

# Conserve Water for Kane Saving Water Indoors Workshop Technical Slides

NWPA Technical Advisory Committee  
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Haider Mehdi

Water Conservation Associate

*Illinois Indiana Sea Grant & University of Illinois Extension*

# Conserve Water for Kane

*Conserve Water for Kane* encourages residents and communities to practice water conservation and use water more efficiently, through:

- Education: guides, publications, **workshops**
- Incentives: toilet rebate, pilot water sensor
- Tool: water use calculators



# Saving Water Indoors

*Conserve Water for Kane*

*NWPA TAC, 2/24/2026*

Presented by: Haider Mehdi

*Water Conservation Associate*

*Illinois-Indiana Sea Grant*



# Workshop plan

2–3 hours workshop for Kane residents

1. Introduction to Conserve Water for Kane
2. Household water use overview
3. Where our water comes from
4. Estimate your water use
5. How can you save water?
6. Discussion and Evaluation

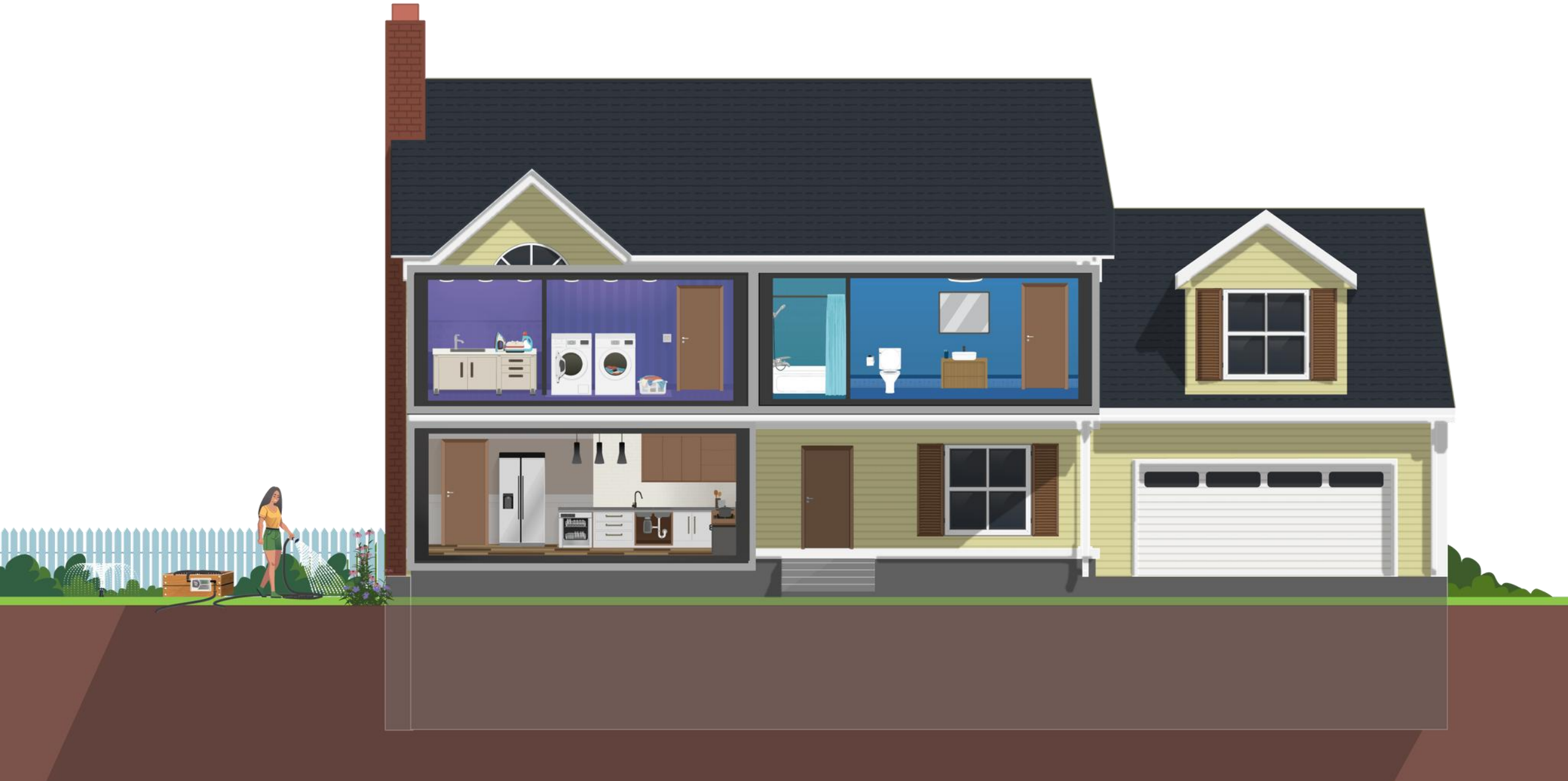
For this presentation, we will only cover the technical information.

# Workshop learning objectives

## Attendees will learn:

- How typical households use water indoors
- What water sources Kane County uses for water supply
- The need for water efficiency and conservation
- If your household uses water efficiently
- Actions you can take to become more water efficient

# Understanding Indoor Water Uses



## How we measure water use

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### **Gallons per day (GPD):**

The total amount of water used by a person or household in one day.

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### **Gallons per household per day (GPHD):**

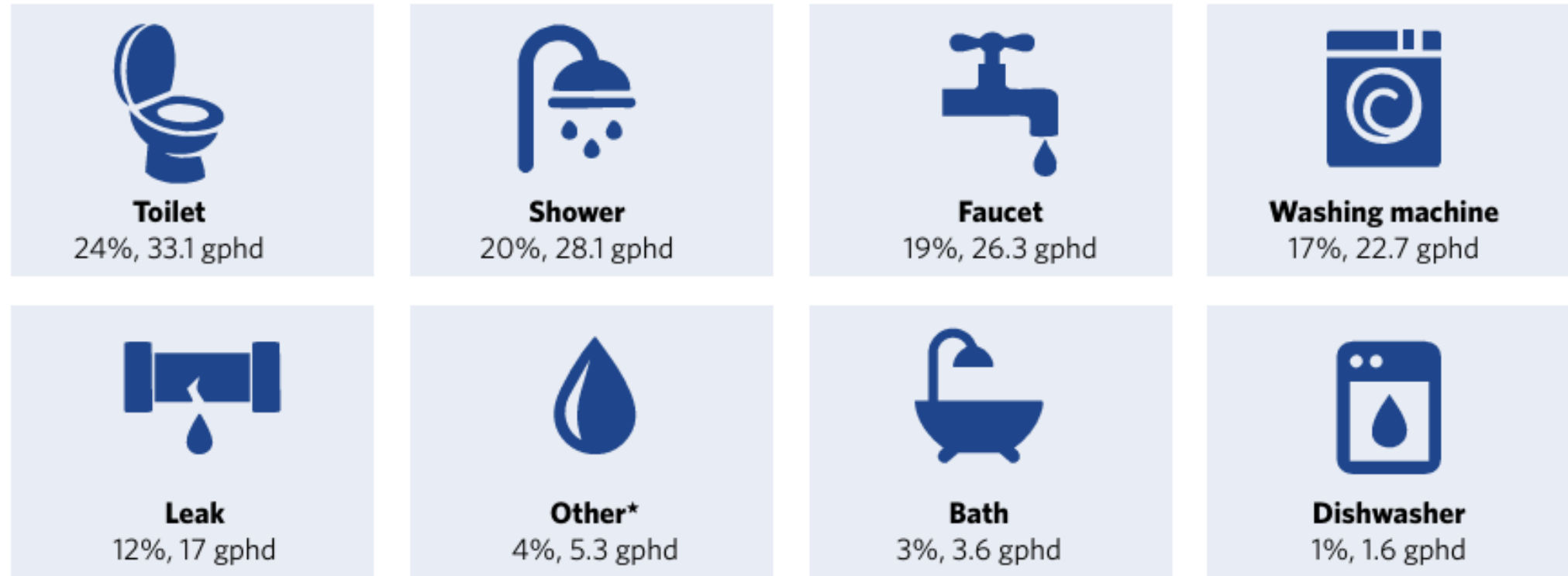
Tracks combined use for everyone in a home — a helpful measure for residential efficiency.

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### **Gallons per capita per day (GPCD):**

Used by water utilities and planners to compare communities.

