# Beyond the Status Quo:

# 2015 EQB Water Policy Report

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# The Environmental Quality Board (EQB)

- Governor's office
- Five citizen members
- Board of Soil and Water Resources
- Department of Administration
- Department of Agriculture
- Department of Commerce
- Department of Employment and Economic Development
- Department of Health
- Department of Natural Resources
- Department of Transportation
- Metropolitan Council
- Pollution Control Agency

# Report Outline


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# What do solutions look like?

Voluntary

Regulatory

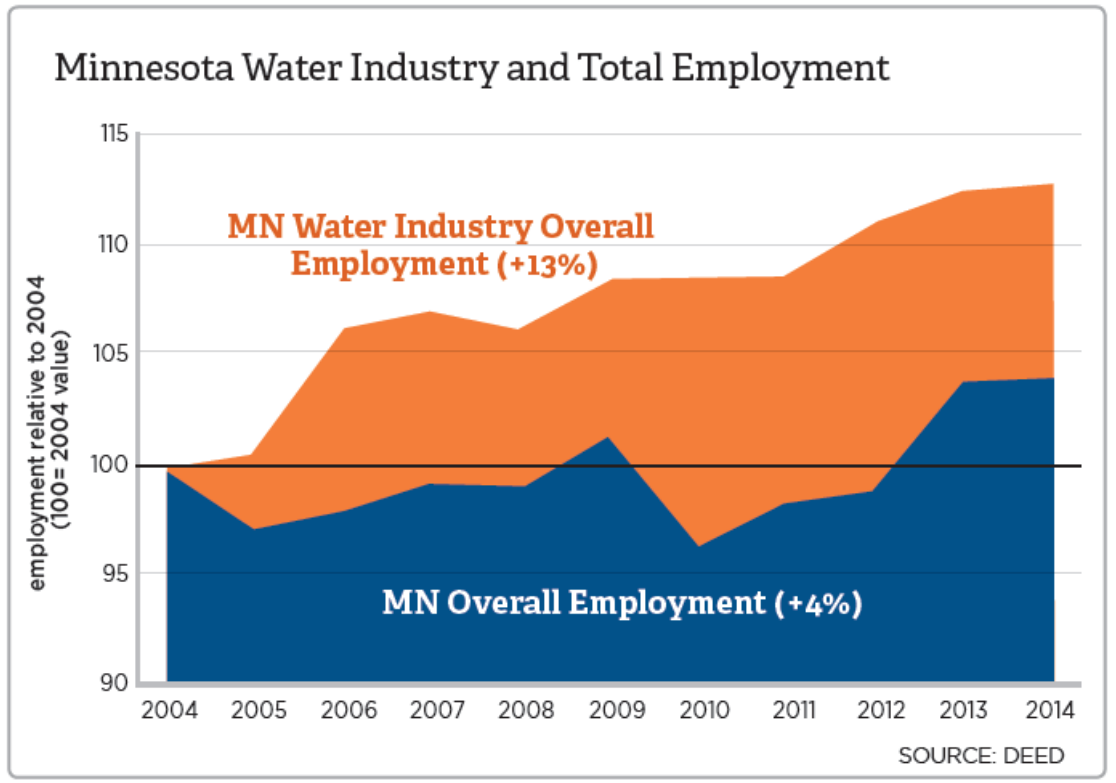
System Change

More Study

# Employment Findings

**13,500**
**Water Industry Employees**

**$885M**
**Water-Related Payroll**




Average **annual wages** in the water technology industry were
**27% higher**
THAN THE STATE AVERAGE.

