

Understanding our Water Resources

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We go to great lengths
to get the water we need



Fresh, clean water is a limited resource

- 97% of Earth's water is in the oceans

80% of fresh water is frozen



Most unfrozen water is unavailable for use



Less than 1% of fresh water is clean and available for use.



Water is abundant some places....



and scarce in others.

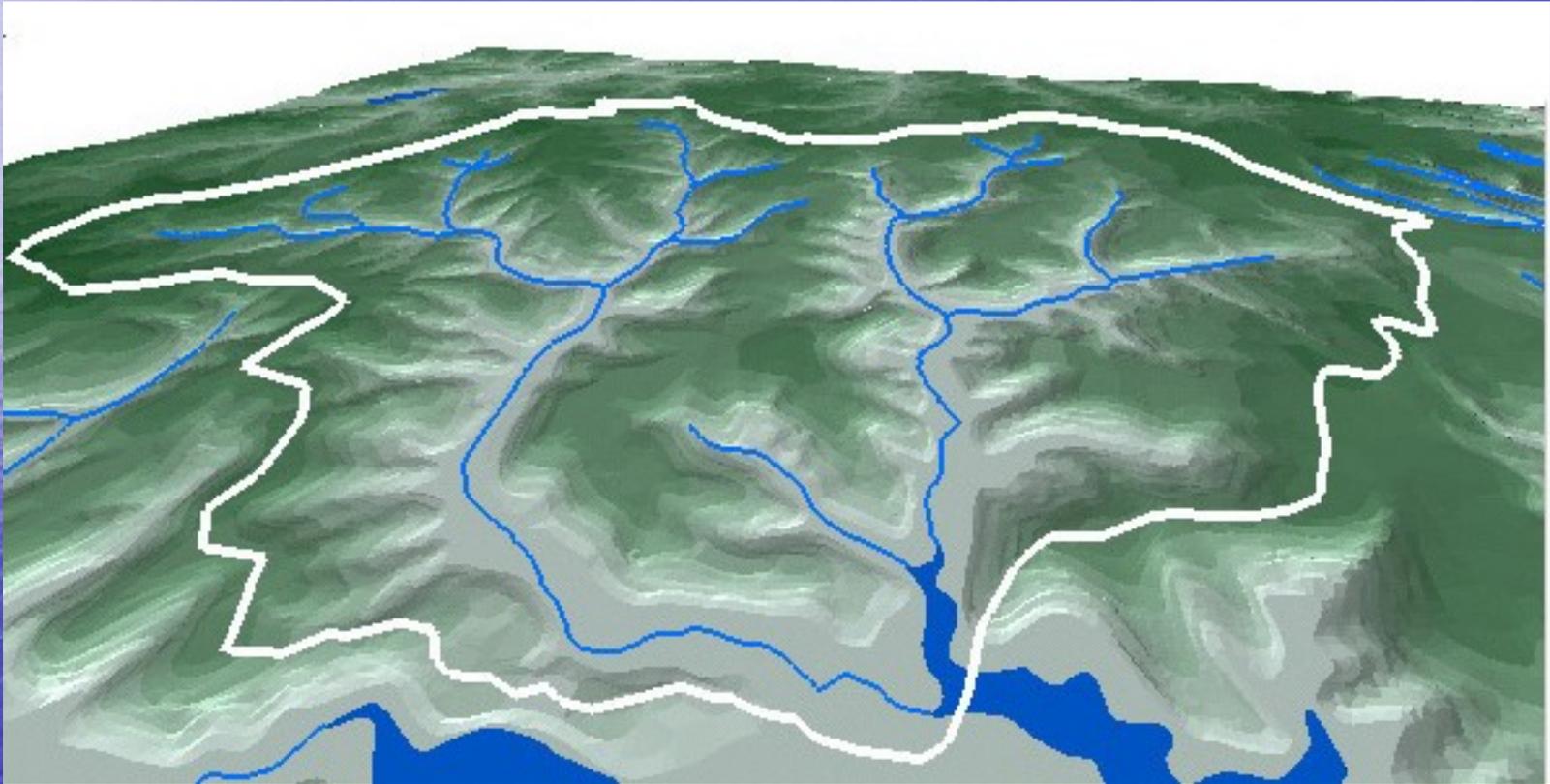


Water exists in watersheds.

