

Global Water Needs Local Water Conservation

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Q: How much water does the average person in the US use at home per day?

a. 30 – 50 gallons

b. 40 – 60 gallons

c. 50 – 70 gallons

d. 80 – 100 gallons

Correct

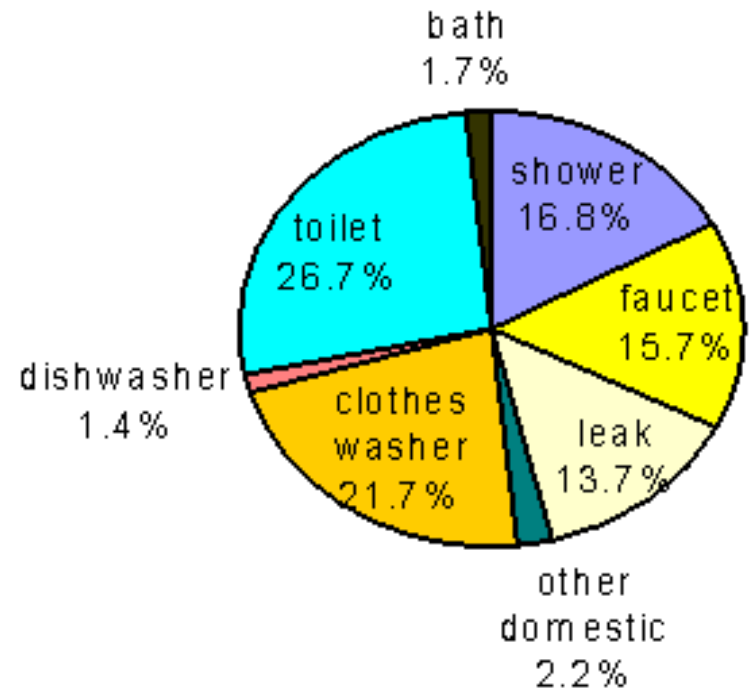
- Design engineers for municipalities still use estimate figures of 100 gallons per person per day.

- A town of 10,000 people would = 1,000,000 gallons per day

How Much Water Do You Use

Activity	Water used
Shower	15-30 gallons (57-114 liters)
Brushing teeth (water running)	1-2 gallons (3.75-7.51 liters)
Shaving (water running)	10-15 gallons (38-57 liters)
Washing dishes by hand	20 gallons (75 liters)
Washing dishes in dishwasher	9-12 gallons (34-45 liters)
Flushing toilet	5-7 gallons (19-26 liters)

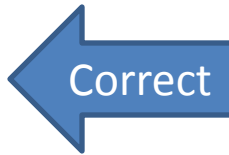
How Is Water Used in the Typical Household?
-- source: City of Albuquerque website



Q: How much water does the average person in Africa use at home per day?