**Figure 4.3: Indoor household water use by fixture by gallons per household per day (gphd)**



Source: Water Research Foundation, Residential End Uses of Water, Version 2, Executive Report.

Note: The other category includes evaporative cooling, humidification, water softening, and other uncategorized uses.

Data source: DeOreo, W. B., Mayer, P. W., Dziegielewski, B., & Kiefer, J. C. (2016)

# What influences water use at home?

Observable at Home	Attitudes and Behaviors	Outside Context
<p><b><i>Household demographics</i></b></p> <ul style="list-style-type: none"><li>• Age of residents</li><li>• Family size</li><li>• Income level</li></ul> <p><b><i>House characteristics</i></b></p> <ul style="list-style-type: none"><li>• Size (rooms, lot, garden, etc)</li><li>• Water use fixtures</li><li>• Leaks</li></ul>	<p><b><i>Habits and routines</i></b></p> <ul style="list-style-type: none"><li>• Shower length</li><li>• Number of laundry loads</li><li>• Leaving tap running</li><li>• Time spent at home</li><li>• Watering plants</li></ul> <p><b><i>Awareness</i></b></p> <ul style="list-style-type: none"><li>• Water costs</li><li>• Water supply context</li></ul> <p><b><i>Attitude</i></b></p> <ul style="list-style-type: none"><li>• Conservation motivation</li></ul>	<p><b><i>Climate conditions</i></b></p> <ul style="list-style-type: none"><li>• Rainfall</li><li>• Drought</li><li>• Temperature</li></ul> <p><b><i>Water pricing and policy</i></b></p> <ul style="list-style-type: none"><li>• Water rates</li><li>• Watering restrictions</li></ul>

Sources: Jorgensen, B., et al. (2009); Addo, I. B., et al. (2018); Singha, B., et al. (2022)  
Cominola, A., et al. (2023)

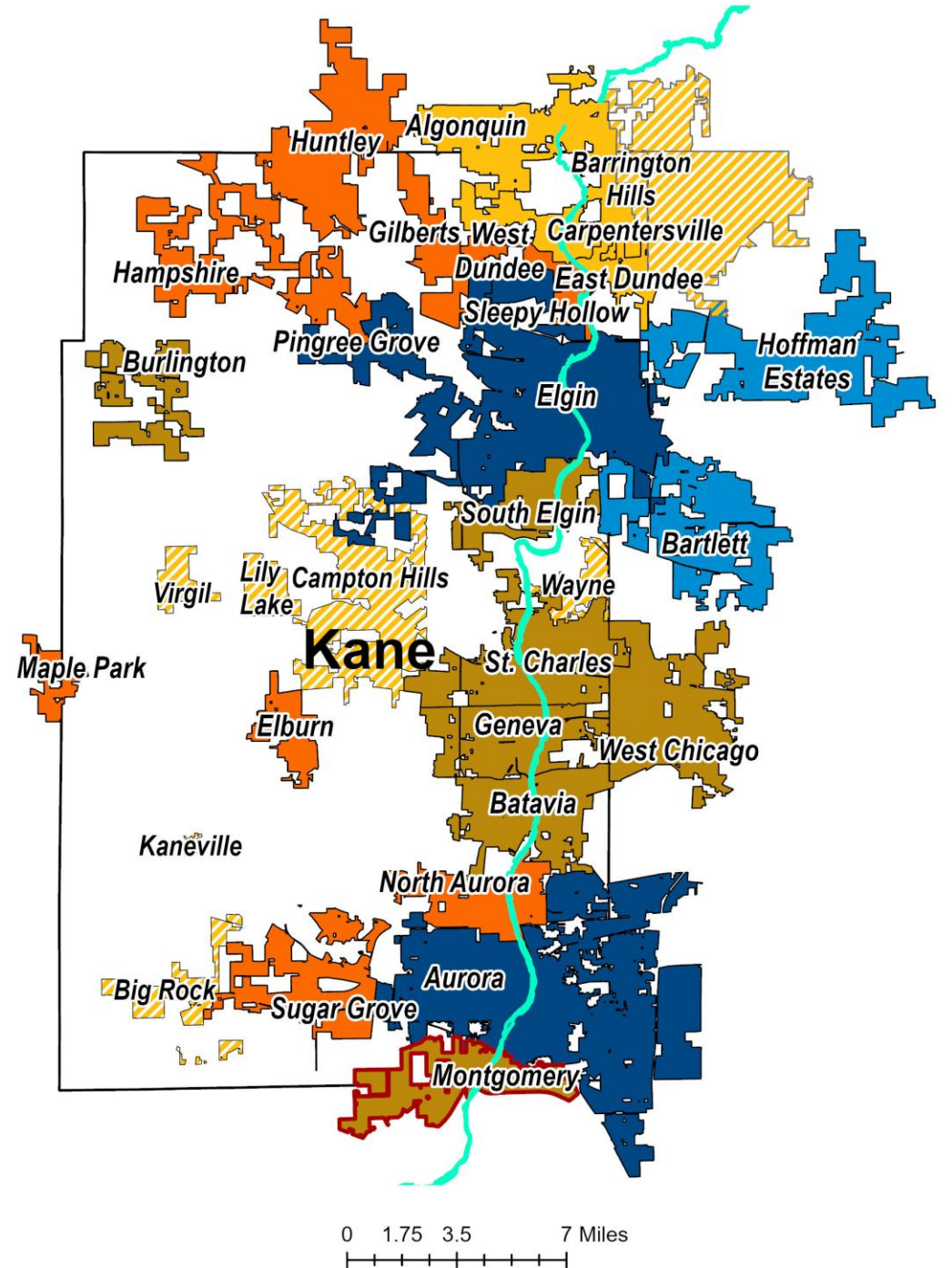
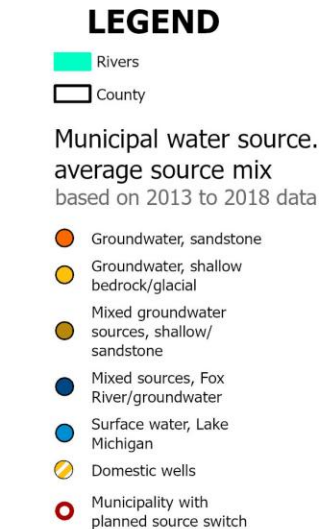
# Where our water comes from

# Where does Kane's water come from?

Kane County's water supply comes from groundwater aquifers and the Fox River.

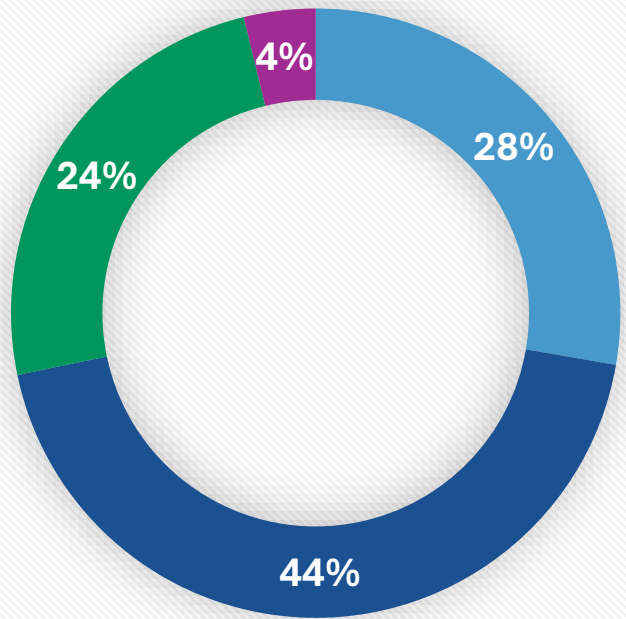
Take a moment to note where your water comes from.

Map source: Chicago Metropolitan Agency for Planning, 2013 to 2018, based on Illinois State Water Survey IWIP data.



