

Northwest Illinois Water Study

WATER DEMAND/SUPPLY SURVEY RESULTS - 2018

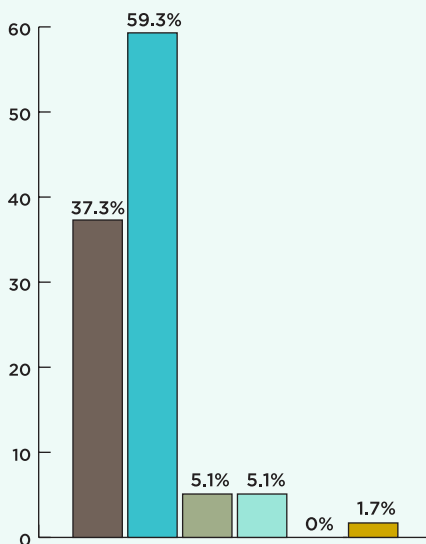
(159 respondents participated in total**)

- B** Business Respondent Question
- A** All Respondents Question
- R** Illinois Resident Question
- M** Municipal Illinois Resident Question

If you own or manage a farm or business in Northwest Illinois, where does your farm or business get water?*

59 responses

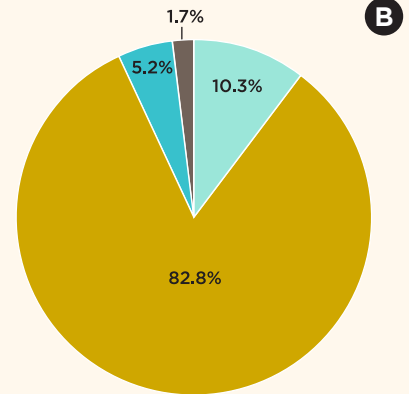
- Municipal system
- Private well
- Surface water (lake, rivers, etc.)
- I pick up water or it is delivered to my farm or business
- I don't know
- Other



My farm or business' use of water is

58 responses

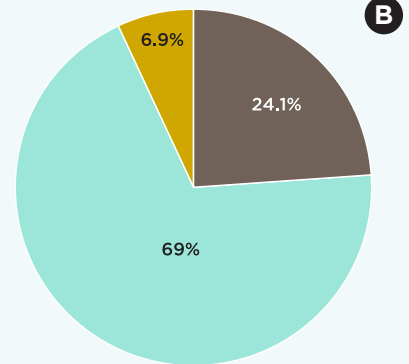
- Increasing
- About the same
- Decreasing
- I don't know



My farm or business has a continuity plan for dealing with water supply shortages.

58 responses

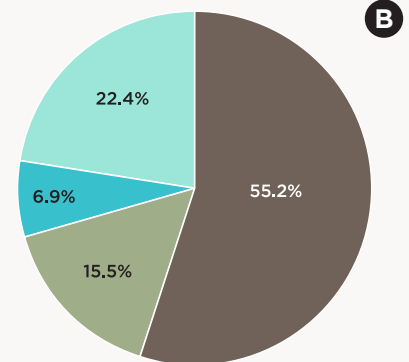
- Yes
- No
- I don't know



How important is ground or surface water to your farm or business?

58 responses

- Very important
- Important
- Somewhat important
- Not important

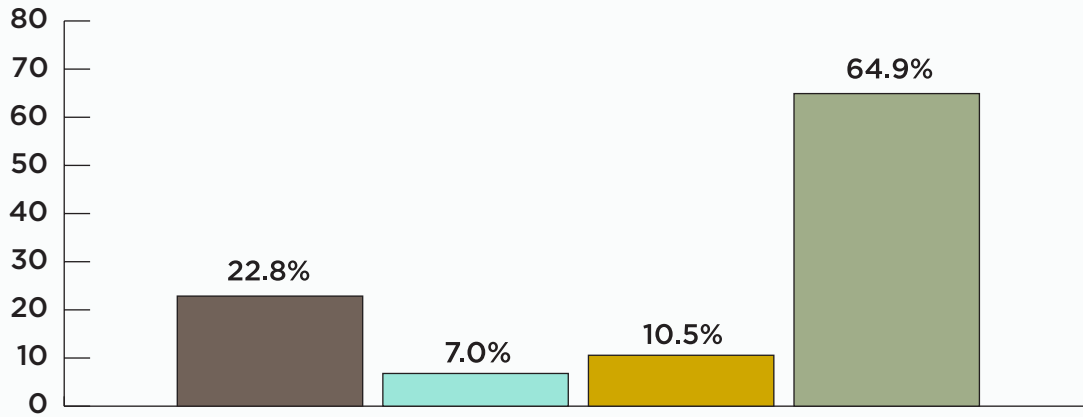


*Respondents could check multiple responses.