a. 2.0 – 4.0 gallons

b. 0.8 – 1.0 gallons



c. 1.0 – 2.8 gallons

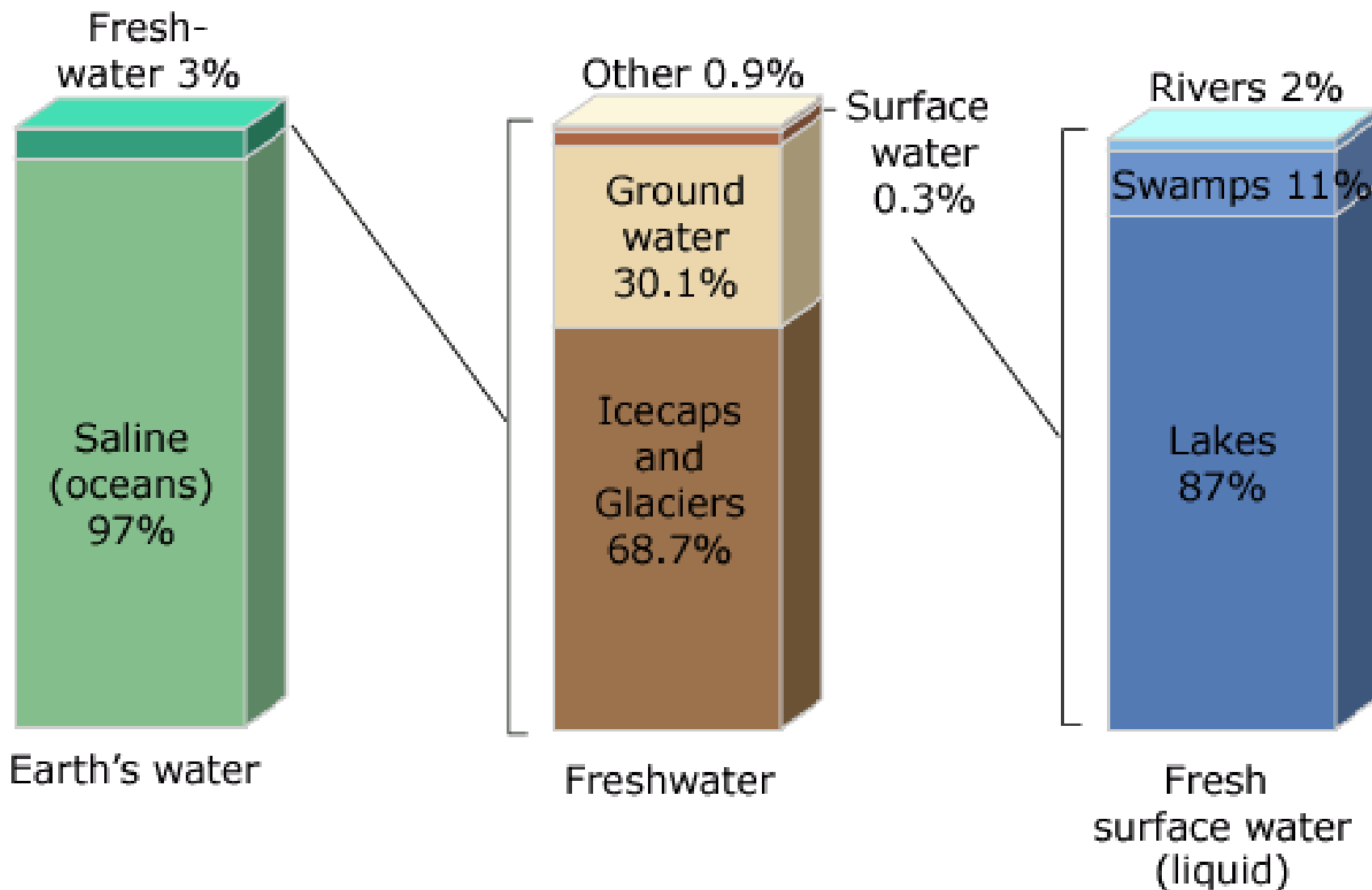
d. 5.0 – 12 gallons

•The United Nations High Commission for Refugees estimates that an average human needs a minimum of 30 liters of water a day – 5 liters (approximately 1.3 gallons) for drinking and cooking, plus 25 liters (approximately 7 gallons) or more to keep clean. The average citizen of the United States uses about 425 liters (approximately 112 gallons). Canadians average about 340 liters of water per day. Europeans use about 140 liters per day. **In Africa, the average person uses 3 liters per day.**