# Kane primarily relies on Groundwater

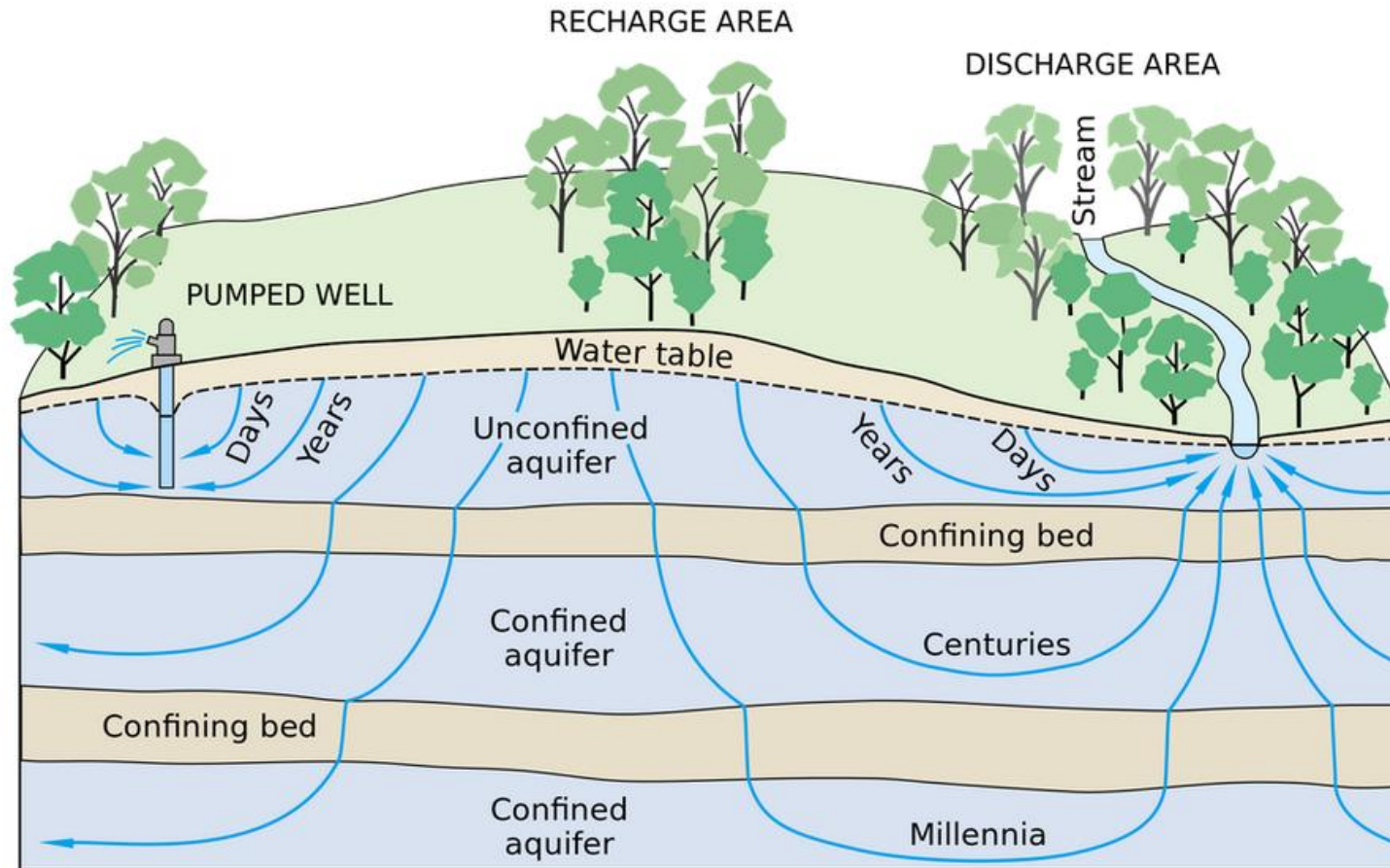
Kane County Water Sources



■ Shallow groundwater ■ Deep groundwater  
■ Rivers ■ Lake Michigan

- 72% groundwater sources (deep and shallow)
- 24% river sources (Fox River)
- 4% Lake Michigan

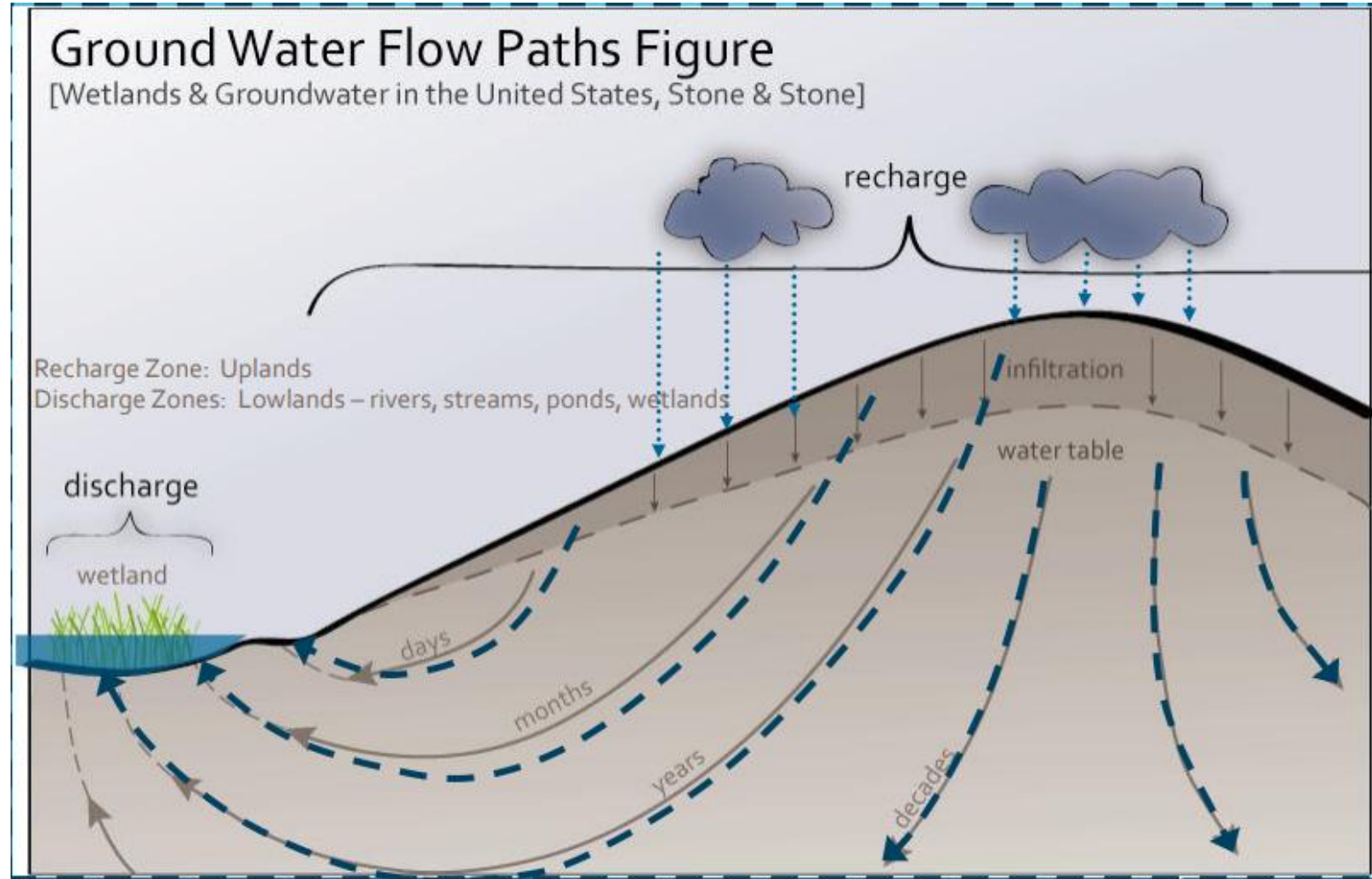
# What are groundwater aquifers?