# Goal #1: Promote Sustainable Water Use

**Sustainable groundwater use:**

prevents drawdown of contaminants from the surface or from shallower aquifers into deeper ones

does not interfere with other users

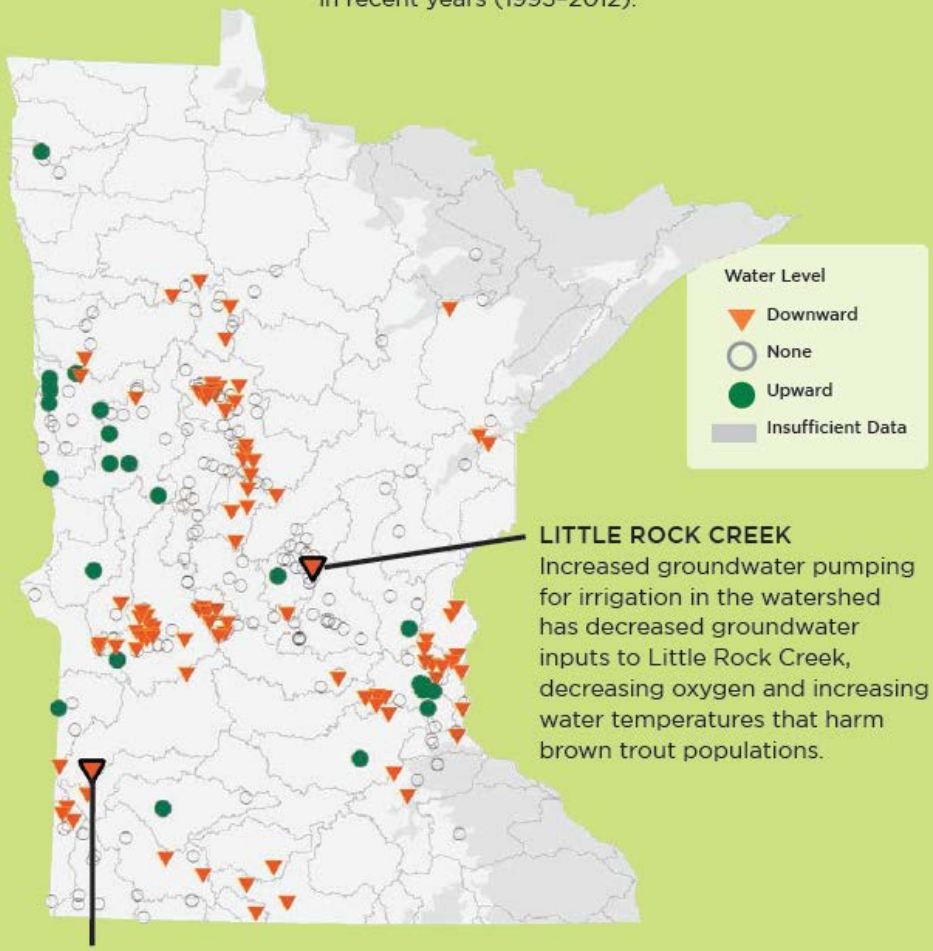
does not affect surface waters

does not harm aquatic ecosystems

meet current and future needs

## Well Water Level Trends

While not all of Minnesota has water supply issues, numerous wells have shown a decrease in water level in recent years (1993–2012).




SOURCE: MNDNR

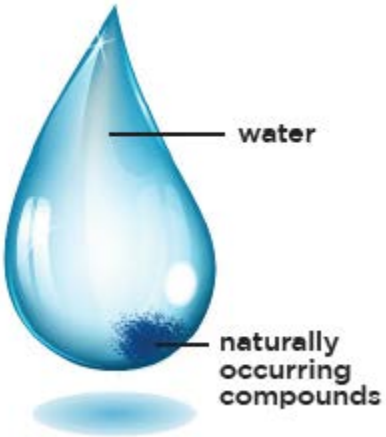
MINNESOTA ENVIRONMENTAL QUALITY BOARD EQB