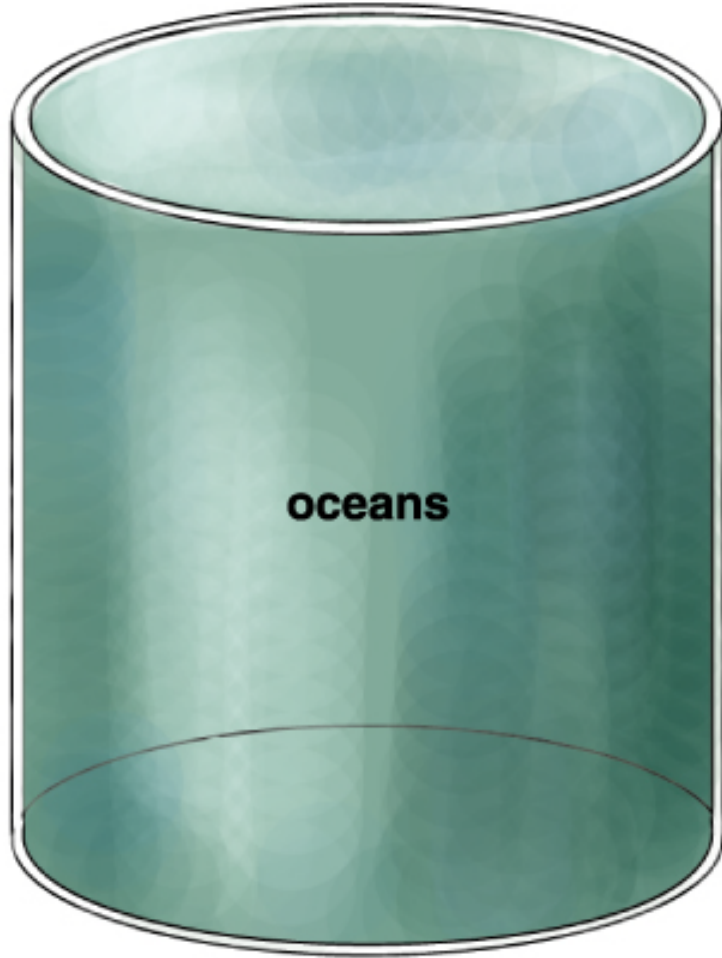
Outline

- Global Water Make up
- Water Scarcity
- Hydrologic Cycle
- Water Conflict
- Old vs. New way