**Source:** T.C. Winter, J.W. Harvey, O.L. Franke, and W.M. Alley, 2013

# Groundwater aquifers

- Groundwater comes from rain/snowmelt that seeps into underground aquifers
- Water levels build up between layers of rock and sediment over time
- Aquifers discharge into surface water sources like rivers, streams, ponds and wetlands

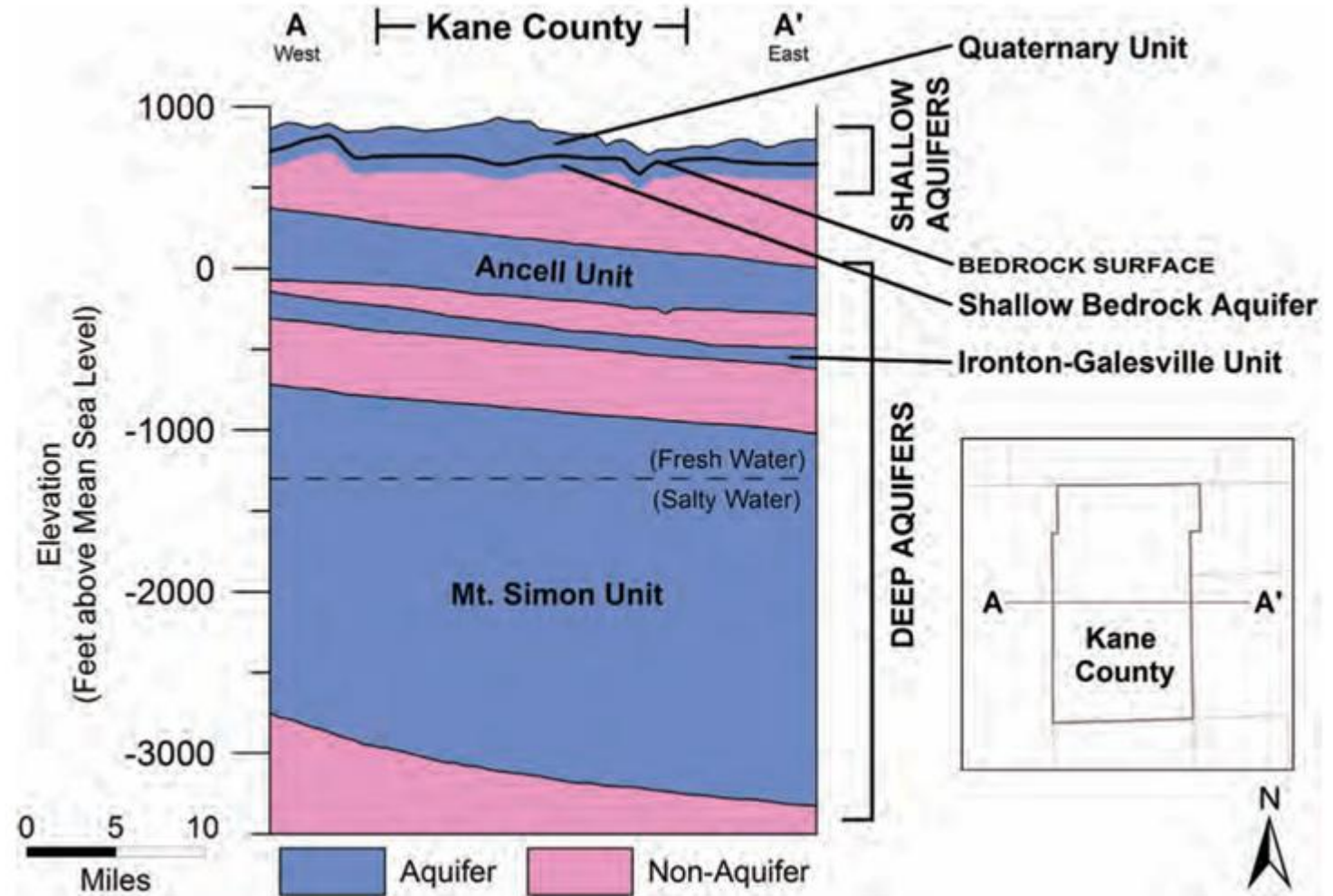


James Patchett, Conservation Design Forum

pulled from: [https://www.ipwman.org/sites/default/files/conference-docs/s.kuykendall\\_sensible\\_salting\\_ipwman\\_2019-10-14.pdf](https://www.ipwman.org/sites/default/files/conference-docs/s.kuykendall_sensible_salting_ipwman_2019-10-14.pdf)

# Kane County aquifers

- Kane County contains both deep and shallow aquifers underground
- Quaternary Unit and Shallow Bedrock Aquifer within 500 ft below surface
- Deep Aquifers range from >500 to 4000 ft below surface
  - Ancell Unit
  - Ironton-Galesville Unit
  - Mt. Simon Unit



Source: Meyer, S. C., Roadcap, G. S., Lin, Y.-F., & Walker, D. D. (2009)

# From source to supply

## Sources

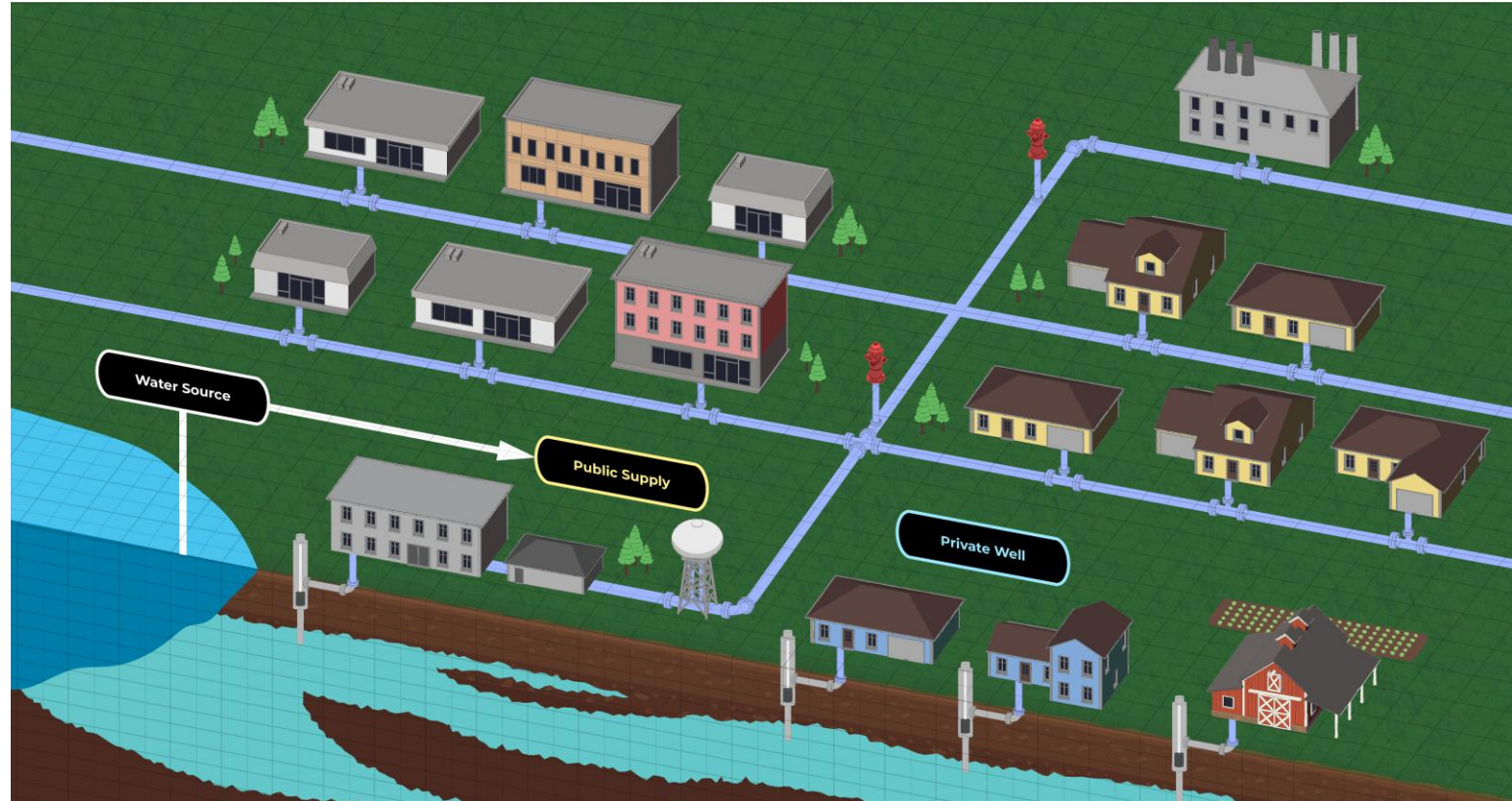
- Groundwater
- Surface water

## Water Users

- Homes, businesses, communities, farms, nature

## Water Supply

- the process of sourcing, treating, and delivering water



# Water supply challenges



**LIMITS ON SURFACE  
WATER**



**DESATURATION OF  
GROUNDWATER**



**WATER QUALITY RISKS**

# Surface water supply limits

- Lake Michigan Supreme Court Decree limits water use
- Inland surface water regulations (Fox River Implementation Plan)
- Water quality risks
- Infrastructure costs and limitations

