

NWPA Library Exhibit Subcommittee Updates

NWPA Executive Committee – May 21st meeting

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Illinois-Indiana Sea Grant

Agenda

- **Timeline updates based on changes in Library leadership**
 - Library leadership change and delays
 - Library feedback and actions taken
- **Budget snapshot**
- **Revised approach**
 - Panel content narratives
 - Target audience approach
 - Visual panel concepts

Gail Borden Library – timeline changes

- Denise Raleigh is no longer working there, library is transitioning leadership
- Main panels were not passed along in the transition – *sent Dec 2025*
- Library resumed feedback contact - *March 2026* (3 month-delay)
- Laura Espinoza (lead designer) provided panels feedback – *April 2026*
- Key library contacts:
 - Laura Espinoza, Director of Digital and Visual Arts - lespinoza@gailborden.info
 - Natalie Kiburg, Division Chief of Public Relations & Development - nkiburg@gailborden.info

Library feedback and actions taken

Main points

- Initial drafts were not clear on NWPA deliverables/designer deliverables
- The text and visuals was geared towards adults, needed to be more accessible for families overall
- Hero concepts and narrative direction were not clear

Actions taken

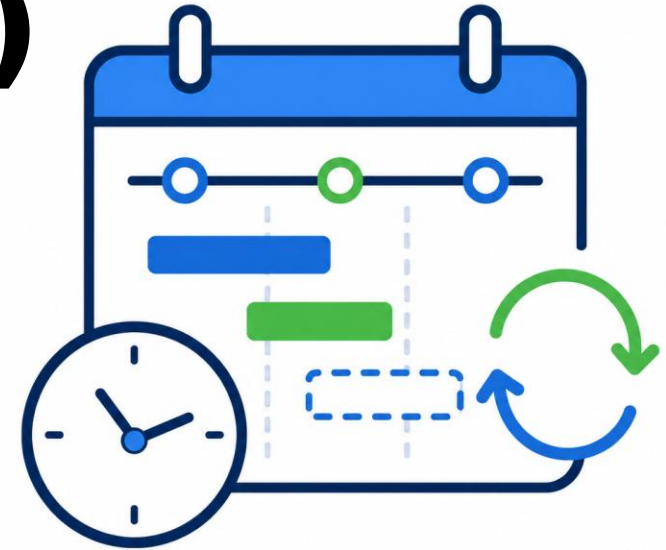
- Laid out entire exhibit scope and deliverables for clear project development
- Revised the text to be more based in relevant science while maintaining accessibility to our target audiences – *under review process*
- Developed visual concepts to communicate ideas to design team, leading to more efficient design development – *under review process*

New timeline (tentative)

- ~~February → finalize panels, get designed and translated~~
- ~~March → print and pilot exhibit~~
- ~~April → showcase exhibit to TAC and EC~~
- ~~April-June → pending library schedule, launch exhibit~~

3-month delay

- April → Subcommittee reviews reviewer feedback and discusses new approach
- May/June → finalize panel concepts and text with subcommittee + external reviews from technical experts and educators
- June to August → Work closely with library designers to convert concepts to final panel designs and content + work with developers for iPad content
- September → Showcase final panel design files (EC meeting)
- October → Showcase printed exhibit panels at in-person TAC meeting
- October to December → work with library to schedule launch, pilot exhibit if-needed



Budget snapshot

\$40,000 estimated budget

- ~\$6000 per exhibit (panel + technology + equipment + translation)
- ~\$34,000 for 6 moving exhibits
- ~\$6000 for additional outreach items



Adjusting our approach

Narrative reconsiderations, clear target audience, and new panel concepts

Narrative approach

Superhero characters will represent and address

- **Types of water sources**
 - Ground water hero/hydrologist alter ego
 - Surface water hero/field scientist alter ego
- **Water supply challenges**
 - **Pollution** > Shows how pollution affects water quality and why protection matters
 - **Overuse** > A water system strained by excessive demand
 - **Leaks** > Water being lost unintentionally through system inefficiencies
- **Solutions**
 - **Saving water** indoors and outdoors at home through fixtures and behaviors
 - **Sustainable practices** to reduce pollution
 - **The real-work done by professionals**

Their role is to illustrate real-world challenges while emphasizing that these systems **can be restored through real human action and stewardship.**



Target audience and engagement

Primary audience: families visiting the library exhibit

The exhibit is designed for a mixed-age audience, including children, teens, parents/guardians, adult visitors, and interested community members.