Distribution of Earth's Water



salt water = 97.5%



oceans

fresh water = 2.5%



**ice caps
and
glaciers
1.97%**

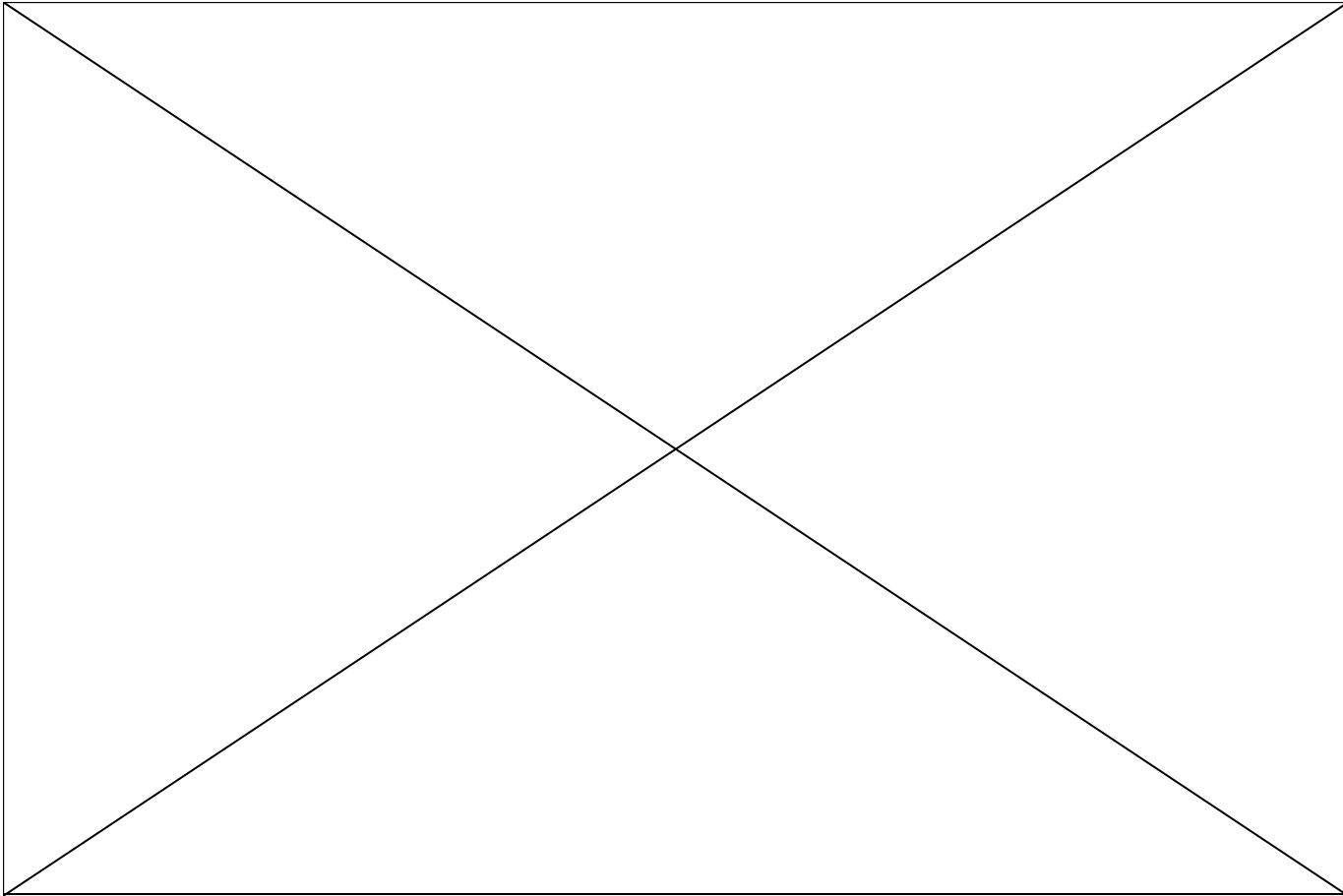
**ground-
water
0.5%**

**lakes,
rivers,
and soil
0.03%**