**Respondents were asked to skip non-applicable sections or questions.

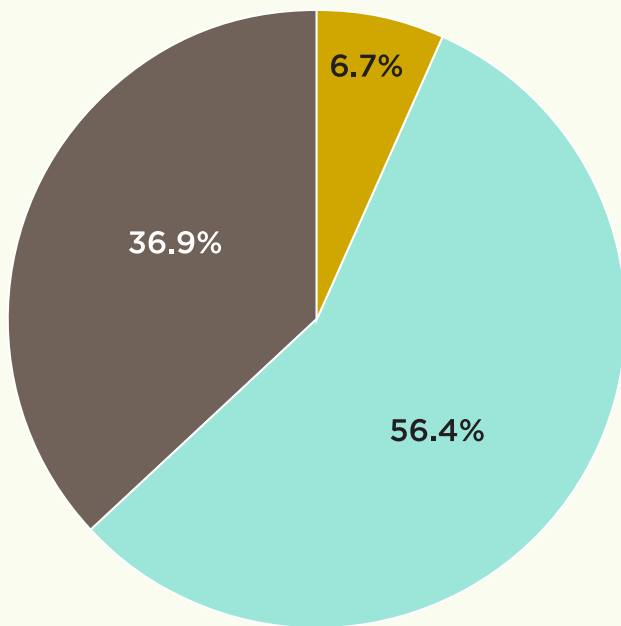
Does your farm or business in Northwest Illinois have stormwater runoff issues?* 57 responses B

- Yes (on my farm or business property)
- Yes (on another person's property)
- Yes (on public property)
- No



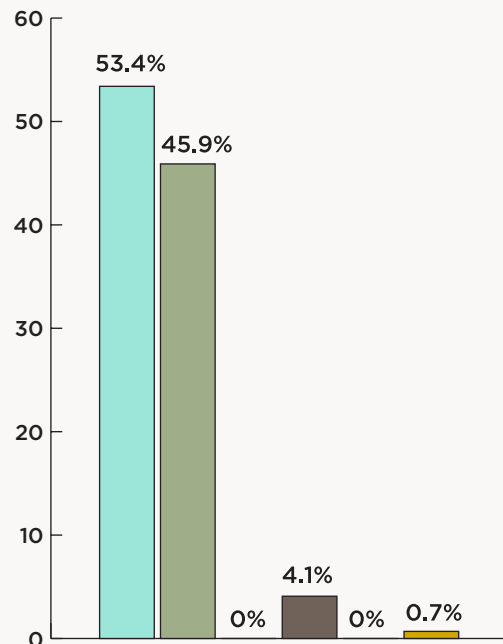
The average person uses (e.g., drinking, showering, cooking, etc.) 80 to 100 gallons of water per day. How much water do you think you consume per day? 149 responses R

- Above Average
- Average
- Below Average



Where do you get your home water supply?* 148 responses R

- Municipal system
- Private well
- Surface water (lake, rivers, etc.)
- I pick up water or it is delivered to my home
- I don't know
- Other

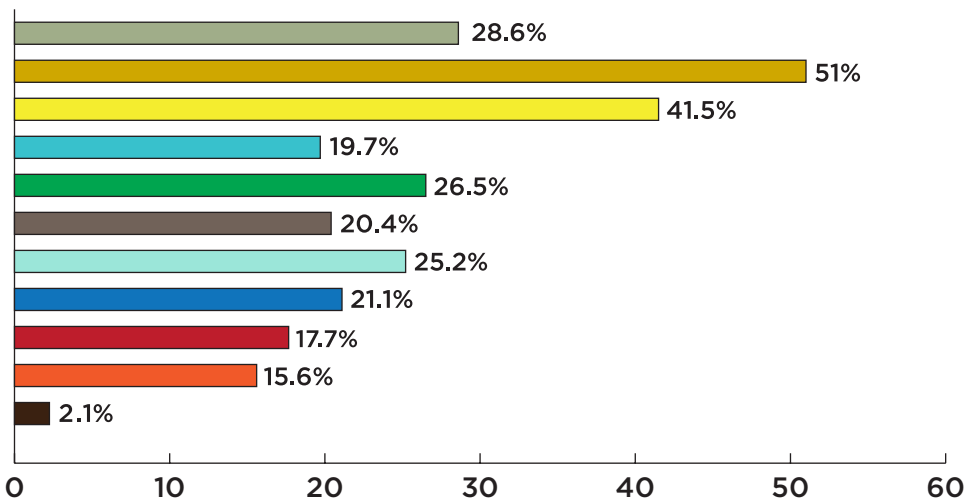


*Respondents could check multiple responses.

Do you use any of the following water conservation practices at home?* 147 responses