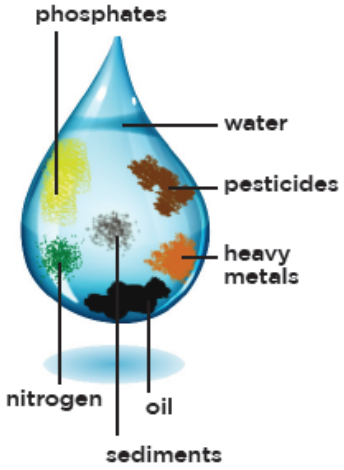
Regulatory

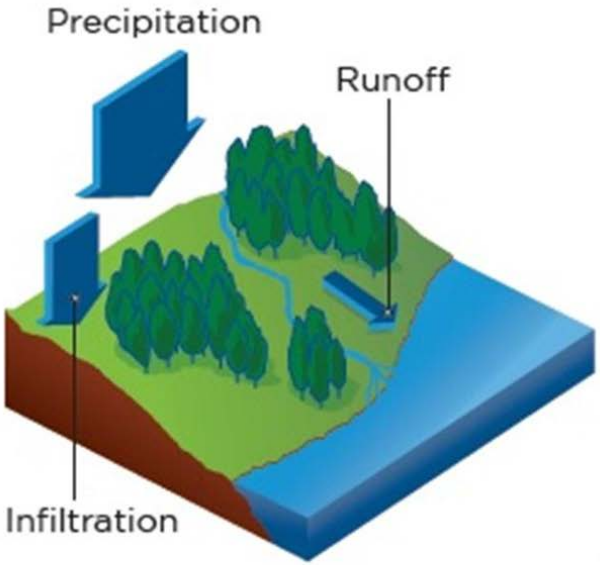
# Update plumbing codes and treatment standards to allow for safe and practical water reuse