Layered engagement approach

- **Children and younger teens** engage through visuals, characters, icons, maps, and simple activities.
- **Older teens, adults, educators, and community members** engage with the fuller panel text for additional context and regional water supply information.
- **Parents, guardians, and educators** can use the visuals and characters to help explain the big ideas to younger children and teens.

Reading level strategy

- **Child-facing elements: Grades 3–5 target**
Character speech bubbles, simple icon labels, and activity instructions should use short sentences, familiar words, and one clear idea at a time while visually sticking out
- **Family-facing elements: Grades 6–8 target where possible**
Panel headings, section headings, key takeaways, and major facts should be understandable to middle-school readers and easy for parents/guardians, educators, and older siblings to explain
- **Supporting panel text: Grades 9–12 target**
Some explanatory text and captions may remain at an advanced high-school level because the exhibit introduces complex regional water supply topics
- **Technical detail:**
More detailed information should be limited on the panels and moved to QR codes, take-home resources, or website links

Learning outcomes

Children and younger teens should be able to:

- Recognize that water generally comes from different sources (groundwater and surface water)
- Understand that water moves through nature and through community systems
- Identify simple water challenges, such as pollution, overuse, and leaks
- Name everyday actions that help protect water, such as less polluting and saving water at home

Older teens and adults should be able to:

- Understand NWPA's role in regional water supply planning and coordination
- Recognize that communities rely on different, distinct water sources with different limits
- Understand why sustainable supply, conservation, and efficiency matter for the region's future
- Connect household, community, and real-world professions to long-term water stewardship

Overall learning goal:

Visitors leave understanding that water is shared, limited, and worth protecting, and that everyone has a role in supporting a sustainable water future.

Panel concepts

These are NOT final designs nor are they drafts, just **visual tools to communicate our vision**

- Helps reduce the complexity behind the subject matter being presented
- Allows efficient discussions with the designers, who will lead design development
- Clear visual structure and elements are communicated beyond textual guidance
- These paint a layered exhibit approach: simple visual storytelling for children, with more detailed content for teens, adults and older students



Panel 1: Protecting our water, together

Key panel points

- NWPA introduction
- importance of water
- regional stewardship
- Water Guardians as guides connected to real-world professionals

1 PROTECTING OUR WATER, TOGETHER

Meet the Northwest Water Planning Alliance



The Northwest Water Planning Alliance, or NWPA, is a partnership of communities in northeastern Illinois working together to plan for a reliable and sustainable water supply.



Water connects all of us. We use it every day to drink, cook, clean, grow food, support local businesses, and keep our communities healthy.



Water also supports rivers, streams, wetlands, plants, wildlife, and the natural places we enjoy.



2 WHY IS WATER IMPORTANT TO ALL OF US?

Water is part of nearly everything we do. Every home, school, park, business, and natural area depends on clean, reliable water.

But water is not unlimited. In the NWPA region, water sources can be affected by overuse, pollution, drought, leaks, and growing demand.



OVERUSE



POLLUTION



DROUGHT



LEAKS



GROWING DEMAND

That is why communities across the region are working together to better understand, protect, and conserve the water we all share.

3 WHAT DOES NWPA DO?



NWPA helps communities in Kane, DeKalb, McHenry, and Kendall counties work together across local boundaries to:

- understand where our water comes from
- plan for future water needs
- share information and resources
- support water conservation and efficiency
- protect water sources for future generations

4 MEET YOUR WATER GUARDIANS

Throughout this exhibit, you will meet Water Guardians inspired by the water systems — and the real people — that help protect water in our region.

★ Real-world water professionals are heroes too.

The Water Guardians have two sides: a hero form that helps us picture how water systems work, and a real-world guide form that represents the professionals who study, manage, and protect those systems.

Groundwater Guardian / Aquifer Dude

Groundwater Guardian helps reveal the hidden water stored underground in aquifers. Aquifer Dude represents the hydrogeologists and water professionals who study wells, aquifers, and groundwater supplies.



