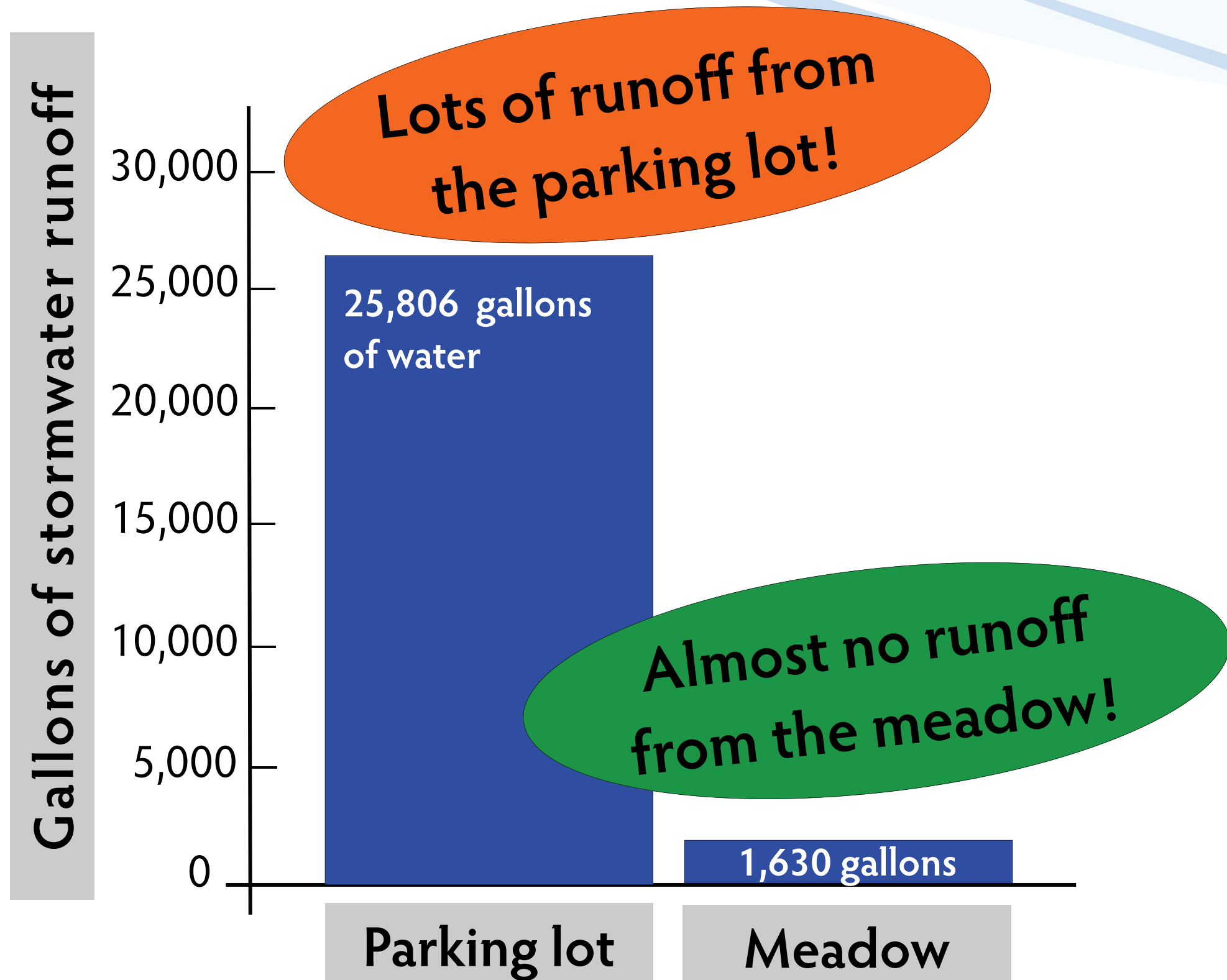


What happens when it rains on a parking lot?

Stormwater

If 3" of rain fall on a parking lot or a meadow...

Figures assume same size and slope of meadow and parking lot.



Adapted from Schueler, T. 1994, "The Importance of Imperviousness." Watershed Protection Techniques 2(4): 100-111.

The Quality Problem

Stormwater runoff from impervious surfaces such as parking lots, roads and buildings carries pollutants on these surfaces into stormdrains, and then to rivers and streams. This is now the single greatest source of water pollution in the nation.

Possible contaminants in stormwater runoff from a parking lot:

- ▶ Excess nutrients (nitrogen or phosphorous)
- ▶ Excess sediments
- ▶ Pathogens (disease carrying organisms)
- ▶ Toxic contaminants (heavy metals, polycyclic hydrocarbons, volatile organic compounds)
- ▶ Excess chloride (salt)
- ▶ Increased water temperature

The Quantity Problem

Impervious surfaces such as parking lots, roads, and buildings cause a lot of stormwater to run off very quickly. Results:

1. Flooding during rain events.
2. Groundwater, which feed rivers and streams, is not re-charged, causing low water levels during dry periods.