- Is this a watershed?



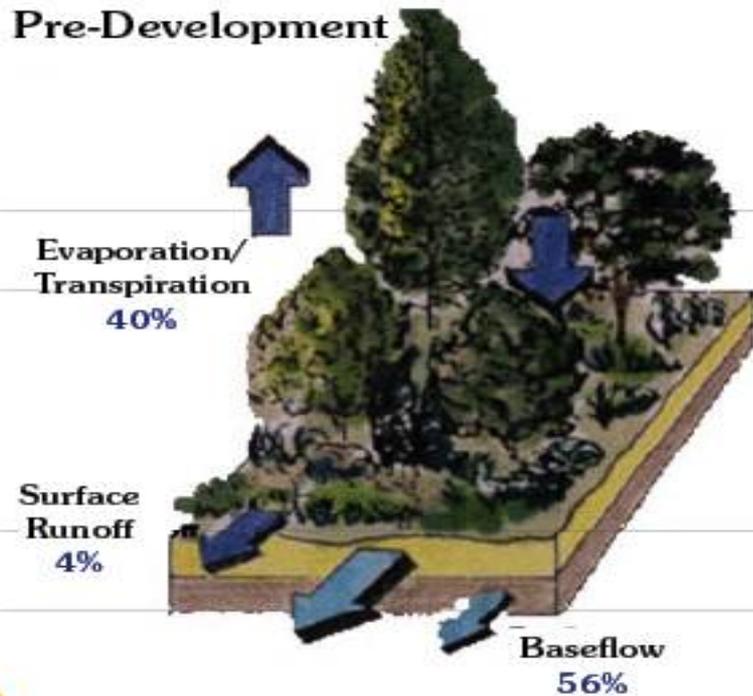
A watershed includes all the land that drains to a water body.