Lady Watershed / Surface Water Sally

Lady Watershed helps show how rain, rivers, streams, lakes, and wetlands are connected. Surface Water Sally represents the professionals who monitor and protect surface water across the region.



Together, they will guide you through the story of our water: where it comes from, what challenges it faces, and how we can all help protect it.

1 WHERE DOES OUR WATER COME FROM?

Water Sources in Northeastern Illinois



Communities in northeastern Illinois get drinking water from different sources. Some water comes from rivers or Lake Michigan. Other water comes from underground aquifers reached by wells. Each source is important, and each one has limits. Understanding where our water comes from helps communities plan for the future and protect the water we all depend on.

1 SHALLOW AQUIFERS

Shallow aquifers are underground water sources closer to the surface. They can be replenished more readily by rain and melting snow, but they are also more vulnerable to pollution from the land above, including road salt, fuel leaks, and runoff.

2 DEEP AQUIFERS

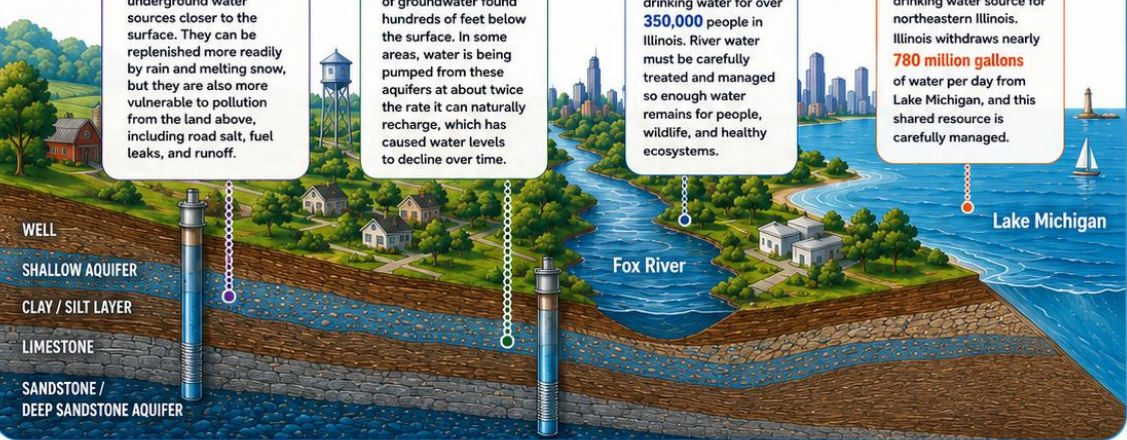
Deep aquifers are layers of groundwater found hundreds of feet below the surface. In some areas, water is being pumped from these aquifers at about twice the rate it can naturally recharge, which has caused water levels to decline over time.

3 FOX RIVER

The Fox River provides drinking water for over **350,000** people in Illinois. River water must be carefully treated and managed so enough water remains for people, wildlife, and healthy ecosystems.

4 LAKE MICHIGAN

Lake Michigan is a major drinking water source for northeastern Illinois. Illinois withdraws nearly **780 million gallons** of water per day from Lake Michigan, and this shared resource is carefully managed.



2 WHAT IS AN AQUIFER?

An aquifer is an underground layer of sand, gravel, or rock that can hold and move water.

Aquifers are not giant empty caves. They are more like layers of earth where water fills tiny spaces between grains of sand, gravel, or cracks in rock.

Communities use wells to pump groundwater from aquifers for homes, schools, businesses, and public water supplies.

Northern Illinois has aquifers made from sand, gravel, limestone, and sandstone.

Some layers of silt and clay can help filter water, but they can also slow down recharge.

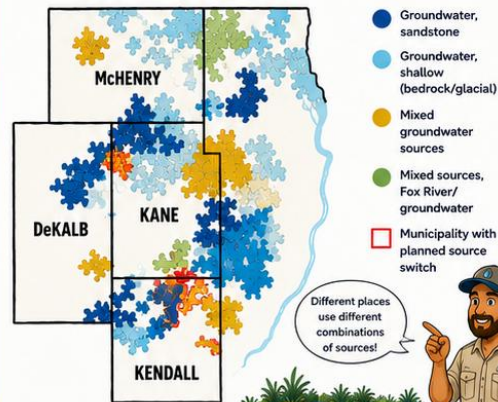
In some aquifers, the process of refilling — can take a very long time.