R

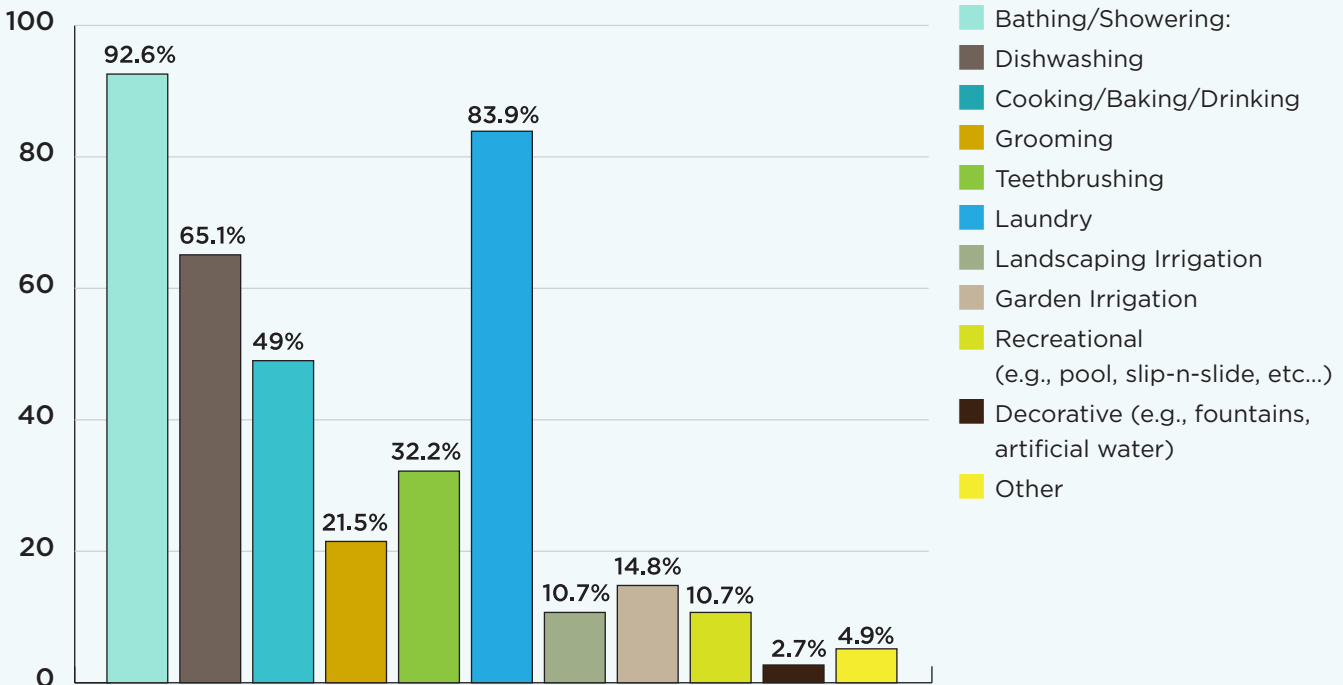
- Restrict general use during drought conditions
- Install WaterSense or low flow faucets, showerheads, or toilets
- Take shorter showers
- Shower/bathe less frequently
- Reduce irrigation
- Reduce recreational use (e.g., pools, slip-n-slides, etc.)
- Reduce decorative use (e.g., fountains, artificial fish ponds, artificial waterfalls, etc.)
- Use rainwater storage (e.g., rain barrels, cisterns, etc.)
- Physical buffers, including vegetation, to retain/detain water
- I don't intentionally conserve water
- Other



What activities use the most water at your home?*

R

149 responses



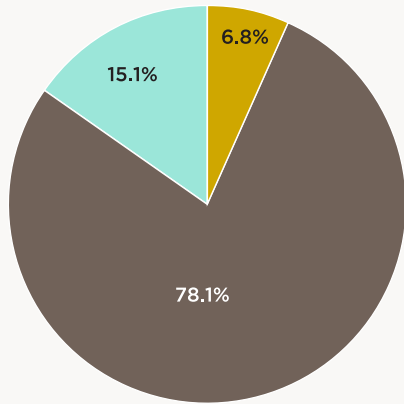
*Respondents could check multiple responses.

In my home, overall water use is:

R

146 responses

- Increasing
- Staying about the same
- Decreasing

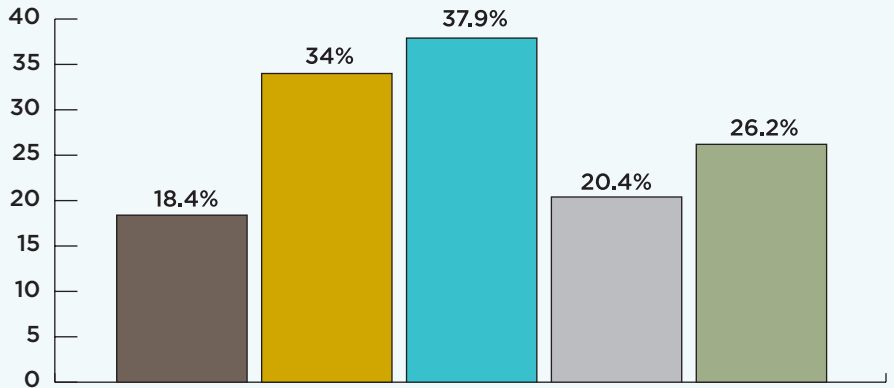


Does your community have stormwater runoff issues?*

M

103 responses

- Yes (on my property)
- Yes (on another person's property)
- Yes (on public property)
- No
- I don't know

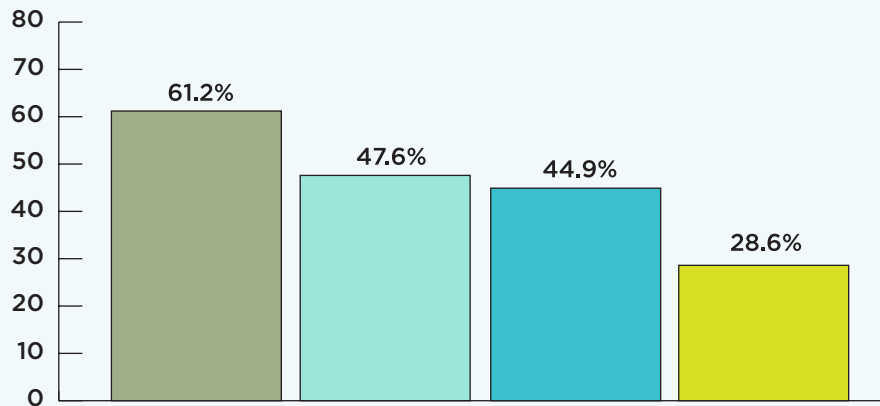


Do you have any concern about any of the following water supply contaminants?*

M

147 responses

- Chemical contaminants (nitrates, etc.)
- Elemental contaminants (arsenic, barium, lead, radium, etc.)
- Biological contaminants (E. coli, legionella, cryptosporidium, etc.)
- I don't have any concerns about water supply contaminants