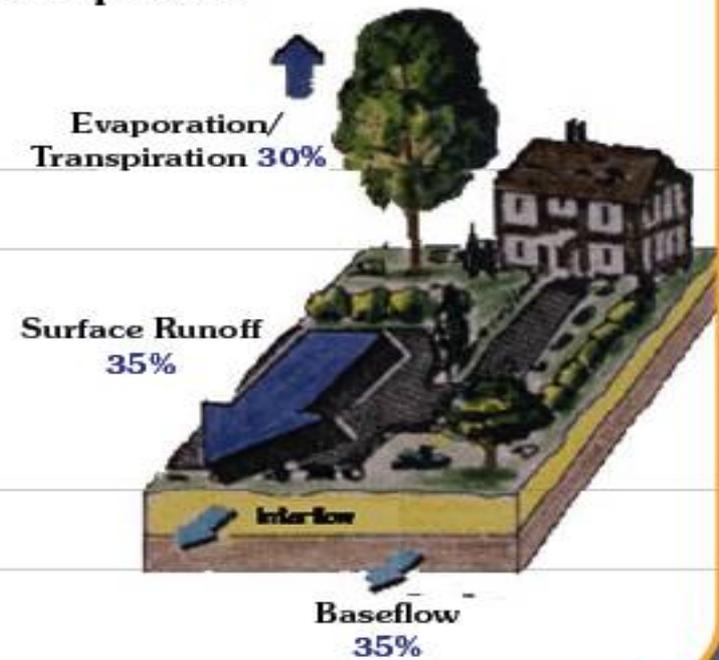
Runoff affects our watersheds

WATER BALANCE

Pre-Development



Post-Development

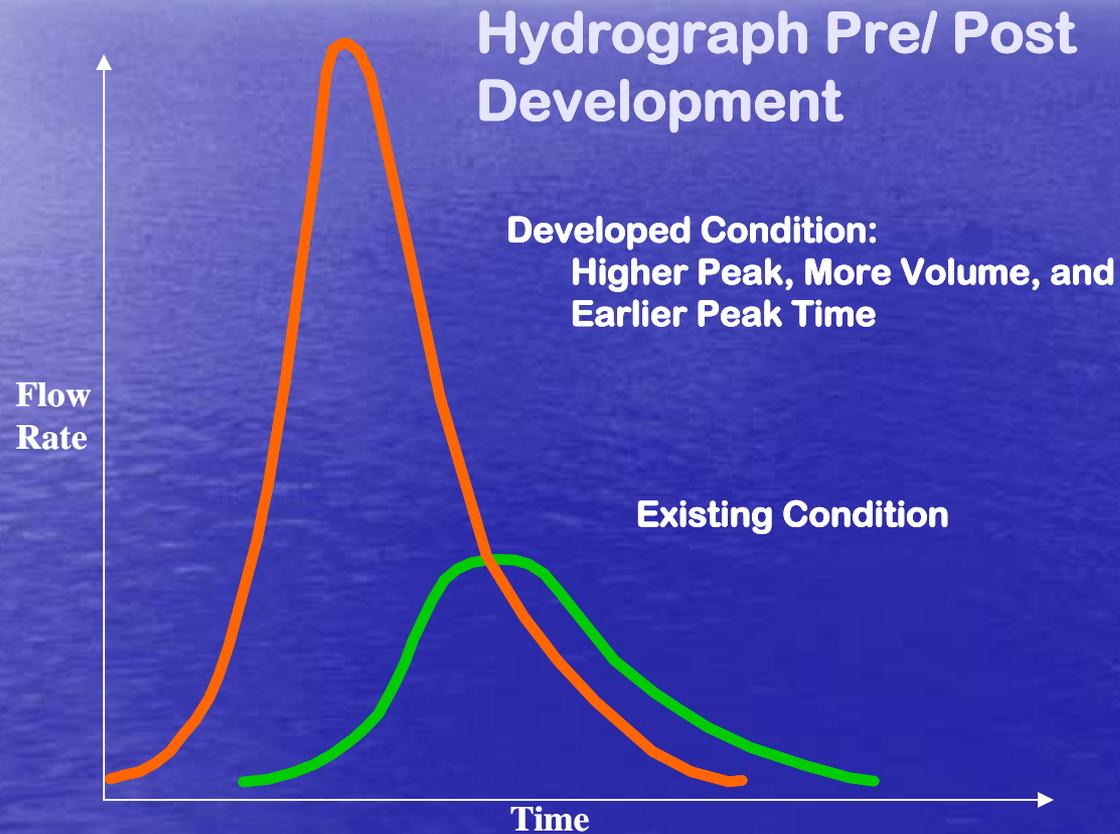


More Pavement = More Runoff