For deep aquifers, recharge may take thousands of years.



3 WHERE DOES YOUR WATER COME FROM?

Look at the map to explore which water sources serve communities across the region.



Every source has limits. Knowing where our water comes from helps us plan ahead and protect this essential resource for generations to come.



Panel 2: Where does our water come from?

- Regional drinking water sources
- aquifers
- source-mix map
- aquifer explanation taught by Groundwater hero/alter ego

Panel 3: Water's Journey

- Natural water cycle and urban water cycle
- showing how water moves through nature and community systems
- Water cycles explained by Surface water hero/alter ego

3

WATER'S JOURNEY: FROM NATURE TO OUR NEIGHBORHOODS



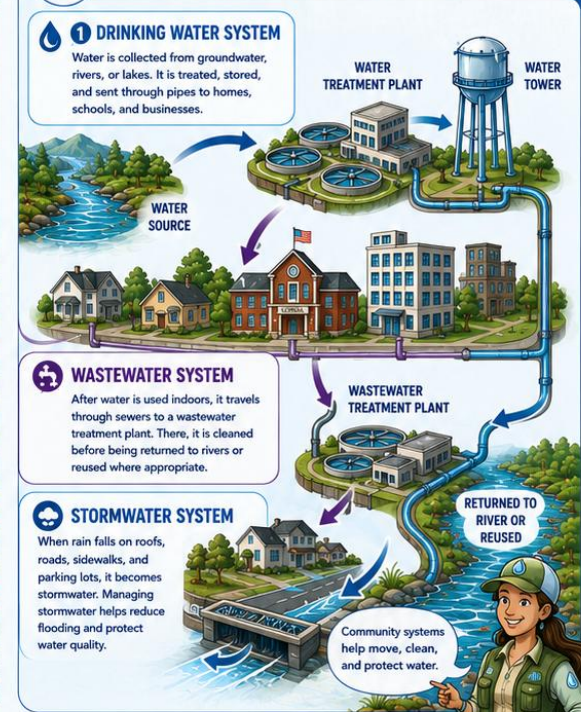
How does water move?

Water is always moving. It moves through the air, across the land, underground, through rivers and lakes, and through the pipes that serve our homes, schools, and businesses. This journey includes both the natural water cycle and the urban water cycle.

1 THE NATURAL WATER CYCLE



2 THE URBAN WATER CYCLE



3 WHY DOES THIS MATTER?

Natural systems and community systems are connected. The water we use comes from the environment, and the water we return can affect rivers, lakes, wetlands, aquifers, plants, wildlife, and people downstream. When we conserve water, prevent pollution, and care for infrastructure, we help keep the whole water cycle working.

- CONSERVE WATER
- PREVENT POLLUTION
- CARE FOR INFRASTRUCTURE
- PROTECT OUR COMMUNITY



Footer / sources
Source notes, credits,
or additional information



QR code
Scan to learn more



Partner or exhibit note
Logo or partner
acknowledgment area

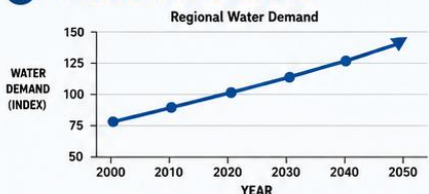
Balancing Water Use and Water Supply

Working together for a reliable water future

1 As communities grow, so does the need for water. Homes, schools, businesses, parks, and public services all depend on a reliable water supply. But our water sources are not unlimited. Communities must plan ahead and use water wisely so there is enough for people, the economy, and the environment.



1 WATER DEMAND IS GROWING



As communities grow, water use can grow too.

2 WHAT IS A SUSTAINABLE WATER SUPPLY?



A sustainable water supply means using water in a way that meets today's needs without putting future water supplies at risk. The goal is balance.

Use water carefully, protect our sources, and plan ahead so communities have a reliable supply in the future.