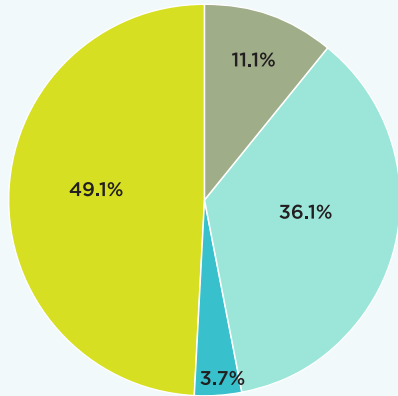
*Respondents could check multiple responses.

In my community, overall water use is:

M

108 responses

- Increasing
- Staying about the same
- Decreasing
- I don't know

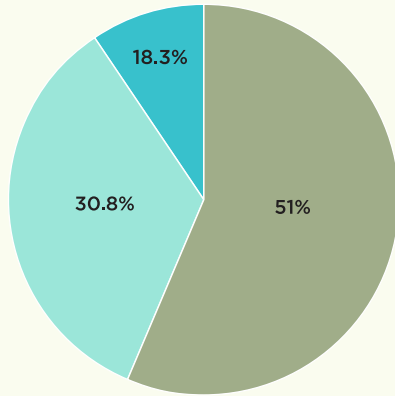


Within the past five years, has your community issued a notice (including a boil order) due to public infrastructure failure?

M

104 responses

- Yes
- No
- I can't remember

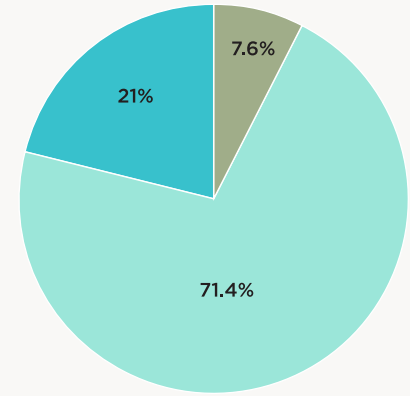


Within the past five years, has your community issued a notice (including use restrictions) due to drought or extremely dry weather?

M

105 responses

- Yes
- No
- I can't remember

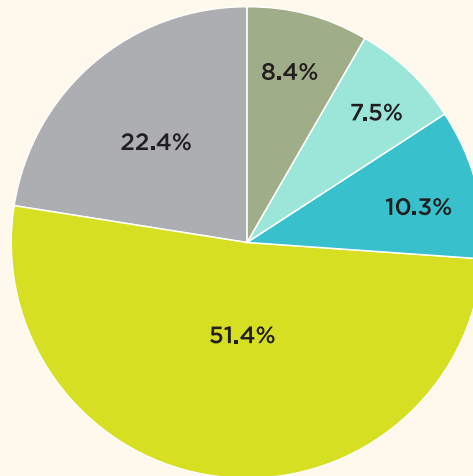


How long has it been since you experienced a water supply disruption in your community?

M

107 responses

- Past six months
- Past year
- Past five years
- I have not experienced a water supply disruption in my community the past five years
- I can't remember

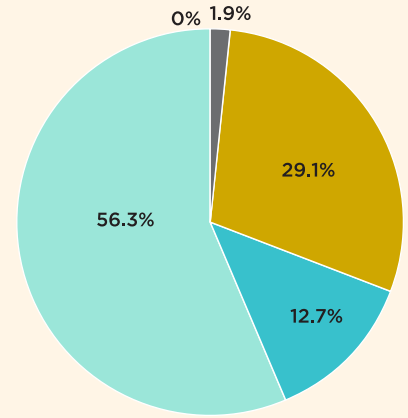


*Respondents could check multiple responses.

Would you say that Northwest Illinois has more, less, or about the same amount of water compared to the rest of the United States?