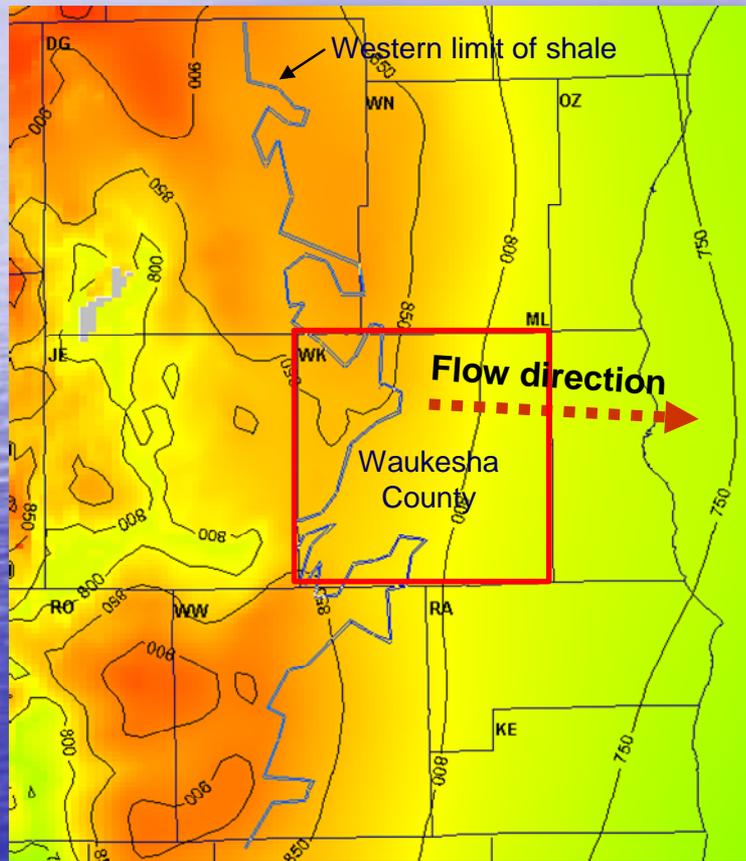


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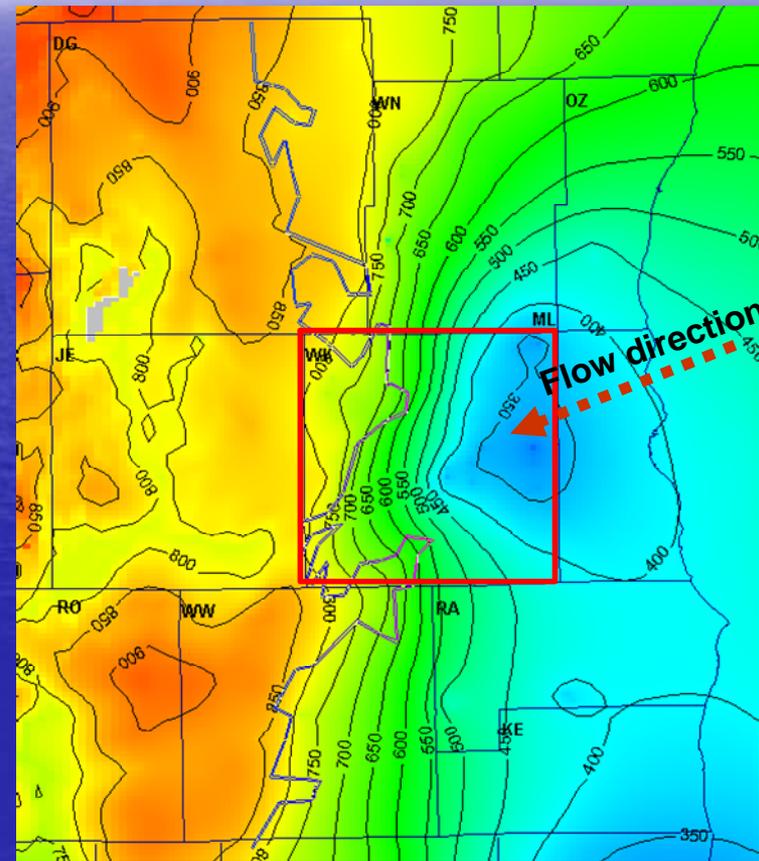
A lot more runoff!



More runoff = less water soaking into the ground.....groundwater!