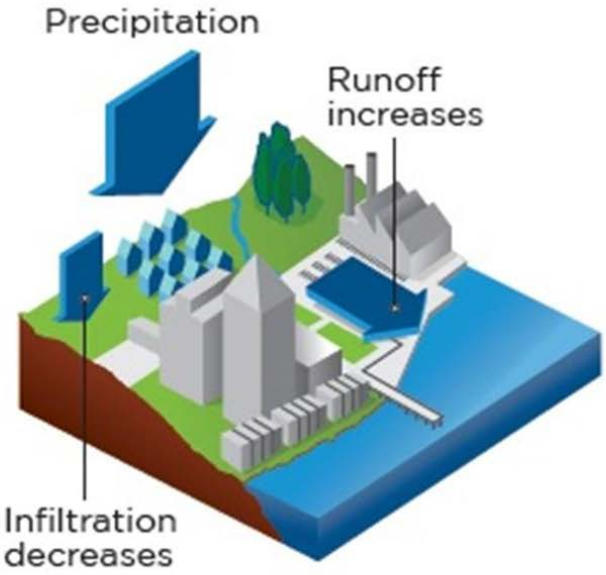

MINNESOTA ENVIRONMENTAL QUALITY BOARD EQB

# Goal #2: Manage Runoff in the Built Environment

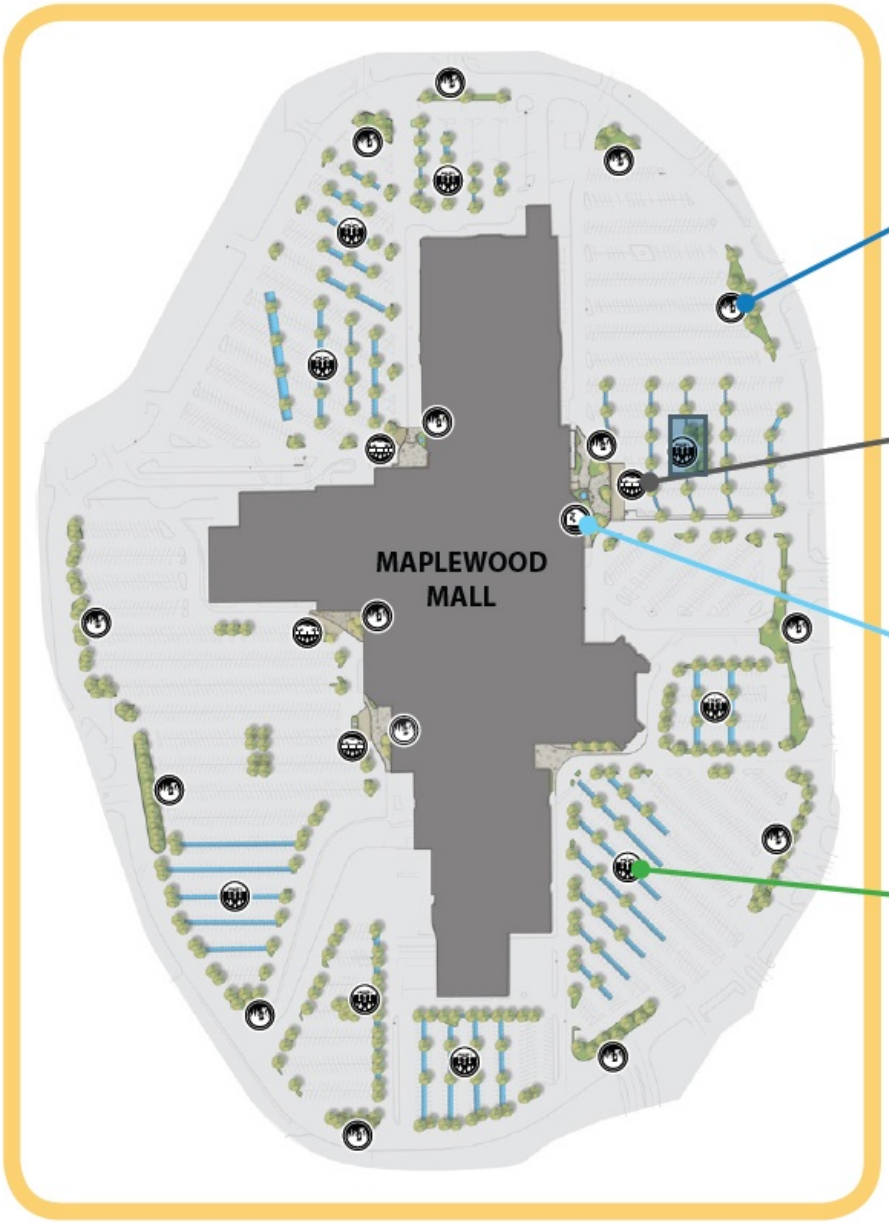


# Goal #2: Manage Runoff in the Built Environment




*Location of features within the 35-acre footprint*

## Features & Benefits

**55**
RAINWATER GARDENS

*They filter 9 million gallons of runoff**

**6,733**
SQ FT. OF PERMEABLE PAVERS

*They infiltrate 260,000 gallons of runoff**

**1**
CISTERN

*It holds 5,700 gallons of roof runoff*

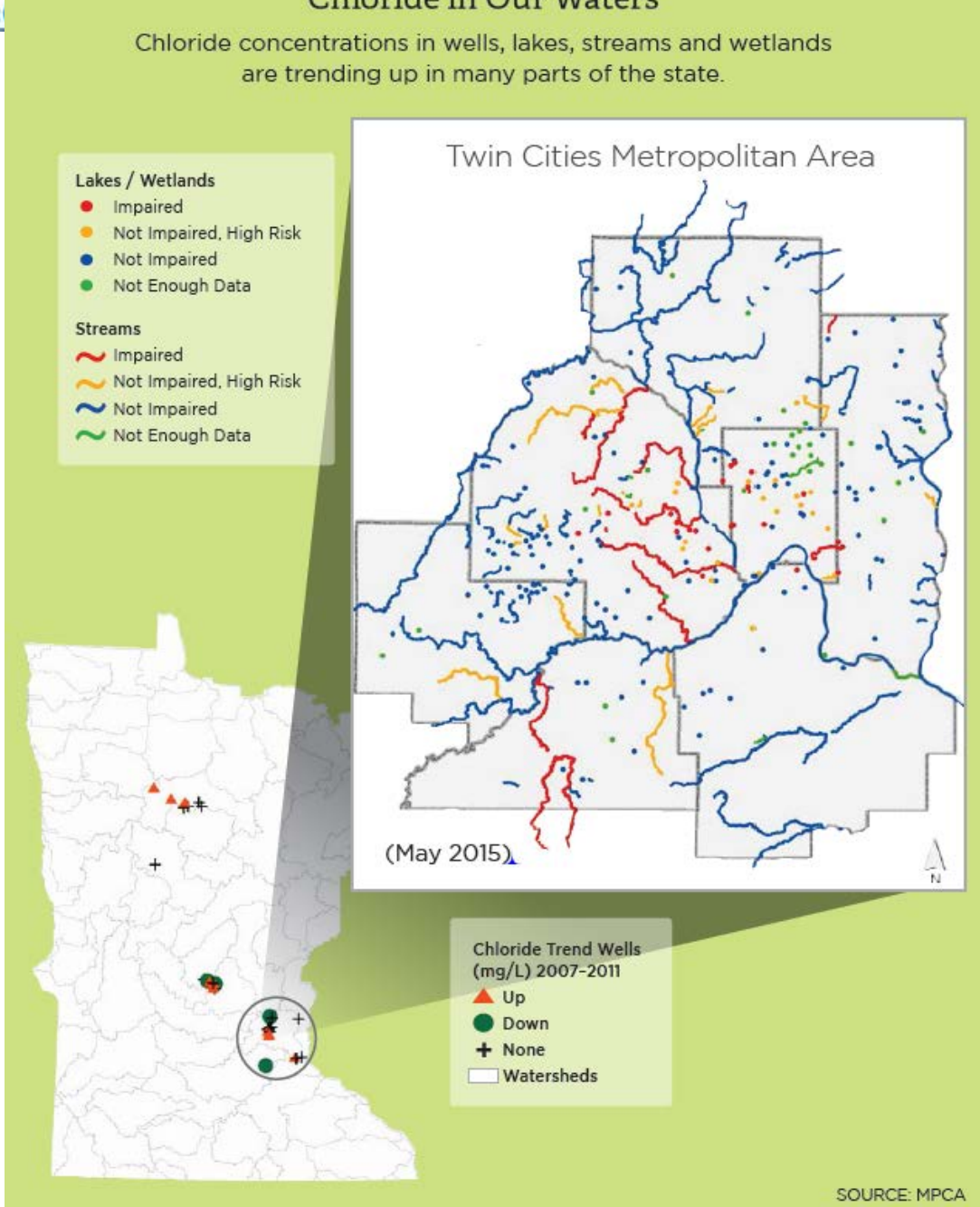
**375**
TREES

*11.2 million gallons of runoff brought into the tree trenches**

*** in a typical year*

# An emerging issue in management of runoff in the built environment is chloride.

Some 349,000 tons of chloride in the form of winter deicing chemicals are applied in the Twin Cities metropolitan area each year.



Regulatory

# Reduce liability for applicators who attend training on best management practices


NEW HAMPSHIRE CERTIFIED
GREEN SnowPro

MINNESOTA ENVIRONMENTAL QUALITY BOARD
EQB

# Goal #3: Increase Living Cover

**Living plant cover helps filter contaminants and sediment out of water, and it holds water on the landscape.**

Perennial crops:

Cover crops:

Prairie and Grasses:

Wetlands:

Forests:

No till/
Minimum till:

MINNESOTA ENVIRONMENTAL QUALITY BOARD EQB

# Goal #3: Increase Living Cover

**Regulatory**

## Use living cover around wellheads to prevent groundwater contamination

- Acres in MN = 50+M
- Well areas = 1.22M
- Vulnerable acres = 360K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# Goal #3: Increase Living Cover

The interest in providing grass fed beef has led Minnesota restaurants to source from farms with grass fed beef.

- Hell's Kitchen
- French Meadow
- Lucias
- Grand Café
- Corner Table
- Dakota Jazz
- Broders
- Lowbrow
- Prairie Dogs

# Goal #4: Ensure Resilience to Extreme Rainfall

Extreme rainfall has increased during the past century in Minnesota. This combined with our activities on the land, make our infrastructure and communities vulnerable.


## Minnesota Has Experienced Numerous Floods

Number of flood disasters by county (1964–2014).

**MOORHEAD:** Insurance claims from floods of similar scale were more than $2 million in 1997 but less than $1 million in 2011, illustrating the benefits of buyouts and flood risk reduction projects.

**AUSTIN:** A city sales tax instituted to purchase flood-prone homes has yielded a return on investment of 265 percent and avoided $30 million in estimated damages.

**MONTEVIDEO:** Buyouts had a 747 percent return on investment, saving an estimated $8 million in damages for an investment of $1 million.

