



Watershed Health Report and Forum Themes

6:00 Welcome/Introduction/Overview

6:30 Presentations

Black Earth Creek Water Quality Monitoring - Nic Buer USGS

Green Infrastructure/Flooding - Nick Bower CARPC/James Brodzeller Dane
Cty

Neonic Pesticides and Impacts to Black Earth Creek - Mike Miller WDNR

Trout Fishery and Stream Health - Kim Kuber/Mitch Trow WDNR

Black Earth Creek Valley Project - Tony Abate Groundswell Conservancy

7:50 Questions/Discussion/Next Steps

8:15 Open House with Watershed Organizations present

9:00 End of Event

A HEALTH REPORT

Black Earth Creek Watershed
2024



produced by the
Black Earth Creek Watershed Association

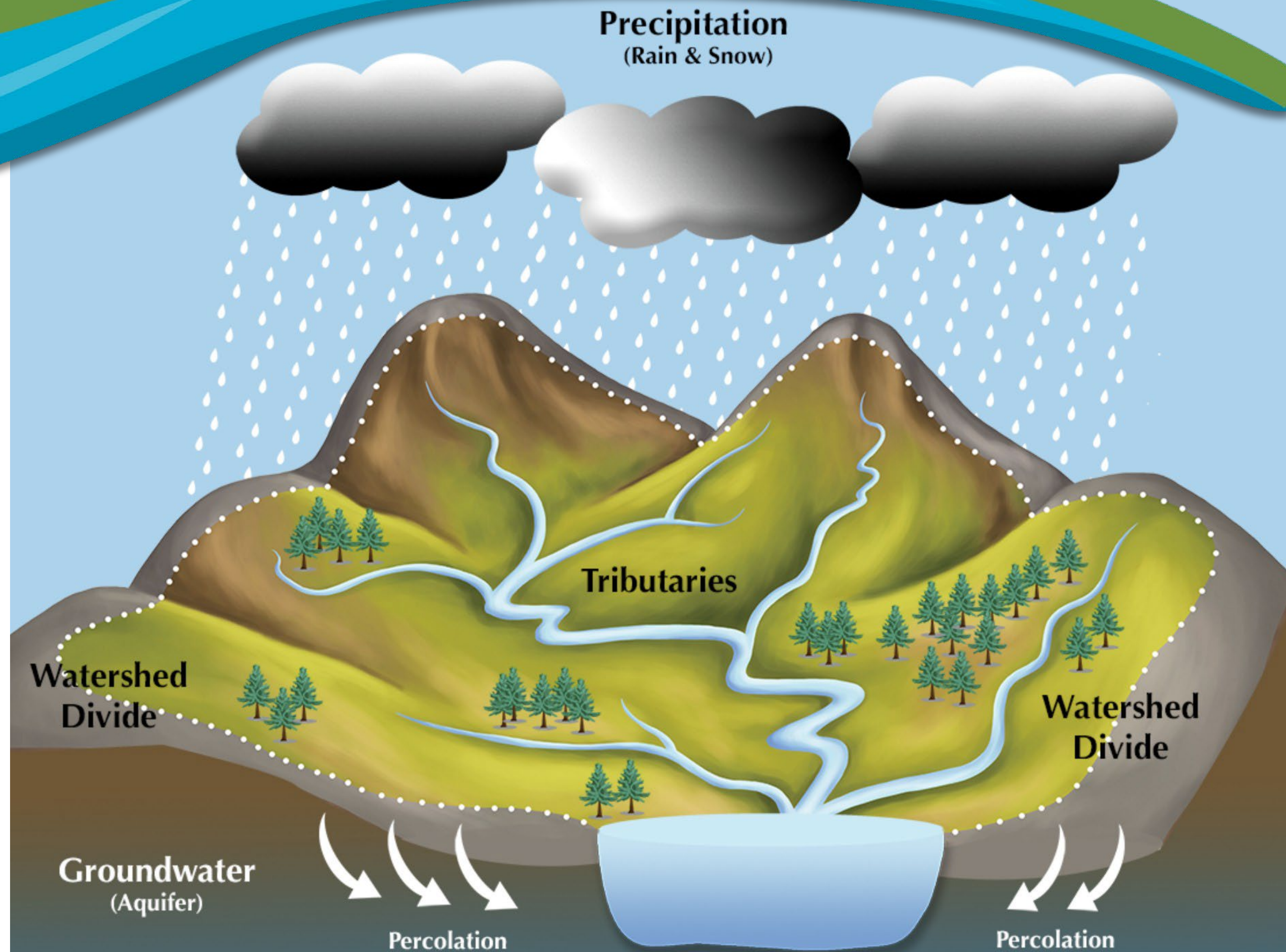
A HEALTH REPORT

Black Earth Creek Watershed

What is a
Watershed?