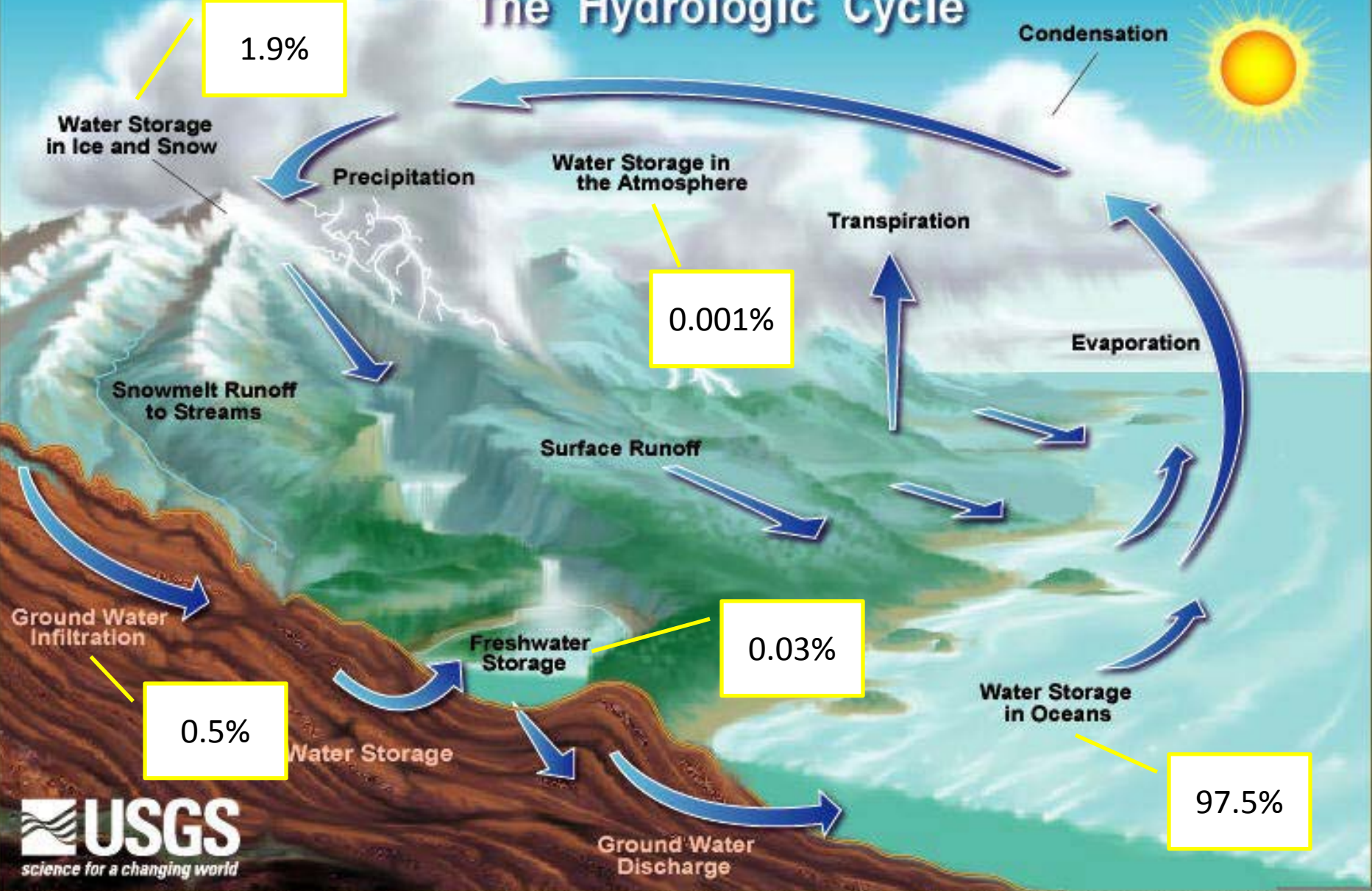
**atmosphere
0.001%**



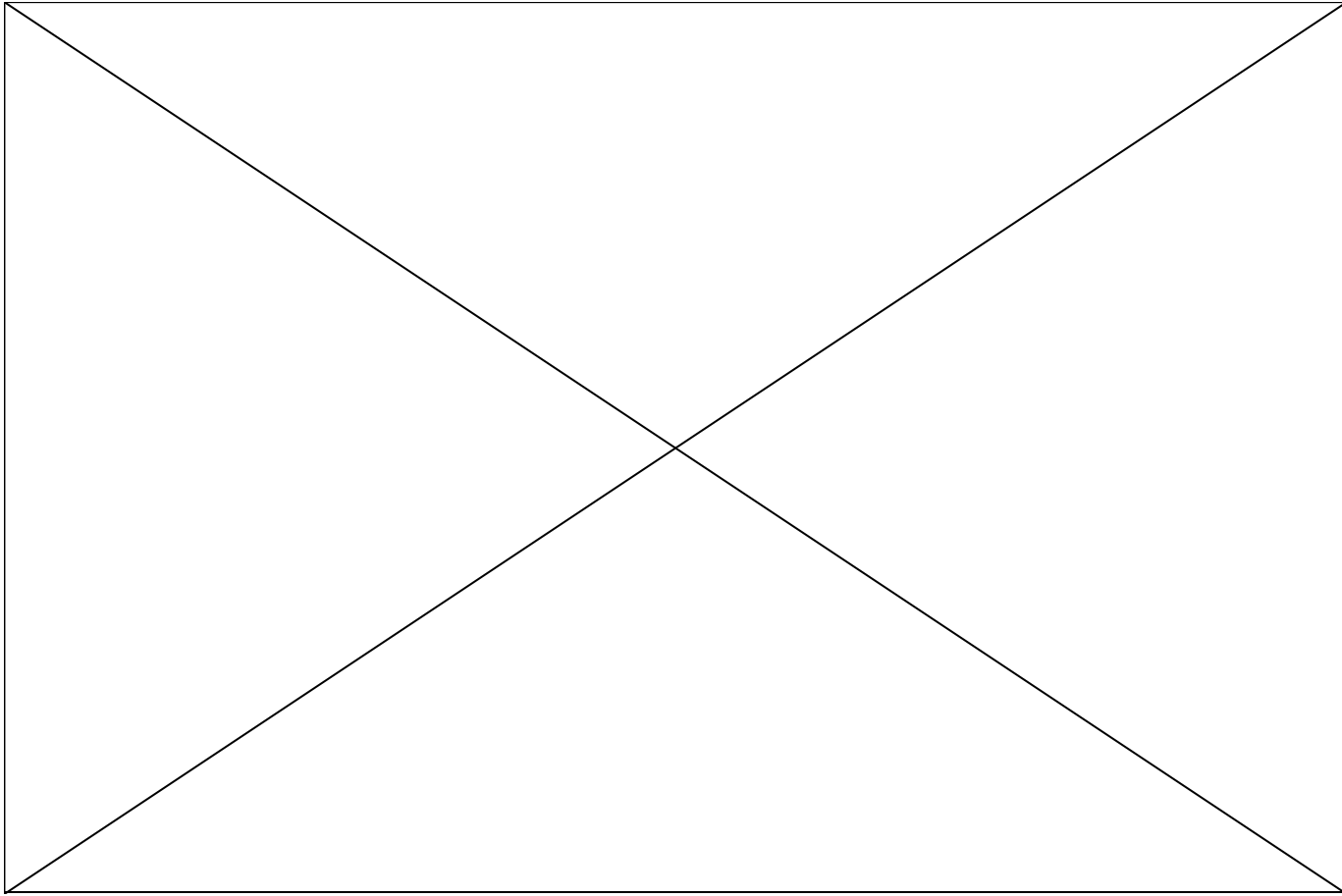
Global Water Scarcity



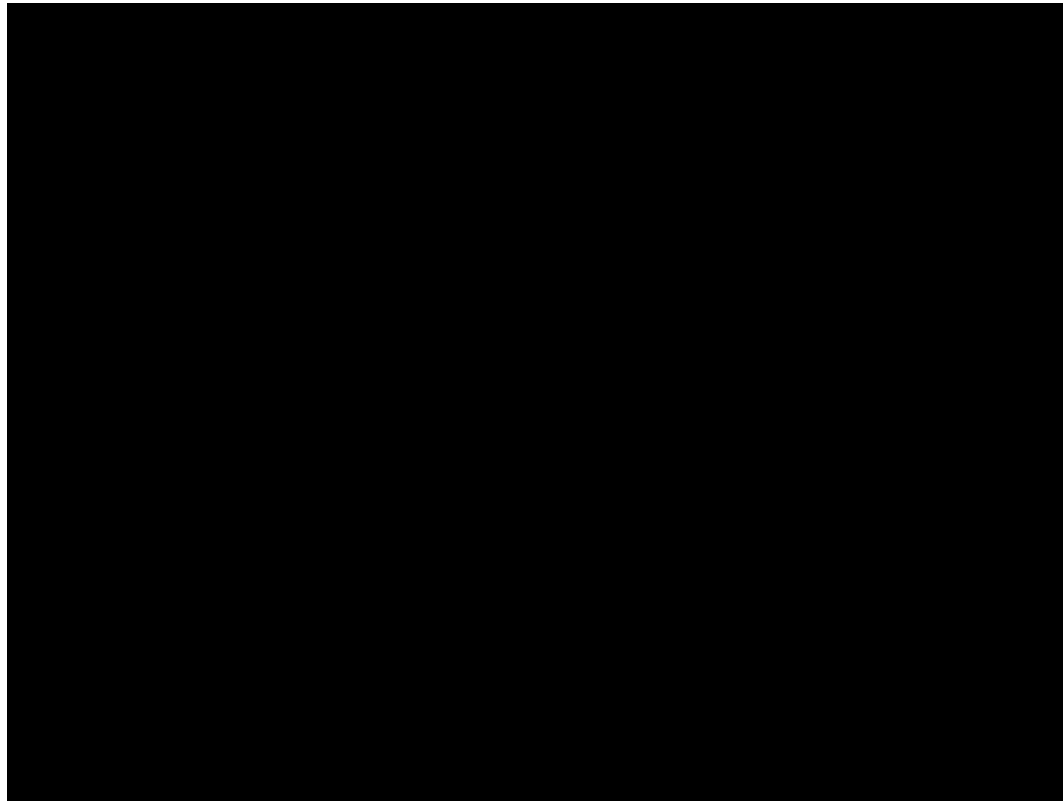
The Hydrologic Cycle



Hydrologic Cycle



Conflict Areas



The Old Way

- **wasteful homes**
Showers, toilets, and gardening — the big uses
- Bathing and cleaning - 28%
- Laundry and dishes - 16%
- Drinking and cooking - 4%
- Garden watering - 20%
- Toilet flushing - 32%