158 responses

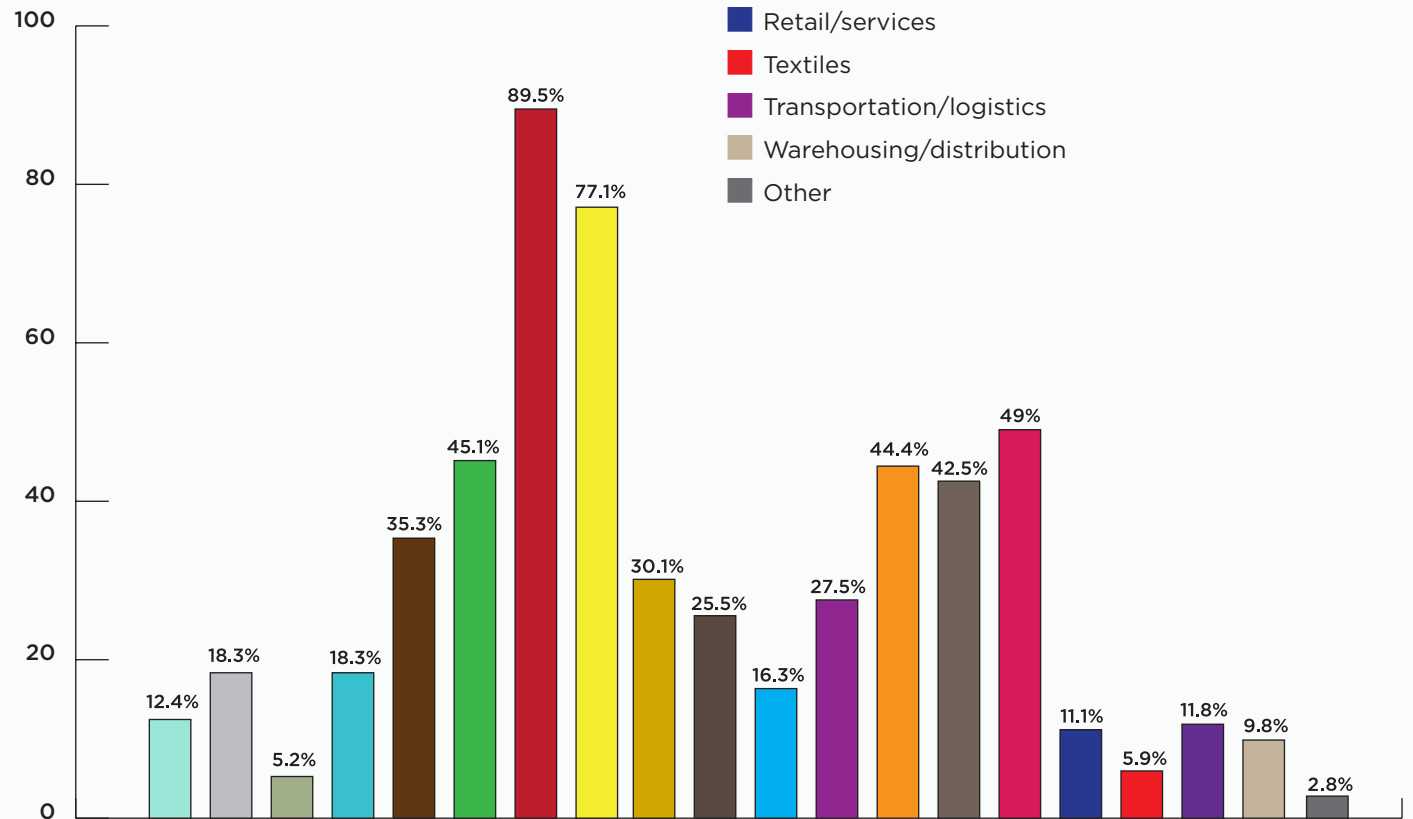
- Much more
- More
- About the same
- Less
- Much Less



A

What industries located in Northwest Illinois are most likely to be impacted by drought or extremely dry weather?* 153 responses

- Biotechnology/pharmaceuticals
- Chemicals/plastics
- Computing/technology
- Construction
- Energy/fuel production (e.g., nuclear power, Ethanol, etc.)
- Food processing
- Crop production
- Livestock/dairy production
- Hospitality/tourism
- Manufacturing
- Mining/extraction
- Municipal/governmental use (non-public safety)
- Public safety use (e.g., fire services, etc.)
- Recreation (e.g., snow skiing, etc.)
- Residential (i.e., at home)
- Retail/services
- Textiles
- Transportation/logistics
- Warehousing/distribution
- Other



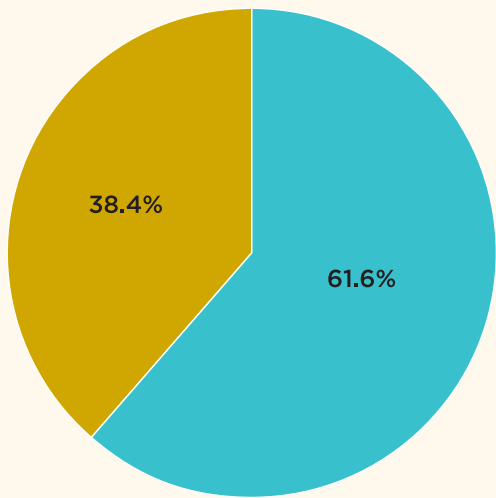
A

*Respondents could check multiple responses.