“A watershed is the area of land from which water drains into a river, stream, or other waterbody.”

source: Hudson River Watershed Alliance
<https://hudsonwatershed.org/>



A HEALTH REPORT

Black Earth Creek Watershed

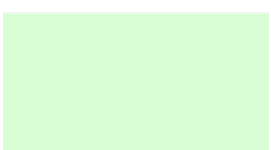
Black Earth Creek Watershed 2020 Land Use Map

105 square miles

Mix of:



Forests 37%

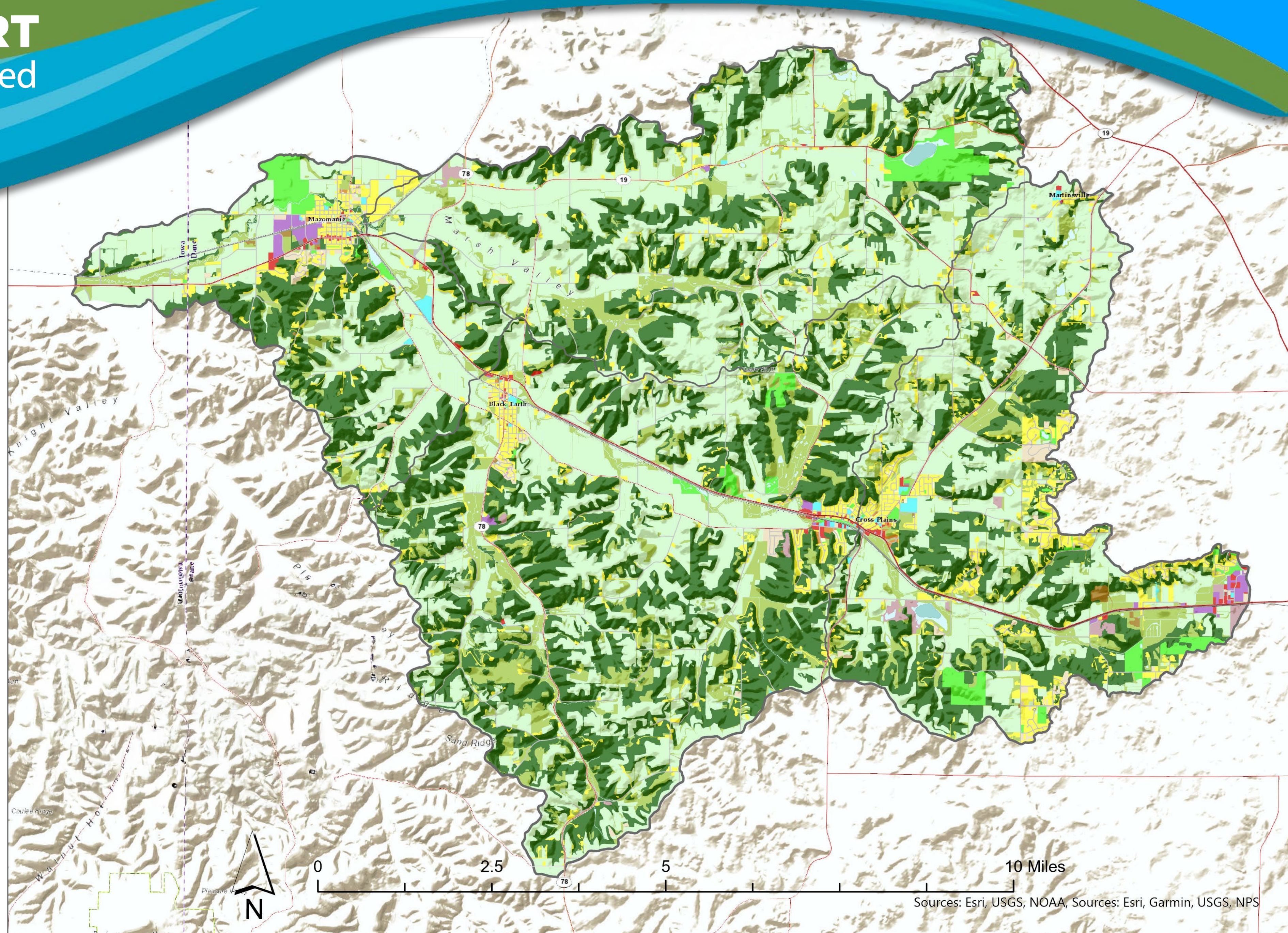


Agriculture 37%



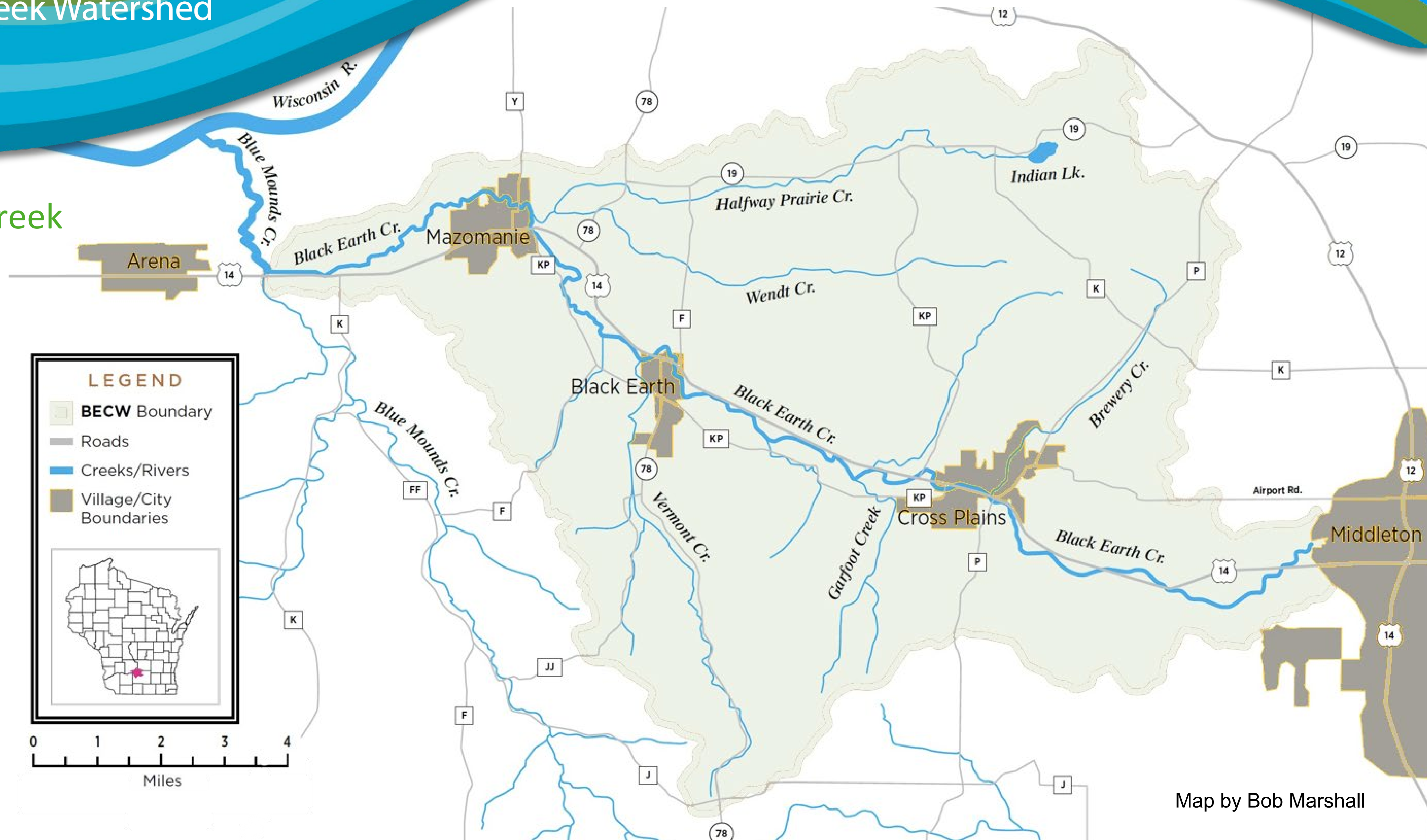
