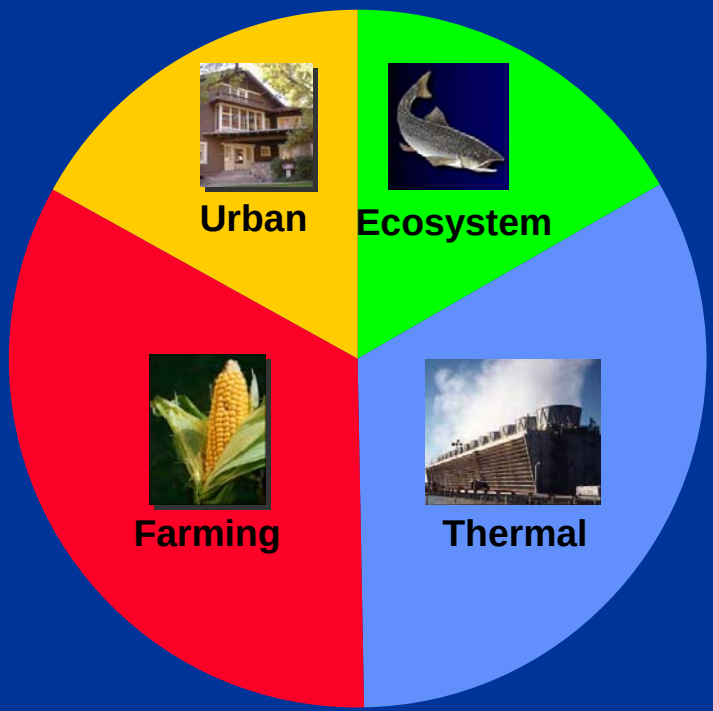
USGS

Change In Storage



USGS

The “pie” might be shrinking because ground water in storage is being depleted



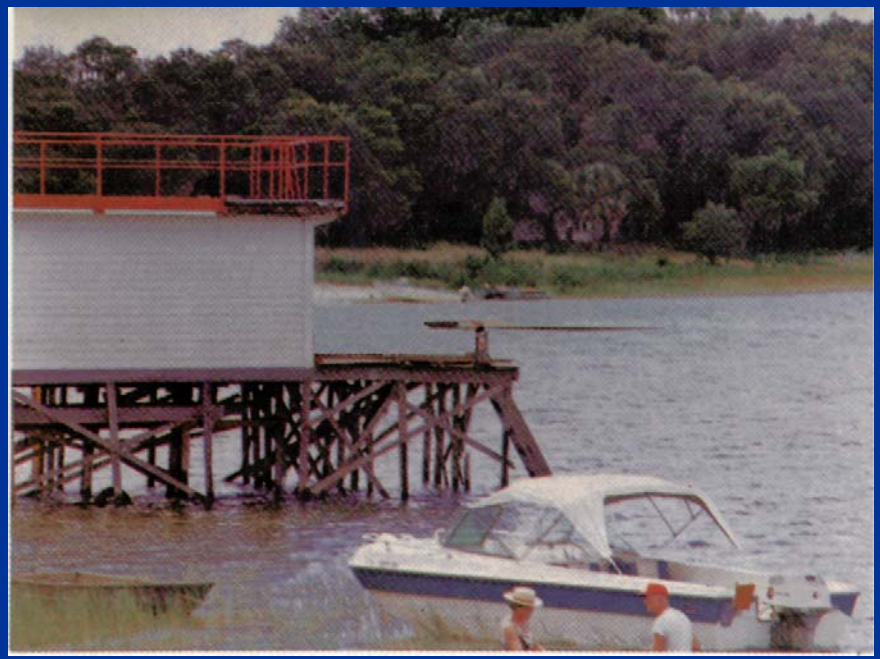
Depletion impacts:

- Wells
- Streamflow
- Riparian vegetation
- Subsidence
- Water quality
- Future generations

USGS

Lake or wetland impacts

An example from a Florida lake: before and after ground-water development



USGS