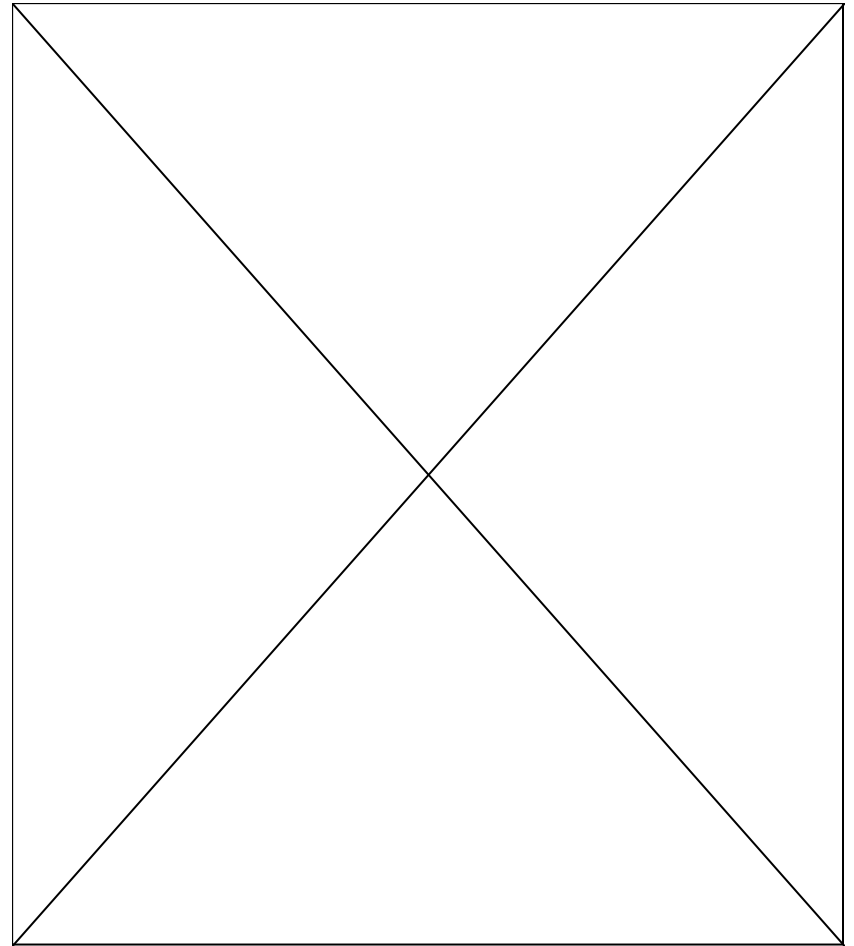
The New Way

- Drought-resistant garden
- Drought-resistant native plants
- Drip irrigation
- Harvest rainwater from roof
- Cistern stores rain water
- Water-efficient appliances and toilet