Grassland 16%

Black Earth Creek
is watershed focal point



Black Earth Creek Watershed

Black Earth Creek Watershed



Map by Bob Marshall

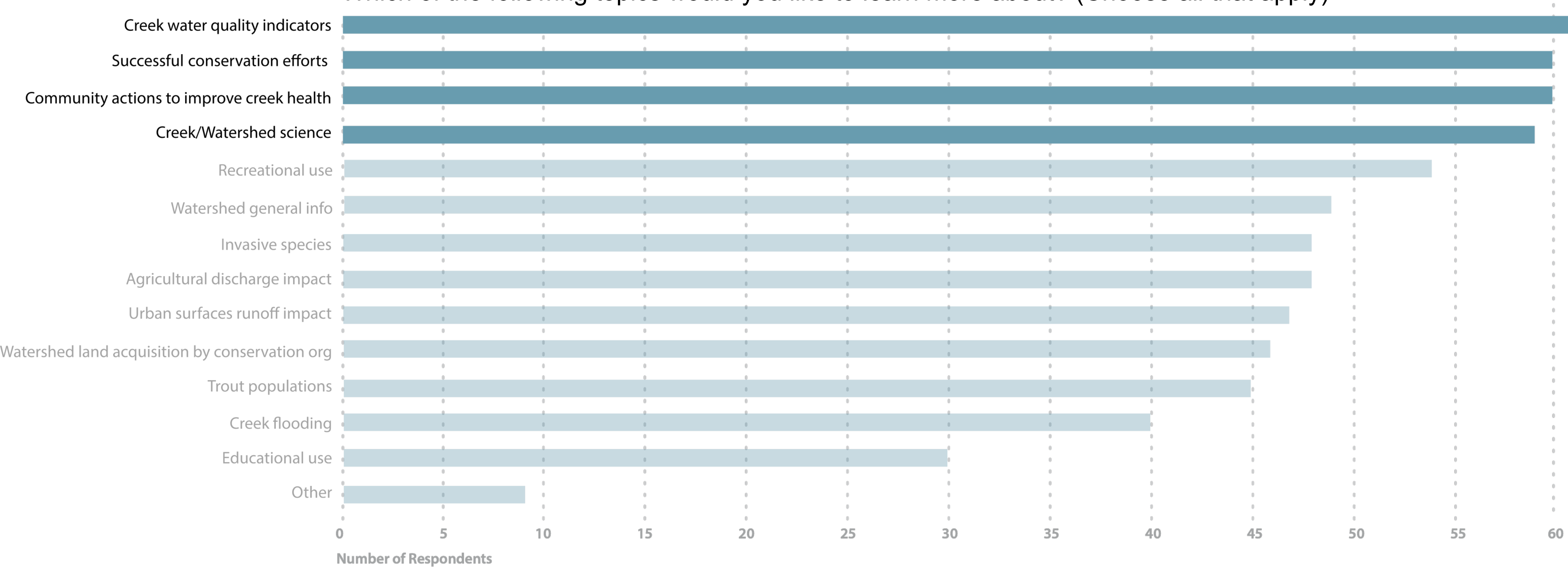
A HEALTH REPORT

Black Earth Creek Watershed

2023 Community Survey

- 103 respondents
(51% homeowners/residents, 15% anglers, 34% other groups)
- People want to know more about creek science/health, conservations efforts, and what they can do to help.

Question 2:
Which of the following topics would you like to learn more about? (Choose all that apply)





Watershed Health Report and Forum Themes

- Watershed health indicators
- Issues of concern
- Successful efforts
- How we can improve watershed health

A HEALTH REPORT

Black Earth Creek Watershed

WATERSHED HEALTH ISSUES:



Dennis Franke

Keep Cold Springs Flowing

Cold springs are the life blood of Black Earth Creek and its tributaries.