3 OUR WATER SOURCES HAVE LIMITS.



DEEP AQUIFERS
Deep aquifers are important water sources, but in some areas they are being pumped at about 2x the rate they can naturally recharge. Over time, this can lower water levels and make pumping harder and more expensive.

2x NATURAL RECHARGE



SHALLOW AQUIFERS
Shallow aquifers can recharge more readily from rain and snow, but they are smaller and can also face stress if too much water is withdrawn in one area.

RECHARGE FROM RAIN AND SNOW



FOX RIVER
The Fox River is an important water source, but enough water must remain in the river to support water quality, aquatic life, and downstream needs. During dry periods, less water may be available.

ENOUGH FLOW MUST REMAIN



LAKE MICHIGAN
Lake Michigan is a major drinking water source, but it is carefully managed. The amount of water Illinois can withdraw is limited, and access to this source is not available to every community.

CAREFULLY MANAGED. WITHDRAWALS ARE LIMITED.

4 WHAT CAN HAPPEN WHEN SUPPLY IS STRESSED?

DECLINING GROUNDWATER LEVELS	REDUCED WELL PERFORMANCE	HIGHER PUMPING AND TREATMENT COSTS	PRESSURE ON RIVERS AND NATURAL SYSTEMS	THE NEED TO FIND NEW WAYS TO SAVE AND MANAGE WATER
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5 PLANNING FOR A RELIABLE FUTURE

CONSERVE WATER	USE WATER EFFICIENTLY	REDUCE LEAKS	PLAN AHEAD	PROTECT WATER SOURCES
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Using water wisely today helps protect water for tomorrow.

Panel 4: Balancing Water Use and Supply

- Rising regional demand
- sustainable supply
- source limits
- supply stress
- Both source water heroes explain

Panel 5: Protecting Water from Pollution

- Pollution pathways
- nutrients
- private wells
- actions to protect water quality
- Both heroes + water body character showing pollution effects

NORTH WEST
WATER PLANNING
ALLIANCE

5 Protecting Water from Pollution

Working together to keep water clean

Pollution can come from many everyday sources. When rain or melting snow moves over land, or when spills and leaks happen, pollutants can flow into storm drains and waterways—or soak underground and reach our aquifers. The good news? We can all take action to keep our water clean and healthy.

Pollution can travel with water. Let's stop it before it reaches rivers, wetlands, and aquifers!

HOW POLLUTION REACHES WATER

1 RUNOFF FROM LAND
Rain and melting snow carry road salt, oil, fertilizer, pet waste, soil, and litter into drains and waterways.

4 AIR AND LAND IMPACTS
Dust, smoke, and chemicals can settle on land or water and wash in with rain.

2 DIRECT DISCHARGES AND DUMPING
Spills, leaks, and illegal dumping can send pollutants directly into water.

3 GROUNDWATER PATHWAYS
Pollutants can move underground from leaking systems, landfills, or spills and affect groundwater.

What happens above ground can affect water underground!

NUTRIENTS: TOO MUCH OF A GOOD THING
Excess fertilizer, yard waste, or animal waste can fuel algae growth.

Too much algae can reduce oxygen in the water.

Low oxygen can harm fish, plants, and other aquatic life.

PRIVATE WELLS NEED PROTECTION TOO

- Test well water regularly.
- Keep well records.
- Keep the area around the casing clear.
- Prevent runoff from puddling near the well.
- Check for cracks or damage.
- Follow sensible salting practices.
- Contact your local health department with questions.

WE CAN ALL HELP PROTECT OUR WATER

USE LESS SALT

PICK UP PET WASTE

REDUCE FERTILIZER

NEVER DUMP INTO STORM DRAINS

MAINTAIN SEPTIC SYSTEMS

TEST PRIVATE WELLS

KEEP LITTER OUT OF WATERWAYS

Clean water starts on land.
Small actions can help protect rivers, wetlands, aquifers, and drinking water sources.

SOURCES / INFO
Source notes, credits, or additional information

QR CODE
Scan to learn more

PARTNER / EXHIBIT NOTE
Logo or partner acknowledgment area

Panel 6: Saving Water Indoors

- Indoor water use
- leaks
- fixture efficiency
- WaterSense/ENERGY STAR
- habits that save water

6

Saving Water Indoors

We use water every day in bathrooms, kitchens, laundry areas, and other parts of the home. Small changes indoors can save water, lower bills, and help protect our shared water supply.