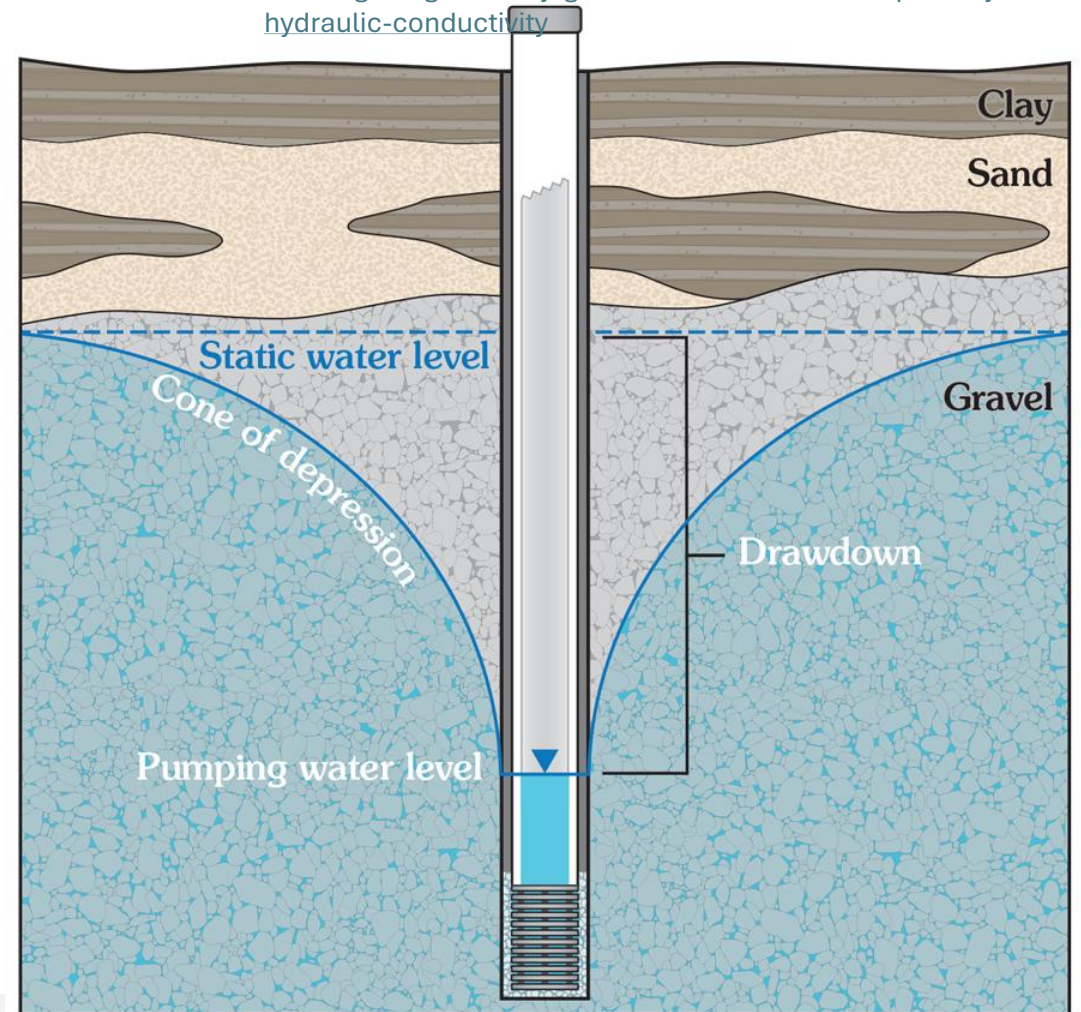


Image source: *Chicago Metropolitan Agency for Planning*

# Desaturation of groundwater

- To supply water, we pump it out of wells
- When water is pumped out faster than it's replenished by rainfall/snowmelt (recharge), groundwater levels drop
- When water levels lower, **desaturation** occurs (layers lose accessible water)

<https://ohiodnr.gov/discover-and-learn/safety-conservation/about-ODNR/geologic-survey/groundwater-resources/aquifers-yield-and-hydraulic-conductivity>



Source: Ohio Department of Natural Resources

# Water quality

Sources are susceptible to harmful levels of contaminants from human behavior:

- road salts, fertilizers, and other synthetic chemicals from industrial runoff
- per- and polyfluoroalkyl substances (PFAS), a persistent chemical linked to multiple health risks
- microplastics from pollution

Poor water quality can make sources costly to treat and harmful to use (example: lead)

Water quality and supply are intrinsically linked



Image source: Adobe Stock, SecondSide

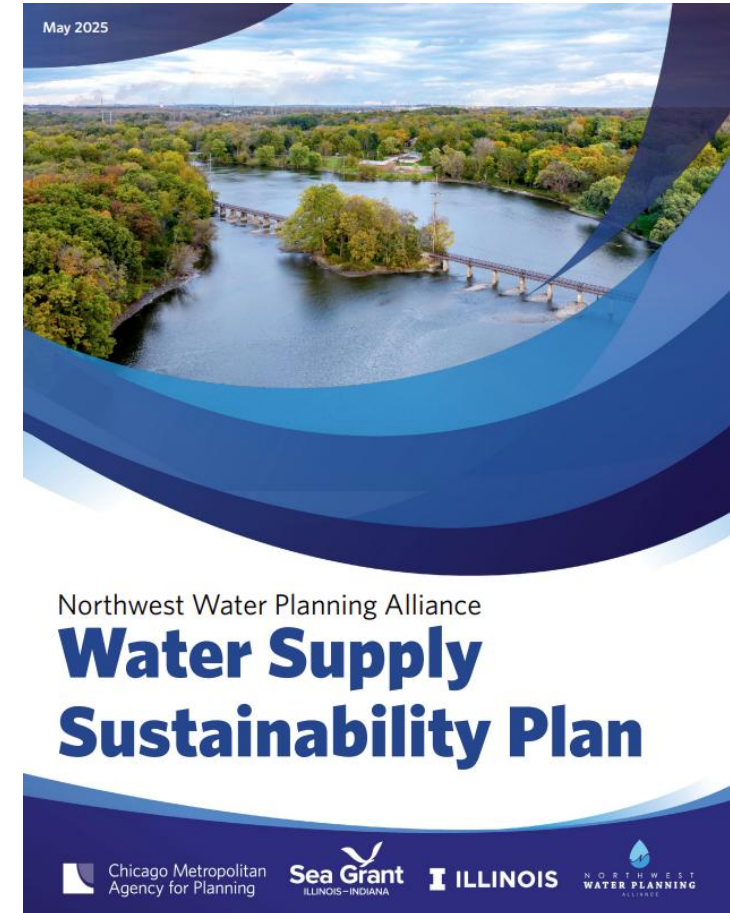
# Water supply planning

Regional planning efforts allow us to estimate:

- current and future water demand
- sustainable supply levels
- water-saving opportunities

What we learned:

- Kane's projected demand is more than sustainable supply
- Population is expected to increase 25% to 2050
- Current water sources have supply limits, alternatives can raise infrastructure costs
- Residents can help via water **conservation** and **efficiency!**



# What is Water Conservation and Water Efficiency?

- **Water Conservation** a beneficial reduction in water use resulting from a change in behavior.
- **Water Efficiency** minimization of the amount of water used to accomplish a task.

We will see what these look like in practice

(Source: Amy Vickers)

# How can you save water?

# How can you save water?

- Change behavior and habits (**Water Conservation**) for example, turning off the water when shaving or brushing teeth, or only running the dishwasher when it's full, checking for leaks, etc
- Change fixtures and products (**Water Efficiency**) Energy Star clothes washer, Water Sense Toilet or low-flow faucets and showerheads, etc.