Best if water soaks into the soil—and then enters streams as springs.

Installing “Green Infrastructure” accomplishes this.

Examples in the watershed include:

- *Stormwater basins*
- *Conservation tillage*
- *Rain gardens*
- *Wetlands*

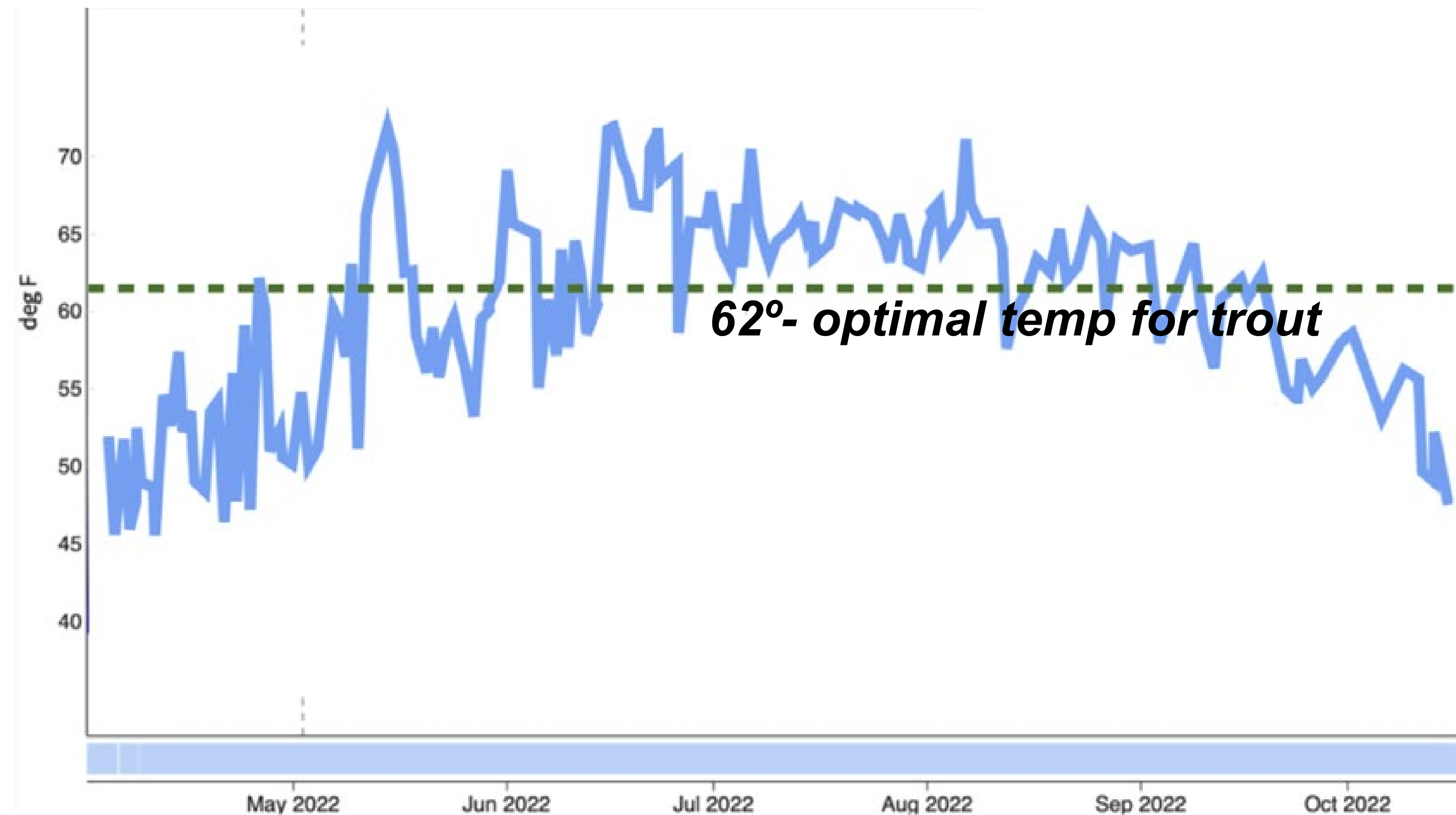
A HEALTH REPORT

Black Earth Creek Watershed

WATERSHED HEALTH ISSUES:

A Cold Creek is a Healthy Creek

Water temperatures can go
above the optimal level for trout
(62°F)



Summer Temperatures 2022

USGS - Provisional

A HEALTH REPORT

Black Earth Creek Watershed

WATERSHED HEALTH ISSUES:

Polluted Urban and Farm Runoff Can Hurt Watershed Streams

Fertilizer & nutrient runoff cause excess plant & microorganism growth – consuming oxygen required by fish and other organisms.



A HEALTH REPORT

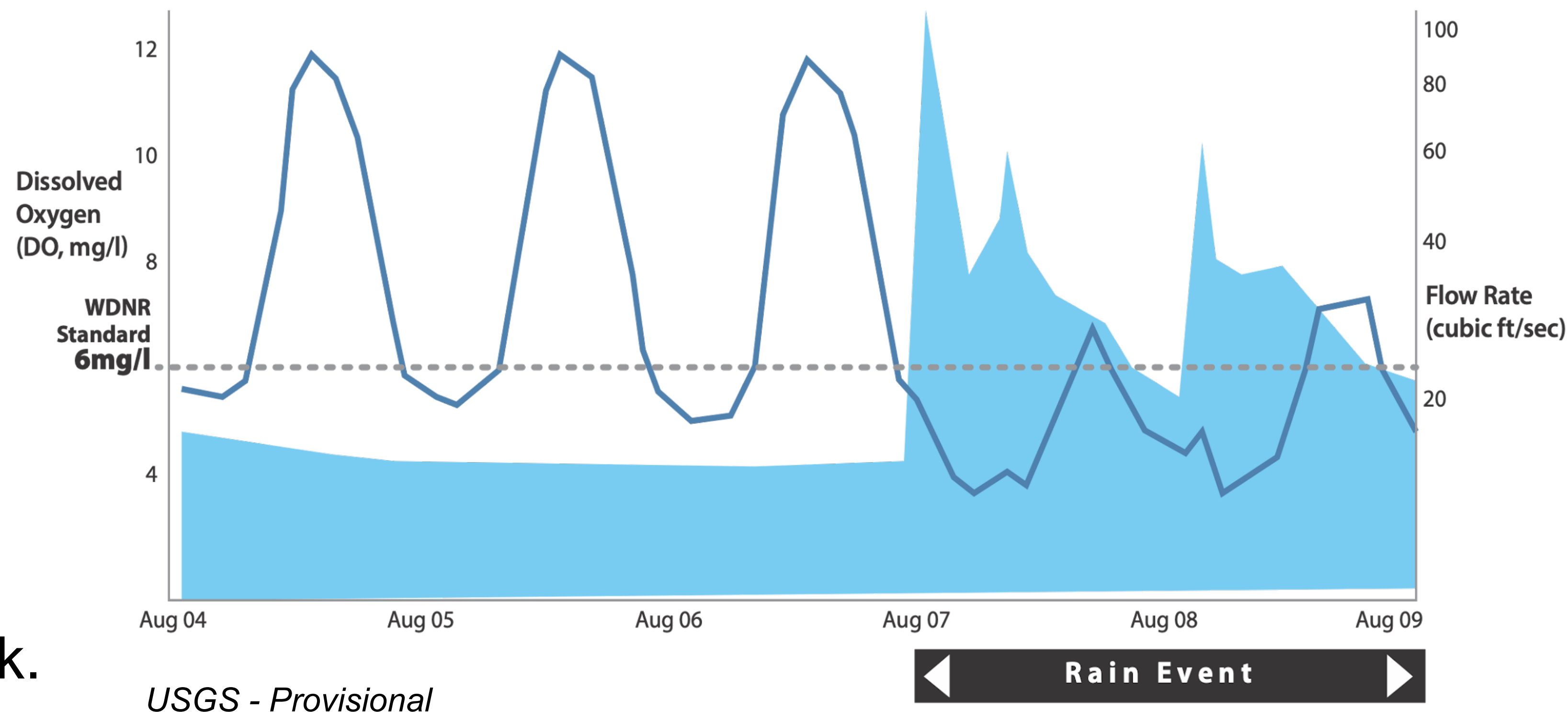
Black Earth Creek Watershed

WATERSHED HEALTH ISSUES:

Dissolved Oxygen is Critical to Creek Life

USGS is monitoring Dissolved Oxygen (DO) and other parameters in Black Earth Creek.