Toilet
Flushes use the most indoor water.

Shower
Showers are a major source of indoor water use.

Faucet
Used for drinking, cleaning, cooking, and more.

Clothes Washer
Laundry can use a lot of water per load.

Everyday Routines
Brushing teeth, washing hands, cooking, and cleaning all add up!

Leaks can waste more water than you think

A leak that drips once per second can waste over **3,000 gallons** of water in a year.

The average household can waste about **180 gallons** of water per week from leaks.

Look for common leaks:

- dripping faucets
- running toilets
- leaking showerheads
- water around appliances
- hidden plumbing leaks

Even a small leak can waste a lot of water over time!



Upgrade where it counts

WaterSense-labeled toilets, showerheads, and faucets are designed to use at least 20% less water than standard models.

Toilets	Showerheads	Bathroom Faucets	Clothes Washers
Older: 1.6–3.5+ gallons per flush	Standard: 2.5 gallons per minute	Standard: 2.2 gallons per minute	Older: 18+ gallons per load
Efficient: 1.28 gallons per flush or less	Efficient: 2.0 gallons per minute or less	Efficient: 1.5 gallons per minute	Efficient: ENERGY STAR®-certified model

Easy ways to save water indoors

- Take shorter showers.
- Turn off the water while brushing teeth.
- Run laundry only with full loads.
- Thaw food in the refrigerator instead of under running water.
- Fix leaks as soon as possible.
- Install a leak detector or smart water monitor.
- Choose efficient fixtures when it is time to replace them.

Small fixes, big savings

- Save water
- Reduce waste
- Lower utility bills
- Protect your home from water damage
- Support a more sustainable water supply

- Fix leaks, use water wisely, and choose efficient fixtures when you can.
- Sources / Info: Source notes, credits, or additional information
- QR Code: Scan to learn more
- Partner / Exhibit Note: Logo or partner acknowledgment area

7

PROTECTING WATER OUTDOORS

Small choices outside make a big difference.

How we care for our yards, gardens, and outdoor spaces affects the health of our rivers, lakes, and groundwater. Let's keep our water clean and our communities healthy!

Rain barrels collect and store rainwater to use in your garden.

1 KEEP POLLUTION OUT OF OUR WATER

Pollution on land can wash into storm drains and flow directly to rivers and lakes — untreated.



WASH CARS AT A CAR WASH
Soap and chemicals from driveways can harm aquatic life.



KEEP GRASS CLIPPINGS OFF DRIVEWAYS
Sweep them back into your lawn or compost.



USE FERTILIZER CAREFULLY
Too much fertilizer can cause algae growth and harm water quality.



DISPOSE OF HAZARDOUS WASTE PROPERLY
Never pour paint, oil, or chemicals down drains or onto the ground.



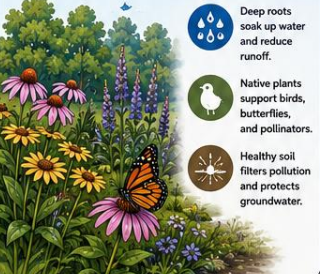
SCOOP THE POOP
Pet waste can carry bacteria and pollute our water.



DON'T DUMP LEAVES OR YARD WASTE IN STORM DRAINS
They can clog drains and add pollution to waterways.

2 PLANT FOR CLEANER WATER

Native plants and trees help rain soak into the ground, reduce runoff, and provide habitat for wildlife.



Deep roots soak up water and reduce runoff.

Native plants support birds, butterflies, and pollinators.

Healthy soil filters pollution and protects groundwater.

3 WATER WISE YARDS

Simple choices can save water and keep your yard healthy.



Water early in the morning or late in the evening.

Use a sprinkler timer or smart controller.

Choose drought-tolerant plants and grasses.

Adjust sprinklers so water lands on plants, not pavement.

4 MANAGE STORMWATER NATURALLY

Slow it down, soak it in, and keep it clean.

Rain gardens soak up rainwater and reduce runoff.

Permeable pavers let water soak into the ground.

Swales and berms slow down water and prevent erosion.

Disconnect downspouts from hard surfaces and direct water to plants or rain barrels.