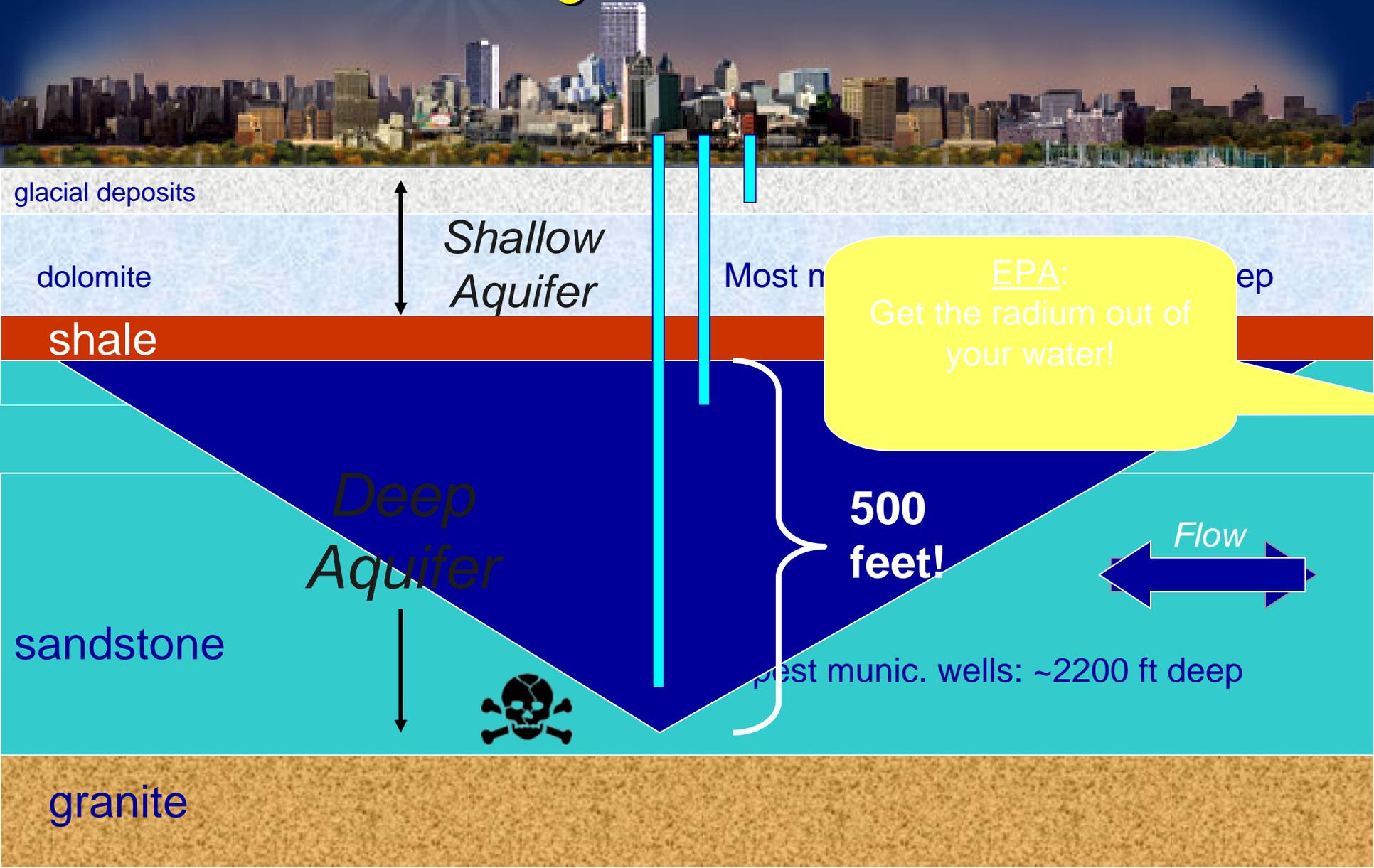
1800's



2000

A 500 foot drop!

Here in Waukesha County...what's happening to our groundwater?



Runoff is the key.
Where does water down the drain go?



Storm drains deliver water straight to the nearest lake, river or wetland.



Runoff carries many pollutants.

- Fertilizers
- Pet Waste
- Bacteria
- Sediment
- Oil and gas
- Heavy metals



What does all that pollution do to our lakes and streams?

- Excessive weed and algae growth
- Warmer, shallower and wider streams
- Less diversity--more pollution tolerant species
- Water unsafe for human contact—due to bacteria
- Heavy metals make fish unsafe to eat



Who will clean it up?



We all use water and contribute to runoff pollution, so we can all help!



Step 1 – Conserve Water

- Take shorter showers
- Fix leaky fixtures
- Turn off the faucet
- Wash full loads in the washer and dishwasher



Water usage more than doubles in the summer.



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Step 2—Reduce Runoff

- Problem—rooftop runoff can't soak in here—it will run into the street and into the nearest storm drain.



Rain Gardens and Rain Barrels



Solutions:

- Rain barrels will store water for later use
- Rain gardens infiltrate water

Where do you wash the car?



- Washing your car on the grass reduces runoff
- The car wash water gets treated and cleaned
- Washing your car on the driveway means polluted runoff goes into our lakes and rivers

Sweep—don't wash!



Step 3—Clean it up!

There are many things we can do at home to keep pollutants from getting into runoff. Pollutants such as:

- Leaves and grass clippings
- Oil and gas
- Fertilizer, pesticides and other chemicals
- Sediment
- Pet Waste

Pick up after your pet

- Pet waste is a major source of bacteria in our urban areas
- Pet waste is also nutrient rich
- Pet waste may contain cryptosporidium



Keep grass clippings out of our waters.

Keep grass on the lawn or compost it

Sweep grass off the pavement



Use fertilizers and other chemicals wisely

- Test your soil first—is it necessary?
- Use only the amount directed
- Don't fertilize before rain
- Sweep up spills and paved areas



Don't drive a leaker!



What will you do to help?



- If we all pitch in and help, we can have clean water to enjoy—One Step at a Time