During a rainstorm, DO can drop to levels harmful to fish and macroinvertebrates.



A HEALTH REPORT

Black Earth Creek Watershed

WATERSHED HEALTH ISSUES:

Macroinvertebrates Indicate Creek Health

Macroinvertebrates (aquatic insects and crustaceans) are important part of the food web for fish.

Some aquatic insects have declined (*Ephemera* and *Hexagenia*) — likely caused by toxics and polluted runoff.



Andy Morton

A HEALTH REPORT

Black Earth Creek Watershed

WATERSHED HEALTH ISSUES:

Trout Fishery Outstanding But Vulnerable

Outstanding wild trout fishery, good access/public lands, good size structure

Concerns — continued spring flow, low DO, polluted runoff, pesticides (neonics), high temperatures, maintaining natural reproduction



Dennis Franke

A HEALTH REPORT

Black Earth Creek Watershed

WATERSHED HEALTH ISSUES:

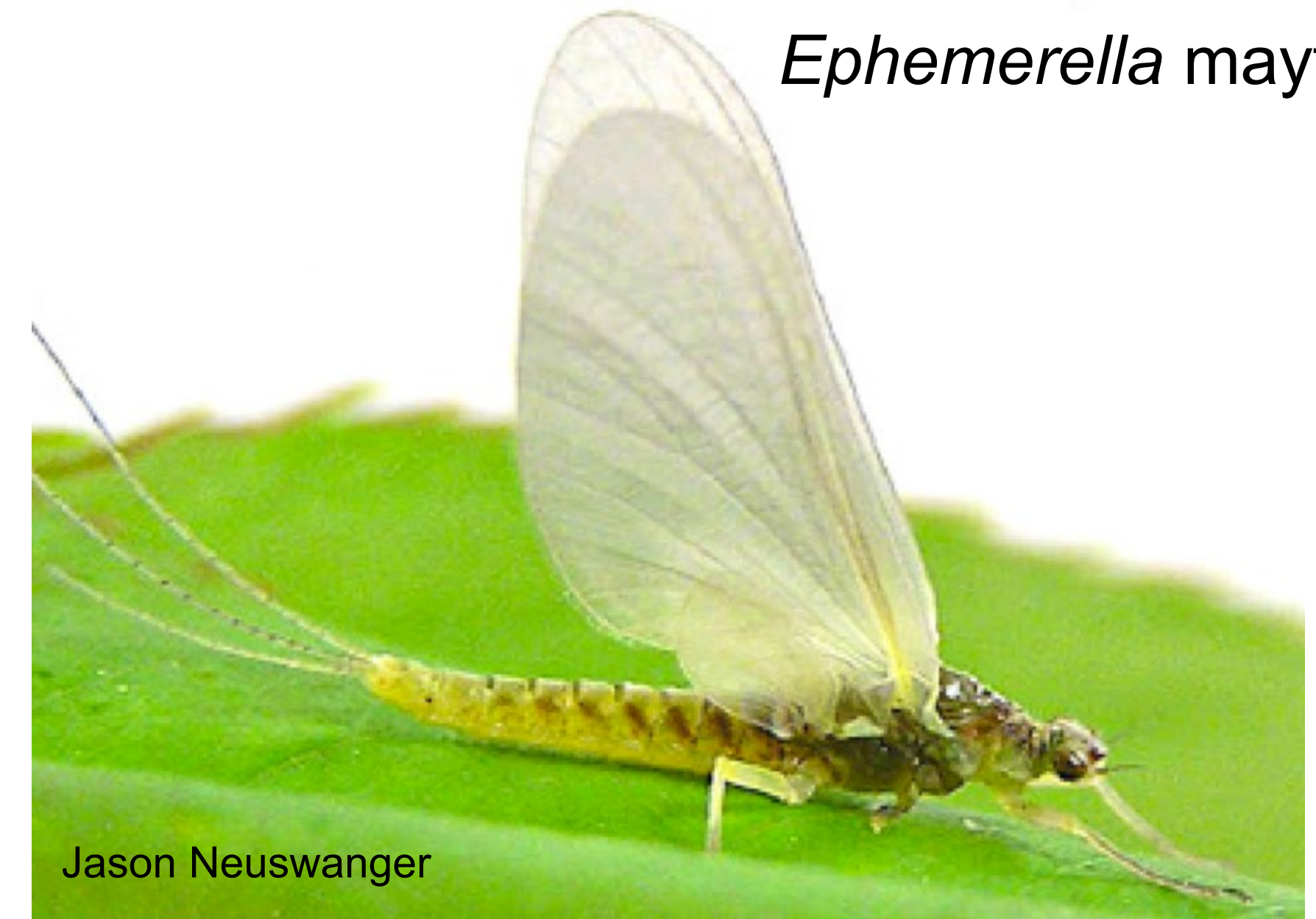
Toxic Chemicals Are In Our Watershed

Neonicotinoid pesticides (Neonics) may reduce abundance of aquatic insects such as *Ephemera* and *Hexagenia*.

Lower PFAS (forever chemicals) levels allowed the lifting of fish consumption advisory for BEC.



Ephemera mayfly



Jason Neuswanger

A HEALTH REPORT

Black Earth Creek Watershed

WATERSHED HEALTH ISSUES:

New Zealand Mudsnails

Invasive New Zealand Mudsnails (NZMs) are in Black Earth Creek and watershed streams.

Anglers can prevent spreading NZMs to other streams by:

- disinfecting gear
- using separate gear for infested streams



Zander Park, Cross Plains 2024

A HEALTH REPORT

Black Earth Creek Watershed

SUCCESSFUL CONSERVATION EFFORTS

- USGS monitoring stations
- BEC re-meandering & stormwater controls:
Village of Cross Plains & WDNR
- WDNR streambank habitat restoration & easement purchases
- Paddler, angler, & hiker access points
- BECWA interpretive signs
- Groundswell Conservancy land acquisition
- Village of Black Earth stream access & park development
- Lake Marion: dam removal, creek re-meandering, & creation of Wolf Run Trail