5 BE A WATER PROTECTOR EVERY DAY

- USE WATER WISELY** (Water drop icon)
- REDUCE POLLUTION** (Leaf icon)
- CARE FOR PETS RESPONSIBLY** (Paw print icon)
- PLANT NATIVE PLANTS** (Plant icon)
- WORK TOGETHER IN YOUR COMMUNITY** (Group of people icon)



Our choices outdoors today protect our water for people, wildlife, and future generations. Every drop counts!

OUR WATER PARTNERS

Many organizations work together to protect and improve our water.

- Kane County
- DeKalb County
- McHenry County
- Kendall County
- Illinois EPA
- Local Communities
- Environmental Organizations
- Universities & Researchers
- Water Professionals

TOGETHER, WE CAN KEEP OUR WATER CLEAN AND OUR COMMUNITIES STRONG.

Healthy yards. Clean waterways. Stronger communities.



Panel 7: Protecting Water Outdoors

- Outdoor water use
- stormwater
- water-wise yards
- rain gardens
- rain barrels
- surface water and groundwater connections

8

OUR REAL-LIFE WATER HEROES

Working Together to Protect Water



Protecting water takes teamwork! Many organizations, committees, agencies, researchers, water professionals, and local water suppliers work together to study, manage, conserve, and protect our water resources.

The NWPA region is in northeastern Illinois, serving Kane, DeKalb, McHenry, and Kendall counties.

PUBLIC UTILITIES & LOCAL WATER SUPPLIERS
Public utilities and local water suppliers are on the front lines—delivering safe, reliable water and protecting public health every single day.
ESSENTIAL EVERY DAY. HEROES IN OUR COMMUNITY.

OUR WATER HEROES

<p>Field Scientist Collects samples and studies water quality.</p>	<p>Hydrogeologist Studies groundwater and underground resources.</p>	<p>Utility Operator Runs water and wastewater systems safely and reliably.</p>	<p>Educator Inspires learning and builds water awareness.</p>	<p>Planner Plans for clean, healthy communities and resilient systems.</p>	<p>Salting / Snow Professional Uses smart winter practices to protect water and roads.</p>	<p>Community Partner Connects people and strengthens our communities.</p>
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NWPA PARTNERS

Sensible Salting Committee	Library Exhibit Subcommittee	CMAP Chicago Metropolitan Agency for Planning	IISG Illinois-Indiana Sea Grant	ISAWWA Illinois Section American Water Works Assoc.
ISWS Illinois State Water Survey	IDNR Illinois Department of Natural Resources	USGS U.S. Geological Survey	Sugar Grove Water Authority	Local water suppliers across the region

Many partners. One mission: protect our water for today and tomorrow.

HOW THEY HELP

Research and monitoring	Planning for the future	Water conservation and efficiency
Education and outreach	Source water protection	Utility operations and stewardship

Real people, real partnerships, and shared action help protect our water.

Thank you to the many partners helping build a sustainable water future.

Panel 8: Our Real-Life Water Heroes

- Partner recognition panel highlighting NWPA partners, committees, agencies, researchers, water professionals, and local water suppliers

Thoughts?

A solution-orientated framework that focuses on stewardship and healing existing water systems

Feedback questions

- Does this framework feel clear and cohesive?
- Are the roles of each character/concept distinct enough?
- Does this approach help communicate how the system works as a whole, both visually and contextually?
- Is this approach practical for our target audience(s)?

Next steps and considerations

- May 28, 2026 subcommittee meeting to go over panel concepts and begin finalizing text
- We need to make sure we balance our target audiences in our messaging, design, and resources
- Schedule working meetings with Laura and their library staff
 - further refine concepts into final designs and
 - determine staff development time for key deliverables
- How to make exhibit more accessible and engaging for younger audience?
- Questions?

Questions?

For additional questions please reach out to our sub-committee chairs at the email below:

- **Sarra Hinshaw**, Kane County Sustainability Manager
HinshawSarra@KaneCountyIL.gov
- **Haider Mehdi**, Water Conservation Associate, IISG
hmehdi@cmap.Illinois.gov

Thanks!

Presented by Haider Mehdi
hmehti@cmap.Illinois.gov