Sex

159 responses

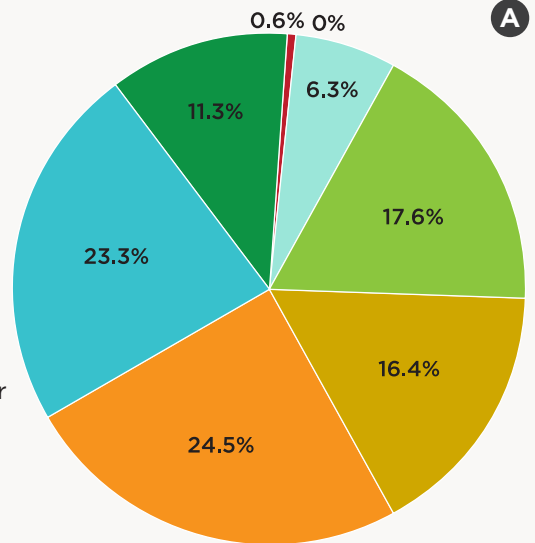
- Male
- Female



Age

159 responses

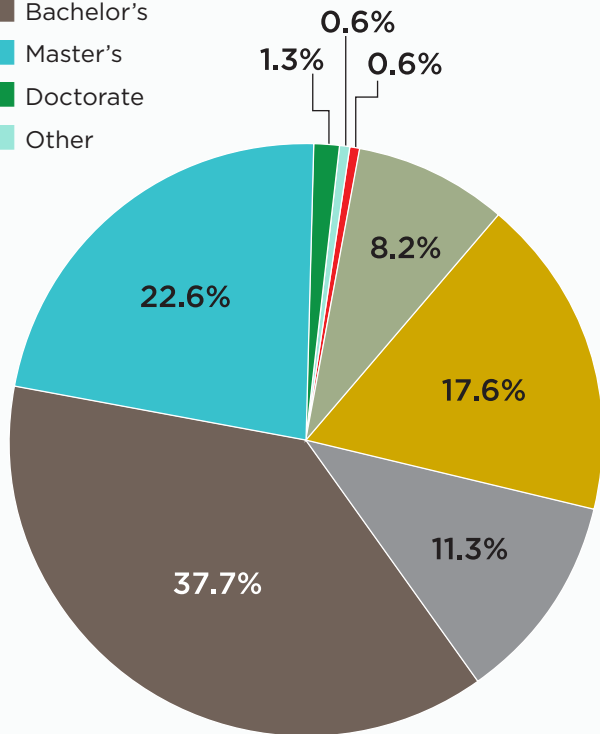
- Under 18 years
- 18 to 29 years
- 30 to 39 years
- 40 to 49 years
- 50 to 59 years
- 60 to 69 years
- 70 to 79 years
- 80 years and older



Highest level of education completed

159 responses

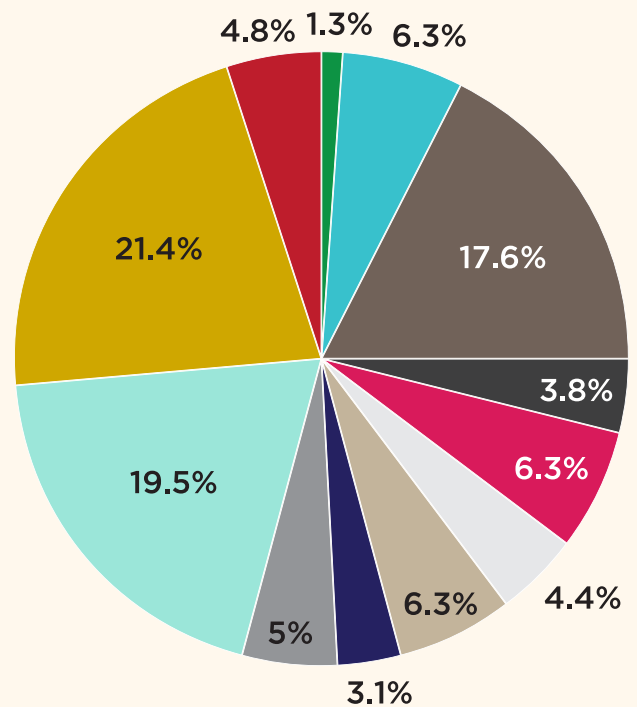
- Less than high school
- High school/high school equivalent
- Some college
- Associate's or trade school
- Bachelor's
- Master's
- Doctorate
- Other



Home county (what is the county you live in?)

159 responses

- Boone
- Bureau
- Carroll
- Henry
- Jo Daviess
- Lee
- Ogle
- Rock Island
- Stephenson
- Whiteside
- Winnebago
- Other



What is my primary industry? (e.g., food processing, manufacturing, energy production, etc.)

B

56 responses

agriculture (2)

Education (2)

Municipal Government (2)

Farming (2)

Ag (2)

Food

Food growing

retail

hospitality

Behavioral Health

Beef

CAMPING

small beef farm

manufacturing

Health Care

Public Health - Local Government

Poultry farm

Processing Wastewater

Farm and small business

Art and art classes

food processing

Village Water Treatment

office work

Tourism

Livestock

Tree farm

Farm Equip Sales and service

Drinking Water Utility

Social services

Golf/hospitality

Beef, hay farm

ag organization

Publicly Managed Conservation Lands

professional service

Loan Making

Consulting

consulting

professional services

farming

Crop production and water supply

Professional Services:

Architecture Firm

govt

Engineering

Farming/Water Well Contractor

Farming irrigation

Municipal well water &
wastewater

Well Drilling - Water Testing

Consulting Engineering

Crops and cattle

Fertilizer Mfg

Mining

What are the most important uses of water at my farm or business? (including specific industrial or other processes) 46 responses

B

Irrigation (4)
 Watering produce
 agricultural spraying
 office and appliance repair
 Laundry, cleaning, cooking and drinking water
 Drinking
 livestock needs
 For drinking
 personal use and for my cattle
 Hygiene and landscaping
 Bathroom and kitchen
 Water for the birds and humans
 Processing wastewater
 Geothermal Heatpumps
 Consumption
 Cleaning and Hydration
 to water plants
 Household use
 coffee, toilets, hand washing.
 Plumbing, drinking
 Livestock water
 Grow trees

Washing Equipment, Water supply for employees personel use
 Treat and Deliver Potable Water
 Safe to drink
 Personal and livestock water use
 drinking
 Drinking water, irrigation of gardens, public education programs, public recreational uses - fishing, canoeing, kayaking, etc..
 domestic uses
 Drinking
 Domestic Use
 potable water use
 drinking water
 Home, Farm shop, water for shop
 Office use only.
 Domestic use
 Irrigation, livestock
 Drinking water
 Growing crops
 Lab procedures, well drilling
 Watering cattle
 Cooling water, boiler feed water, and process water
 Low usage - grain production - no irrigation

Please include any general comments here.