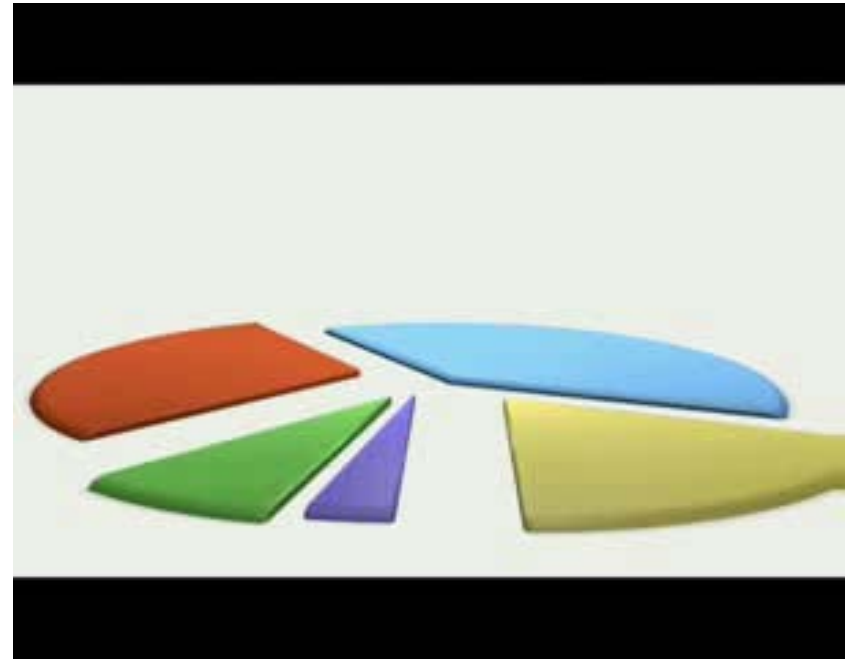
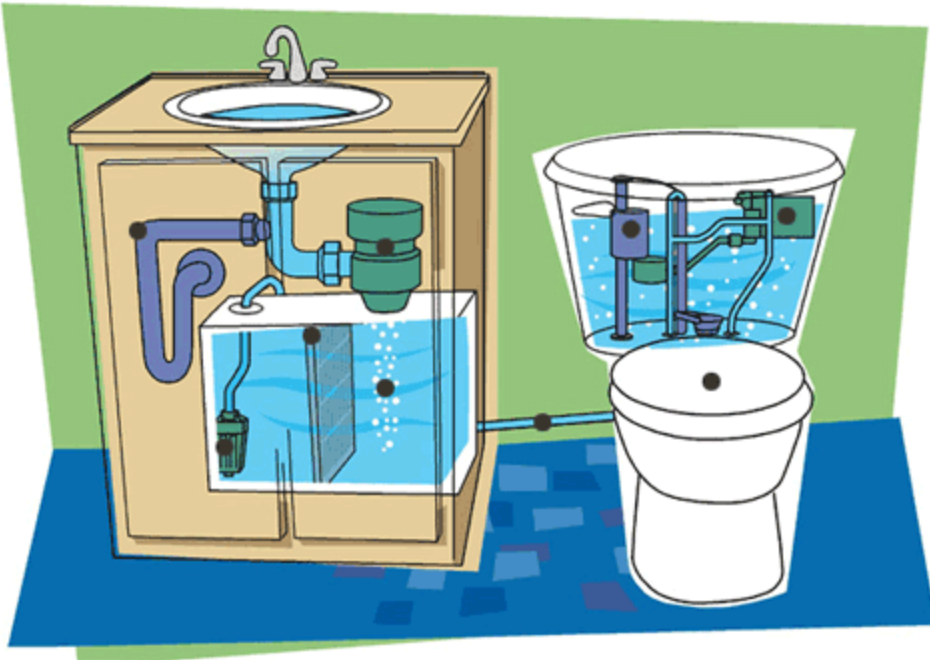


Low Cost Alternative

- [MJSI HYR270 HydroRight Drop-in Dual Flush Converter](#) by MJSI, Inc.
- [Buy new](#): \$29.99
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Gray Water Reuse



Rain Barrels



A one (1) inch rain over a 10 ft x 10 ft roof area will yield **62** gallons of water



25 Things You Can Do

- **1. Check faucets and pipes for leaks**
- 2. Don't use the toilet as an ashtray or wastebasket**
- 3. Check your toilets for leaks**
- 4. Use your water meter to check for hidden water leaks**
- 5. Install water-saving shower heads and low-flow faucet aerators**
- 6. Put plastic bottles or float booster in your toilet tank**
- 7. Insulate your water pipes.**
- 8. Take shorter showers.**
- 9. Turn off the water after you wet your toothbrush**
- 10. Rinse your razor in the sink**
- 11. Use your dishwasher and clothes washer for only full loads**
- 12. Minimize use of kitchen sink garbage disposal units**
- 13. When washing dishes by hand, don't leave the water running for rinsing**
- **14. Don't let the faucet run while you clean vegetables**
- 15. Keep a bottle of drinking water in the fridge.**
- 16. Plant drought-resistant lawns, shrubs and plants**
- 17. Put a layer of mulch around trees and plants**
- 18. Don't water the gutter**
- 19. Water your lawn only when it needs it**
- 20. Deep-soak your lawn**
- 22. Add organic matter and use efficient watering systems for shrubs, flower beds and lawns**
- 23. Don't run the hose while washing your car**
- 24. Use a broom, not a hose, to clean driveways and sidewalks**
- 25. Check for leaks in pipes, hoses, faucets and couplings**