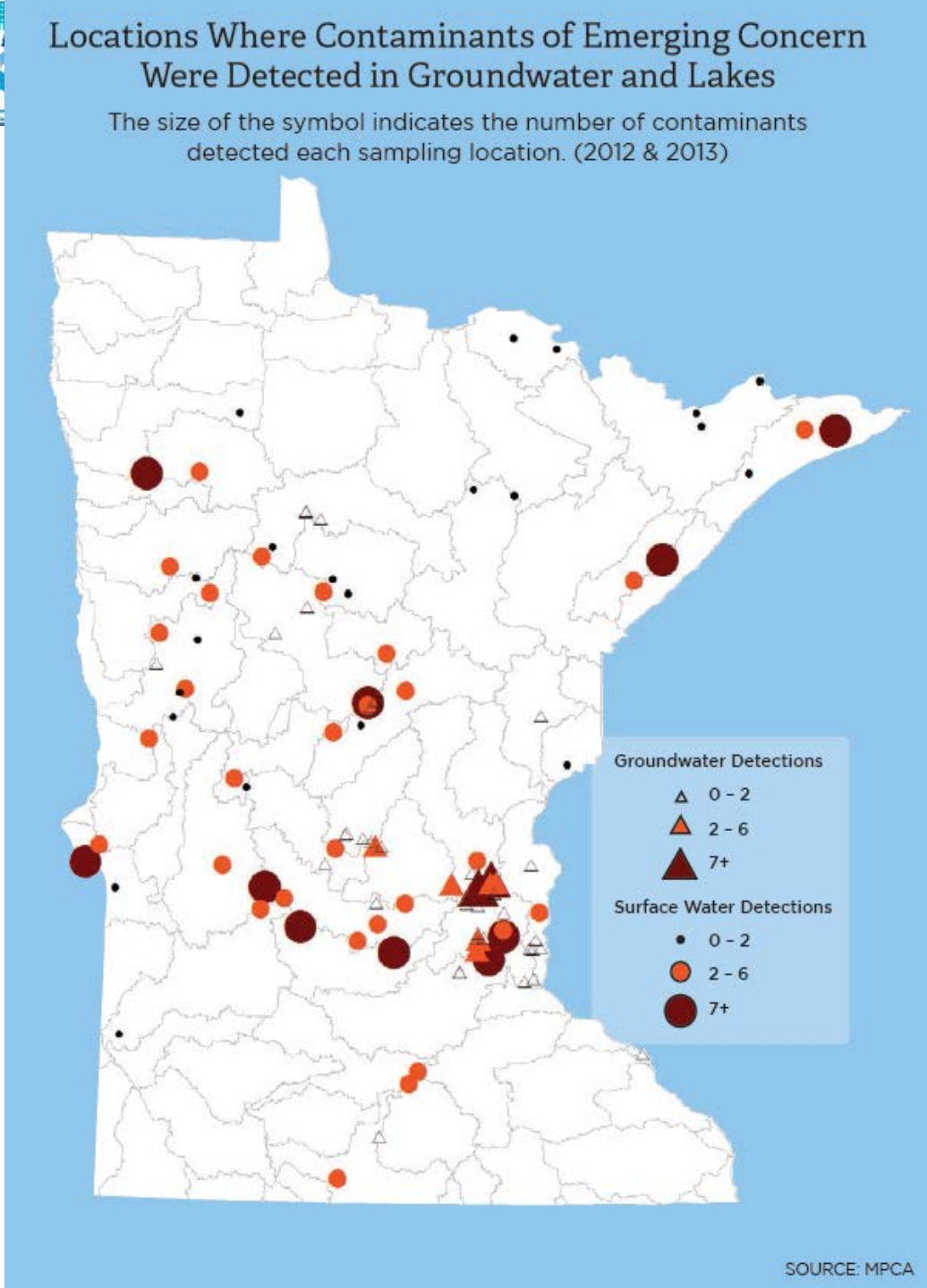
Total Flood Declarations
- 4 – 8
- 9 – 12
- 13 – 16
- 17 – 24

SOURCE: HSEM/DPS

More Study

# How vulnerable are we to extreme rain?

We need to protect drinking water and ecosystems from harmful levels of contaminants of emerging concern.



# Thank you

Anna Henderson
Erik Cedarleaf Dahl