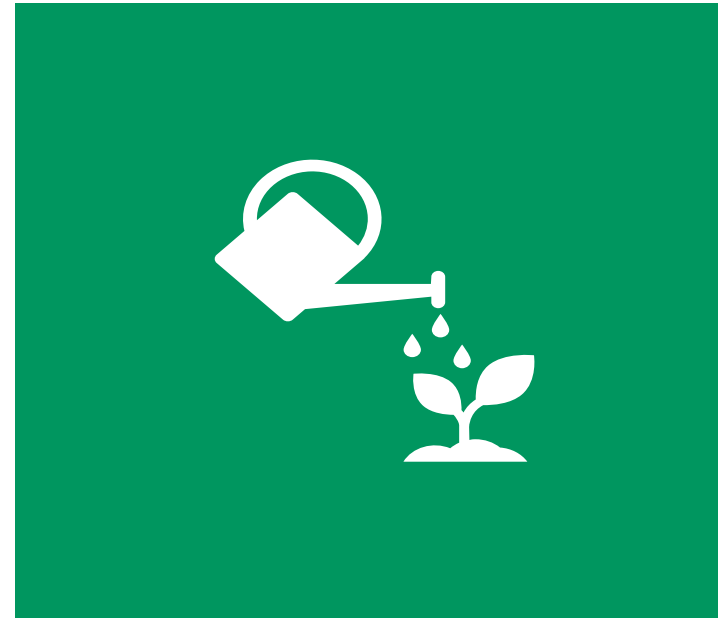


# Residential program participation is key!

## Indoor Residential retrofits



## Landscape water efficiency



Source: Northwest Water Planning Alliance.  
(2025)

# Understanding Water Use Standards – Mandatory

- **Federal and state standards** regulate the water use of devices and fixtures (like toilets, showerheads, faucets, and more)
- **Federal Standards:** The Energy Policy Act (EPAAct) of 1992 established the first nationwide water efficiency standards, which became effective in 1994
- **State Standards:** States can adopt standards that are stricter than the Federal standards

*Sources: U.S. Department of Energy and Offutt,  
MC. (2022)*

# ENERGYSTAR and WaterSense - Voluntary

## WaterSense®

- EPA program launched in 2007
- Develops water efficient product specifications
- Use at least 20% less water and perform as well or better than standard models



## ENERGY STAR®

- Federal program (EPA/DOE) launched in 1992
- Develops efficient product specifications that save energy and water



## NEXT GEN

- Advanced technology

Source: U.S. Environmental Protection Agency  
WaterSense & EnergyStar programs

Devices	WaterSense Specification <sup>1</sup>	EnergyStar Specification <sup>2</sup>	National Standards <sup>1, 3</sup>	Older Devices <sup>1, 4, 5</sup>
<b>Bathroom faucet</b>	1.5 gallons per minute	N/A	2.2 gallons per minute	up to 7 gallons per minute
<b>Kitchen faucet</b>	N/A	N/A	2.2 gallons per minute	up to 7 gallons per minute
<b>Toilets</b>	1.28 gallons per flush	N/A	1.6 gallons per flush	up to 5 gallons per flush
<b>Showerheads</b>	2 gallons per minute	N/A	2.5 gallons per minute	up to 5 gallons per minute
<b>Clothes Washers: Top-loading (4.5 cubic ft)</b>	N/A	19.4 gallons per load	29.3 gallons per load	up to 41 gallons per load
<b>Clothes Washers: Front loading (4.5 cubic ft)</b>	N/A	14.4 gallons per load	21.2 gallons per load	up to 41 gallons per load
<b>Dishwashers</b>	N/A	3.2 gallons per cycle	5 gallons per cycle	10 gallons per cycle

1. Environmental Protection Agency, WaterSense program factsheets (2025)

2. Environmental Protection Agency, Energy Star Program specifications (2025)

3. Code of Federal Regulations. (2025)

4. Environmental Protection Agency, WaterSense management guides (2017)

5. Environmental Protection Agency, WaterSense specification supporting statements (2007)

# Product Finders

- WaterSense

QR LINK:  
[WaterSense Product Search | US EPA](#)



- Energy Star

QR LINK:  
[Product Finder | EPA ENERGY STAR](#)



# Most common sources of indoor household water waste

The most common sources of water waste in indoor household water use is **inefficient fixtures and leaks**.

We will cover:

- Fixture efficiency
- Conservation behaviors
- Leaks

# Toilet Efficiency

## Upgrade (WaterSense):

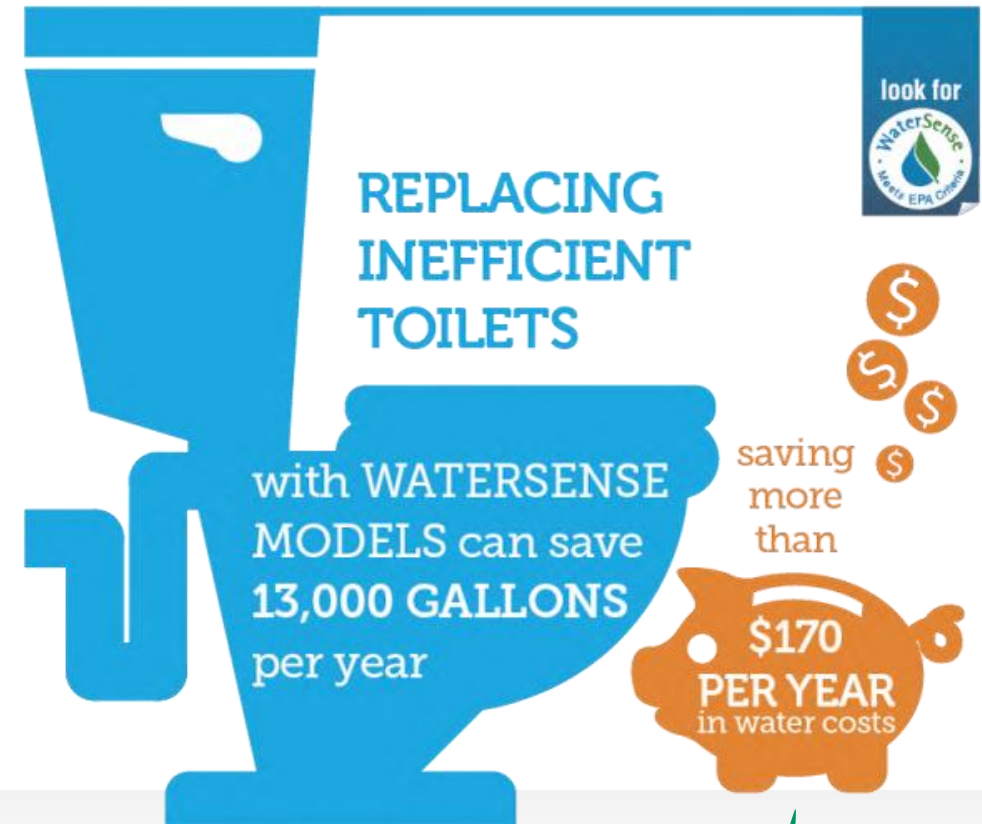
- 1.28 gallons per flush or less
- 20% less water than the current national standard

## Behavioral tip:

- Replace worn flappers or other components to avoid water waste
- Test for and fix toilet leaks with tablets

Source: U.S. Environmental Protection Agency.  
(2025)

Replace flapper  
video QR: [link](#)



# Showerhead Efficiency

## Upgrade (WaterSense):

- WaterSense showerheads use no more than 2.0 gpm
- 20% less water than national standard models, with no loss in performance.

## Behavioral Tips:

- Take shorter showers.
- Turn off the water while lathering up or shampooing.

Source: U.S. Environmental Protection Agency.  
(2025)



Replace  
showerhead video  
QR: [link](#)



Replacing your  
old showerheads with  
**WATERSENSE LABELED**  
showerheads could save  
**2,700 GALLONS** per year

# Bathtub Efficiency

## Behavioral Tips:

- Only fill the tub as much as needed
- Many bath and shower diverters leak a small amount of water from the tub spout while functioning (WaterSense intends to develop specification)
- Make sure your diverter isn't leaking more than 0.2 gpm!
- For daily cleaning, a shower is often more water-efficient (EPA, 2000)



# Faucet Efficiency

Replace faucet  
aerator video QR:  
[link](#)

## Upgrade (WaterSense):

- WaterSense models use a maximum of 1.5 gpm (bathroom only, no kitchen standard)
- 30% less water than national standard models.

## Behavioral Tips:

- Turn off the tap while brushing teeth, shaving, or scrubbing dishes.
- Run only as much water as needed for washing hands or face.