I do not have any concerns for my office but I am on a sand-point at home and I am always concerned about runoff and the water table.

Storm water and waste water leaks, intermingling

The Boone County Conservation District manages most of its land holdings as important conservation lands for ecological functions and values. Our properties contribute significantly toward groundwater recharge and effective use of habitat restoration - re-establishing native plant communities, to reduce surface water runoff and facilitate infiltration of water on a landscape scale of management.

What water supply issues does your community currently have?

63 responses

M

None (10)

Aging infrastructure (2)

Superfund sites, lead in water

Adding floride to the water.

unsure

Backed-up sewers from quick snow melt/rain

we have a new water tower but height limits where new devolpment can be.

unaware of any

none that I know of

Live at a lake resort. Low lake level would be only water issue.

Contamination

Low water pressure for some.

Supposidly cross contamination

Filtering

wells

Unsure

storm runoff flooding, reduced supply of aquifer ground water, reduced aquifer recharge

Aged Infrastructure

Lead and agricultural run off/ nitrates.

High chemical content

Major flooding on all neighborhood streets. more than 8 to 15" deep. standing water or storm water regurgitation from street grates due to system overwhelm and age

We are in a contaminated zone

100 year old system, leaks

none

Aging underground infrastructure

Creeks and streams are cloudy with sediments after rains. There ditches are constantly filled with soil and there sediments from construction or road work.

Don't know.

It stinks (odor) without filtration. We have 350 parts per million.

Flushes of red iron like material in water

not supply but old water treatment facility and flooding because of poor drainage systems

Radium in water supply

Old pipes need replacement but too expensive for community

High nitrate concentrations in surface and ground waters.

Frequent watermain breaks

I'm on a public well

none that i am aware of

possible well issues and undersized mains

Old supply pipes leads to water line breaks and disruptions.

Surface H2O Mississippi River, microbiological, algal

During the summer, the Rock River below the Lower Dam gets very shallow.

radium

Cost of maintaining a system in good working condition with decreasing demand.

No

Combined radium

Old infrastructure.

Limited public distribution in the community.

Water plant is from 1882, with 12 miles of main from the 1800's. There is also a lot of Spuncast main, which is failing greatly.

Radium in water - now building a filtration system.

Aging distribution and storage system. Very hard water.

Water pressure and rust/sediment flushing in lines.

Age and condition of infrastructure.

Old infrastructure

Aging water distribution

Where are these water supply issues happening?

51 responses

M

N/A (3)

City wide (2)

City of Freeport (2)

Southeast Rockford

At the well.

unsure

I don't know

north end of town

People furthest away from the water tower.

Sterling il

City

don't know

Unsure

in urbanized areas along the Rock River in Rockford, subdivisions along the Kishwaukee River, reduced aquifer levels throughout Winnebago County

At home, at school, at my business.

In tower

southwest of Rockton and Halsted 61101

not applicable

water distribution lines

Watermain that is in excess of 50 years old

We previously had a problem with our wells, which has been taken care of now.

Off of HWY 92 in Andalusia - there is an area up the hill that has been being worked on (cutting down trees, etc.) I am not sure what they are doing up on the hill, but there is always run off from the site that is not be mitigated and ends up in the ditch. There is also little to no mitigation on the ditches in town near the ballpark.

Don't know.

Edgewater Neighborhood, 61103

through incoming lines unpredictable

Our Public Water Supply delivers an average of 3.5 million gallons per day. Our fixed capacity is 16 million gallons per day

many different areas in town

No where in particular but the city is older

Wells

Pecatonica

Rural sand point wells are severely contaminated.

Scattered throughout the community

na

Water main breaks

within the community's water distribution system

In the older sections of town.

Source

The Upper Dam restricts the flow so the level north of the Dam stays up for recreational use.

naturally occurring in aquifer

Industrial areas and residential as well.

No

Dixon-North well

Water mains to small and old.

Aquifer

System wide

No funding

Broken pipes

Why do you think these water supply issues are happening?

47 responses

M

N/A (4)

don't know (2)

Past dumping of toxic chemicals

Politicians have sold out the public at large.

unsure

I don't know

Low rainfall

I don't know

I don't know.

Sewer and water infrastructure

Unsure

Water is being pumped and flushed into sanitary sewer faster than aquifers can recharge. Non-permeable surfaces reduce recharge and retention. Loss of wetlands has reduced recharge and filtration capacity.

Old lines

Run off, hard water, brown fields/Superfund sites in Rockford, minerals and elements in the ground water, traffic pollution.

Old system

age of infrastructure. water losses that go unchecked (broken pipes and pipe breaks) that contribute to the amount of water in the system, which can go unchecked if it happens prior to a meter

not applicable

old system, cold weather

Aging infrastructure, thaw / freeze cycles

Wells and pumps are old.

I don't know. I would assume there are best management practices in place and EPA regulations that the village of Andalusia has to follow.

Don't know.