- Dane County: Streambank acquisition & Walking Iron Park streambank improvement
- CARPC Green Infrastructure Project



Aaron Jaglio



Mindy Habecker



Michelle Harris



Michelle Harris

A HEALTH REPORT

Black Earth Creek Watershed

BEC is a quality-of-life indicator for me. A healthy creek means we're trying to do our best to be good stewards of our corner of the world.

Survey respondent

What Can You Do to Help Protect Watershed Health?

Encourage local policy makers to:

- Pursue funding & partner with other organizations to support watershed improvement projects
- Establish policies that support watershed health

You can also:

- Landscape to reduce creek warming (rain gardens, tree planting, etc.)
- Minimize/halt pesticide & herbicide use
- Prevent New Zealand Mud Snail spread
- Request landowner permission to enter creek
- Volunteer with Watershed non-profit organizations



Dennis Franke



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Feedback Survey: Black Earth Creek Watershed Health Forum 4/22/25

Thank you for attending the April 22, [2025](#) Forum on the Health of the Black Earth Creek (BEC) Watershed. Please take a few minutes to answer the questions below. We will use your feedback to plan for future events.

1. How did you hear about the Forum?
 - ☐ [Social Media](#) (Facebook, Instagram, etc.)
 - ☐ Email (from BECWA, Trout Unlimited, etc.)
 - ☐ Local newspaper
 - ☐ Invitation from friend/acquaintance
 - ☐ Other
2. Do you live in the Black Earth Creek Watershed?
 - ☐ Yes
 - ☐ No
3. What was useful or informative about this Forum on the Health of the Black Earth Creek Watershed?
4. How might we improve future Black Earth Creek Watershed events?
5. What remaining questions/concerns/comments do you have?

Thank you for your feedback!

(Alternatively, you can fill out this survey online by [clicking on this link](#) or pointing your phone camera at the QR code shown here.)