Source: U.S. Environmental Protection Agency.  
(2025)

# Dishwasher Efficiency

Sources: U.S. Environmental Protection Agency & U.S. Department of Energy. (2022)

## Upgrade (EnergyStar):

- use 3.2 gallons per cycle (or less)
- ~30% less than the national standard
- can save you about 5,800 gallons of water over its lifetime (U.S. EPA, 2024)

## Behavioral Tips:

- Run only full loads to maximize water and energy efficiency
- Skip pre-rinsing, avoid using kitchen faucet for dishes
- Remove food scraps, but let the machine do the rest of the work



# Clothes Washer Efficiency

Sources: U.S. Environmental Protection Agency & U.S. Department of Energy. (2021) & U.S. Environmental Protection Agency. (2023)

## Upgrade (EnergyStar):

- Front-load washers are more water-efficient than top-loaders
- ENERGY STAR models (4.5 cubic ft)
  - Top loading: 19.4 gpl
  - Front loading: 14.4 gpl

## Behavioral Tips:

- Wash only full loads
- Ensure water supply hoses and connections are tight and free from drips



Save with an  
**ENERGY STAR® Certified  
Clothes Washer**



# Leaks

- Leaks are one of the biggest sources of wasted water in homes, often going unnoticed for months or years.
- The average household can lose up to 10,000 gallons of water each year from leaks
- Nationwide, leaks waste nearly 1 trillion gallons annually, enough for 11 million homes' yearly needs (U.S. EPA, 2024)

Source: U.S. Environmental Protection Agency. (2025). *Fix a Leak Week*.

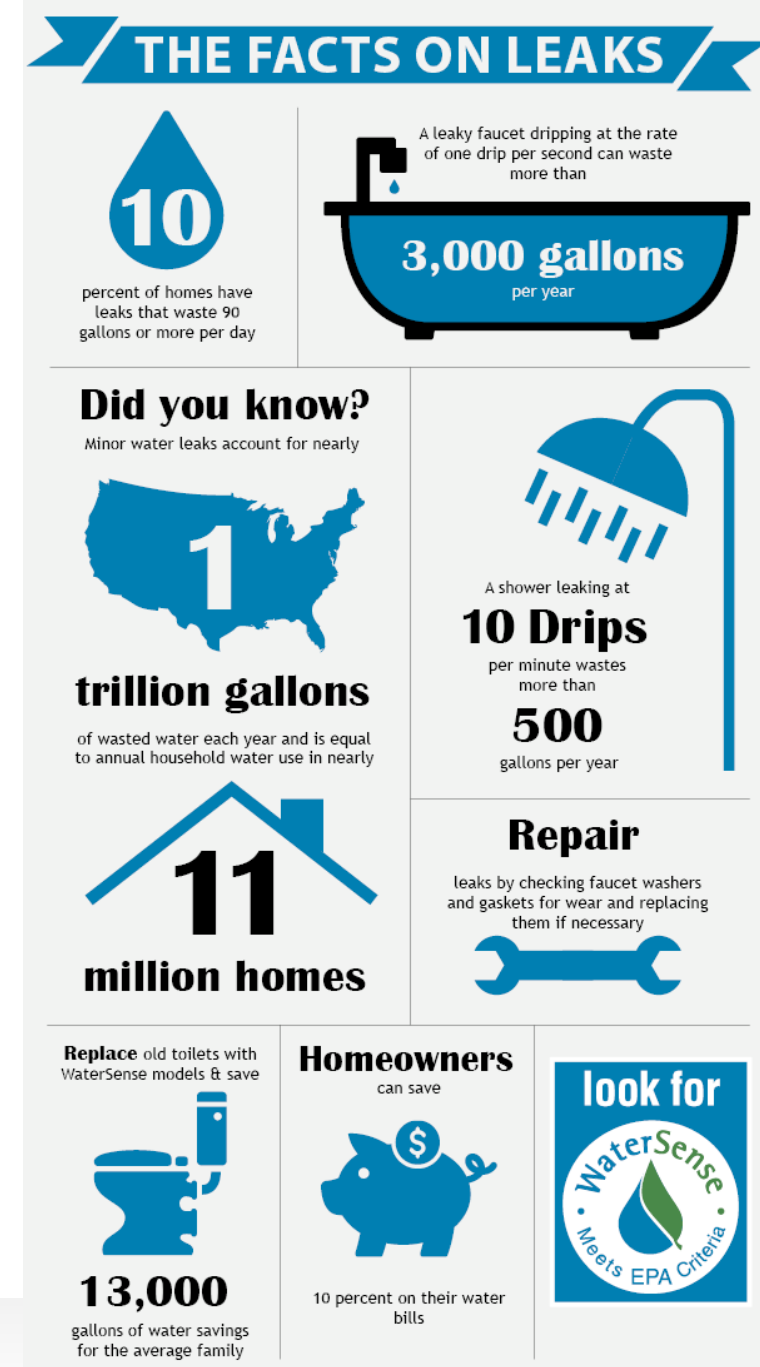


Image by Andrey Popov, Adobe Stock

# Leak Sources

- Toilets
  - Silent leaks or running toilets can waste hundreds of gallons per day.
- Faucets and Showerheads
  - Dripping at one drop per second can waste more than 500-3,000 gallons per year.
- Clothes Washer & Dishwasher Hoses
  - Loose or aging hoses can cause hidden leaks behind appliances.
- Pipe connections

Source: U.S. Environmental Protection Agency. (2025). *Fix a Leak Week*.



# Checking for and addressing leaks

- Check your water meter during no water-use periods
- If available to you, install a Flume device
- Check your water bill for unexplained spikes
- Test for and identify toilet leaks with **dye tablets**
- **Replace** worn components or **upgrade** inefficient devices
- **Listen and look** for dripping sounds and signs of leaks at water use connections



View the extensive guidance WaterSense provides in fixing leaks here:  
<https://www.epa.gov/watersense/fix-leak-week>

# Identifying solutions for your home

# Water efficiency Assistance!

## *Toilet Rebate Program*

Offers up to \$200 rebate if residents upgrades old or standard toilets (>1.6 gpf) to high-efficiency toilet (1.28 gpf)

- Limits up to 3 toilets per household
- Online application process
- Installation charges also covered

Apply at:

<https://conserwaterforkane.org/residents/toilet-rebate/>



# Feedback form



Please provide any feedback at: <https://forms.gle/FHUsH6erhJe7rEVh9>

# Thank you!!

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**Margaret Schneemann**

[mschneemann@cmap.illinois.gov](mailto:mschneemann@cmap.illinois.gov)

**Haider Mehdi**

[hmehdi@cmap.illinois.gov](mailto:hmehdi@cmap.illinois.gov)

*Illinois Indiana Sea Grant & University of Illinois  
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# References