No accountability

no requirements for proper run off were in place when many construction projects took place

See above answer

Changes in water tables

Agricultural practices.

Aged and aging distribution system;

Aging infrastructure

age of infrastructure

Old infrastructure.

Agriculture

People upstream of the Upper Dam like to use their boats, also a certain level has to be maintained for the hydroelectric generator to supply electricity.

naturally occurring

Economic changing conditions.

Naturally occurring in environment but can be harmful to people.

Funding.

The lack of oversight by previous officials, as well as the hesitancy to spend the funds to repair and replace aging infrastructure.

I am told radium is a natural occurring substance - it has moved into our area was not here 5 yrs ago.

Transition to split water system

Failure of past responsible parties to look to the future and plan for infrastructure replacement.

Was not a priority in the past & other funding priorities are higher currently.

Old age

What measures would you like your community to take regarding water use?

M

46 responses

Transparency with possible tainted water

Stop fluoridation.

unsure

Cost comparison of implementing techniques to lower water usage

continued testing

Better filtering systems and water management.

Let everyone had good water pressure and good water.

Clean it up

Doing what they need to be

Water filtration plant

don't know

Education to the public

Reduce non-permeable surfaces. Establish green space along river corridors to protect wetland recharge areas. Large scale capture and re-use of gray water.

Replace lines as affordable

We should encourage people to conserve at home, not to dump things like paint and motor oil into storm drains, not to waster their lawns by planting clover among their grass.

They are trying to resolve

refrain from disposing of chemicals or oil into the system. being safer about things left in yards or disposed of on lots that contaminate our water. being aware of the toxic waste left by previous generations and addressing those. finishing the epa studies of the super fund site in South Rockford, and cleaning up the Kent creek contamination as well as heavy metal contamination in industrial or former industrial areas.

have clean water

fix their old system

Our town has already addressed these issues by contracting with a well services company.

Better filtration

Increased irrigation restrictions. Promotion of non-traditional lawn and landscapes.

None

Encourage the use of rain barrels, host community meetings on the benefits of practices like planting native plants, mowing and watering less, using less pesticides and herbicides on lawns, etc. Help facilitate water monitoring programs on the local creeks and streams.

More water conservation.

I filter water myself and don't believe any governing agency that says it's OK.

Investment in reinforcing and expanding the current system

We are pursuing the building of a HMO water treatment facility

Allow use of grey water in landscaping, install rain barrels,

Better education for rural homeowners who are still operating on a sand point well, to increase awareness and inform residents of possible solutions.

Planned watermain distribution system upgrades/replacement

Proactively replace aged water mains. Maintenance on water tower and well.

just to ensure the adequate water supply and good quality

Acquire grants to replace old infrastructure.

Reduce runoff

Make sure our water supply isn't contaminated.

Conserve groundwater, manage run-off pipeline to river (say, via Galesburg)

Charge enough to keep system in good operating condition within rate payers ability to absorb some.

I would like to see education on the use of rain water.

I would like them to learn and consider their own water usage.

Replace

The village is doing what is required of us by the IEPA & US EPA

Abandon old wells not to code!

Conservation and increase system improvement

Invest more in it

If you have experienced any kind of water supply shortage in Northwest Illinois, please describe briefly what happened. 30 responses

A

N/A (8)

None (4)

No (3)

Concern with contamination of underground aquifer from agricultural land and livestock waste practices.

n/a

Had to replace sandpoint with well because needed to go deeper was told sandpoints were drying up

My Sandpoint depth dropped 5 ft and it was harder to get my water.

restricted lawn watering

Boone County has a good recharge rate however, our rivers have developed a slow decline in depth due to the cone of depression around Joliet, IL. This concerns us greatly.

Filtration problems needed repairs and caused disruption

After a large storm, tornado, etc., a city-wide "boil water" order was in force for a few days.

2012 Drought - farmers suffered

minor - 2012 drought

Used to live in a country subdivision w/ water from a community well, and during drought periods they banned sprinkling and watering lawns.

No.

Only on crops

No shortages - just asking consumer to conserve.

None - we use bedrock water not surface.

Any other comments about water supply, anticipated needs, etc.?

None

I am personally worries about contamination of water supply due to farm/farming run off.

Water use and supply will be our #1 future issue.

erosion control along river corridors is needed to protect aquatic habitat abd water quality

The IEPA has declared Boone County's water to be "sensitive to contamination" due to our geology. The IEPA has declared that our counties water supply is to be "highly prioritized" for protection because of this risk.

My biggest concern after groun water quality is the silt load in our waterways causing habitat degradation and more frequent flooding.

I feel that I should be more educated about water supply issues.

Worried about quality & odor

Health water supply is necessary for life

Boone County is interested in additional geologic assessment of consolidated and unconsolidated aquifers, groundwater recharge and flow between aquifers, and baseline data on the current water quality of the various aquifers most depended upon as a potable water supply (both individual wells and municipal wells).

Funding assistance is likely needed for Municipalities in NW IL to be able to replace/repair the needed infrastructure. Water quality is average and improvements to treatment are needed in many areas (Iron, for example; some radium, etc.).

Our community needs to improve old infrastructure but doesn't have funds to do all that is needed.

I oversee the water system.

I don't like the fluoride or chlorine requirements. I know there are other ways to disinfect the water. Too much into on fluoride not all it is cracked up to be! Needs to be researched more! We need to become better stewards of water!