- Map data from Chicago Metropolitan Agency for Planning, 2013 to 2018
- Figure: T.C. Winter, J.W. Harvey, O.L. Franke, and W.M. Alley – *Ground Water And Surface Water A Single Resource*. U.S. Geological Survey Circular 1139, Figure 3.
- Figure: [https://www.ipwman.org/sites/default/files/conference-docs/s.kuykendall\\_sensible\\_salting\\_ipwman\\_2019-10-14.pdf](https://www.ipwman.org/sites/default/files/conference-docs/s.kuykendall_sensible_salting_ipwman_2019-10-14.pdf)
- Northwest Water Planning Alliance. (2025). *Water supply sustainability plan*. [https://www.nwpa.us/uploads/1/2/9/8/129889926/final\\_nwpa\\_water\\_supply\\_sustainability\\_plan.pdf](https://www.nwpa.us/uploads/1/2/9/8/129889926/final_nwpa_water_supply_sustainability_plan.pdf)
- Abrams, D. B. et al. (2015). Changing groundwater levels in the sandstone aquifers of northern Illinois and southern Wisconsin: Impacts on available water supply (Contract Report 2015-02). Illinois State Water Survey, Prairie Research Institute, University of Illinois at Urbana-Champaign
- Meyer, S. C., Roadcap, G. S., Lin, Y.-F., & Walker, D. D. (2009). Simulation of groundwater flow in Kane County and northeastern Illinois: Executive summary (ISWS Contract Report 2009-07). Illinois State Water Survey
- Figure: Ohio Department of Natural Resources. (2025, January 22). *Aquifers, yield, and hydraulic conductivity*. <https://ohiodnr.gov/discover-and-learn/safety-conservation/about-odnr/geologic-survey/groundwater-resources/aquifers-yield-and-hydraulic-conductivity>
- Amy Vickers
- Cominola, A., Preiss, L., Thyer, M., Maier, H. R., Prevos, P., Stewart, R. A., & Castelletti, A. (2023). The determinants of household water consumption: A review and assessment framework for research and practice. *npj Clean Water*, 6(11). <https://doi.org/10.1038/s41545-022-00208-8>
- Addo, I. B., Thoms, M. C., & Parsons, M. (2018). Household water use and conservation behavior: A meta-analysis. *Water Resources Research*, 54(10), 8381–8400. <https://doi.org/10.1029/2018WR023306>
- Jorgensen, B., Graymore, M., & O’Toole, K. (2009). Household water use behavior: An integrated model. *Journal of Environmental Management*, 91(1), 227–236. <https://doi.org/10.1016/j.jenvman.2009.08.009>
- Naseri, M. Y., Bernosky, G., Mayer, P. W., et al. (2025). Patterns and predictors of residential indoor water use across major U.S. cities (Version 2) [Preprint]. *Research Square*. <https://doi.org/10.21203/rs.3.rs-5098971/v2>
- Singha, B., Eljamal, O., Karmaker, S. C., Maamoun, I., & Sugihara, Y. (2022). Water conservation behavior: Exploring the role of social, psychological, and behavioral determinants. *Journal of Environmental Management*, 317, 115484. <https://doi.org/10.1016/j.jenvman.2022.115484>
- DeOreo, W. B., Mayer, P. W., Dziegielewski, B., & Kiefer, J. C. (2016). *Residential end uses of water, version 2: Executive report* (WRF Report No. 4309a). Water Research Foundation. <https://www.waterrf.org/research/projects/residential-end-uses-water-version-2>
- Runfola, D. M., Polsky, C., Nicolson, C., Giner, N. M., Pontius, R. G., Krahe, J., & Decatur, A. (2013). A growing concern? Examining the influence of lawn size on residential water use in suburban Boston, MA, USA. *Landscape and Urban Planning*, 119, 113–123. <https://doi.org/10.1016/j.landurbplan.2013.07.006>
- Yue, C., Cui, M., Kong, X., Watkins, E., & Barnes, M. (2022). Landscape irrigation and water conservation in urban areas: An analysis of information-based strategies. *HortTechnology*, 32(2), 213–225. <https://doi.org/10.21273/HORTTECH05001-21>
- DeOreo, W. B., Mayer, P. W., Dziegielewski, B., & Kiefer, J. C. (2016). *Residential end uses of water, version 2: Executive report* (WRF Report No. 4309a). Water Research Foundation. <https://www.waterrf.org/research/projects/residential-end-uses-water-version-2>
- U.S. Department of Energy. (n.d.). *History and impacts*. Office of Energy Efficiency & Renewable Energy. <https://www.energy.gov/eere/buildings/history-and-impacts>
- U.S. Department of Energy. (n.d.). *Regulatory processes*. Office of Energy Efficiency & Renewable Energy. <https://www.energy.gov/eere/buildings/regulatory-processes-0>
- H.R. 776, 102nd Cong. (1992). *Energy Policy Act of 1992* [Bill summary]. GovTrack. <https://www.govtrack.us/congress/bills/102/hr776/summary>
- S. 622, 94th Cong. (1975). *Energy Policy and Conservation Act* [Bill text]. GovTrack. <https://www.govtrack.us/congress/bills/94/s622/text>
- H.R. 6, 109th Cong. (2005). *Energy Policy Act of 2005* [Bill summary]. GovTrack. <https://www.govtrack.us/congress/bills/109/hr6/summary>
- Congressional Research Service. (2022). *Appliance and equipment efficiency standards* (CRS Report No. R47038). Library of Congress. <https://www.congress.gov/crs-product/R47038>

- U.S. Environmental Protection Agency. (2017). *WaterScore: A bathroom resource guide for commercial buildings*. EPA WaterSense. <https://www.epa.gov/sites/default/files/2017-12/documents/ws-commercialbuildings-waterscore-bathroom-resource-guide.pdf>
- U.S. Environmental Protection Agency. (2017). *About the WaterSense label: Fact sheet*. <https://www.epa.gov/sites/default/files/2017-03/documents/ws-about-watersense-label-factsheet.pdf>
- U.S. Environmental Protection Agency & U.S. Department of Energy. (n.d.). *How ENERGY STAR works: History*. ENERGY STAR. <https://www.energystar.gov/about/how-energy-star-works/history>
- Code of Federal Regulations. (2025). 10 CFR § 430.32 — Energy and water conservation standards and their compliance dates. Retrieved from <https://www.ecfr.gov/current/title-10/chapter-II/subchapter-D/part-430/subpart-C/section-430.32>
- U.S. Environmental Protection Agency. (2025). *Residential toilets*. EPA WaterSense. Last updated March 6, 2025 <https://www.epa.gov/watersense/residential-toilets>
- U.S. Environmental Protection Agency. (2025). *Showerheads*. EPA WaterSense. Last updated April 11. <https://www.epa.gov/watersense/showerheads>
- Biermeier, Deane. “How Many Gallons in a Bathtub.” *Sanitary Supply*, June 30, 2025, <https://sanitarysupply.org/how-many-gallons-in-a-bathtub/>
- United States Geological Survey. “How Much Water Do You Use at Home?” USGS Water Science School, <https://water.usgs.gov/edu/activity-percapita.php#:~:text=A%20%22full%20tub%22%20varies%2C%20of%20course%2C%20but%2036,shower%20heads%20produce%20about%20%20gallons%20per%20minute>
- U.S. Environmental Protection Agency. (2025). *Bathroom faucets*. EPA WaterSense. Last updated June 10, 2025. <https://www.epa.gov/watersense/bathroom-faucets>
- U.S. Environmental Protection Agency. (2023). *Technical Reference Manual for WaterSense® Labeled Homes*. <https://www.epa.gov/system/files/documents/2023-08/ws-homes-TechnicalReferenceManual>
- U.S. Environmental Protection Agency. (2023). *WaterSense at Work Section 3.5: Laundry Equipment*. Best Management Practices for Commercial and Institutional Facilities. [https://www.epa.gov/system/files/documents/2023-06/ws-commercial-watersense-at-work\\_Section\\_3.5\\_Laundry\\_Equipment.pdf](https://www.epa.gov/system/files/documents/2023-06/ws-commercial-watersense-at-work_Section_3.5_Laundry_Equipment.pdf)
- U.S. Environmental Protection Agency. (2017, November). *Water Efficiency Management Guide: Residential Kitchen and Laundry* (EPA 832-F-17-016b). <https://www.epa.gov/sites/default/files/2017-10/documents/ws-commercialbuildings-waterscore-residential-kitchen-laundry-guide.pdf>
- U.S. Environmental Protection Agency. (2017, November). *Water Efficiency Management Guide: Bathroom Suite* (EPA 832-F-17-016d). <https://www.epa.gov/sites/default/files/2017-12/documents/ws-commercialbuildings-waterscore-bathroom-resource-guide.pdf>
- U.S. Environmental Protection Agency. (2007, February 9). *WaterSense Tank-Type High-Efficiency Toilet Specification: Supporting Statement* (EPA-832 F-07-xxx). <https://www.epa.gov/sites/default/files/2017-02/documents/ws-background-toilets-suppstatement.pdf>
- U.S. Environmental Protection Agency. (2007, February 2). *WaterSense® High-Efficiency Bathroom Sink Faucet Specification: Supporting Statement*. <https://www.epa.gov/sites/default/files/2017-02/documents/ws-background-faucets-suppstatement.pdf>
- U.S. Environmental Protection Agency & U.S. Department of Energy. (2022, July 19). *ENERGY STAR® Program Requirements for Residential Dishwashers — Version 7.0 Final Specification*. <https://www.energystar.gov/sites/default/files/asset/document/ENERGY%20STAR%20Version%207.0%20Residential%20Dishwasher%20Final%20Specification.pdf>
- U.S. Environmental Protection Agency. (2021, April 22). *ENERGY STAR® Program Requirements for Clothes Washers — Version 8.1 Final Specification: Partner Commitments & Eligibility Criteria*.
- Code of Federal Regulations. (2025). 10 CFR § 430.32 — Energy and water conservation standards and their compliance dates. Retrieved from <https://www.ecfr.gov/current/title-10/chapter-II/subchapter-D/part-430/subpart-C/section-430.32>
- U.S. Environmental Protection Agency. (2025). *Fix a Leak Week*. WaterSense. Last updated July 17, 2025. <https://www.epa.gov/watersense/fix-leak-week>