

Site Assessment work in Hastings

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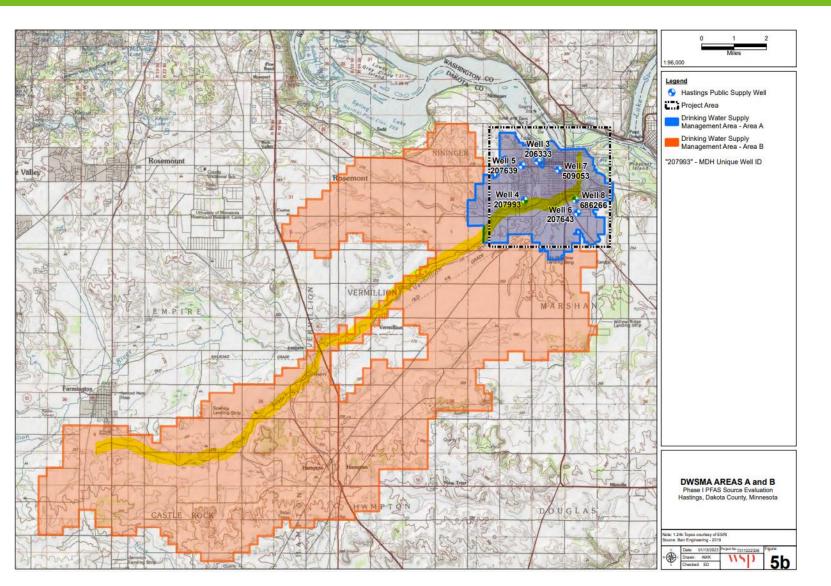
Overview

- Site Assessment process
- Hastings' drinking water sources
- Work completed
- What's next?

Background / Site Assessment Process

- Site Assessment is an established step in the Superfund process that is used to:
 - Determine potential PFAS uses/sources
 - Understand potential impacts to nearby drinking water wells
 - Determine if a potential responsible party (PRP) exists that may be liable for additional investigation, cleanup, and drinking water treatment

Hastings' drinking water sources

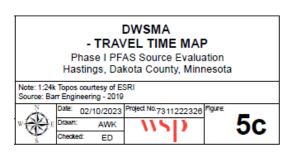


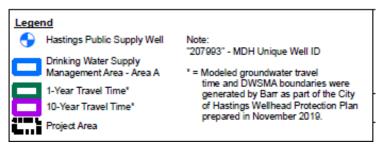
- Primary groundwater flow direction is from the SW to the NE towards the Mississippi River
- Surface water and groundwater from areas in orange and blue travel towards Hastings' municipal wells over time

Condry Lake

Hastings' drinking water sources

- Purple: 10-year travel time
- Green: 1-year travel time



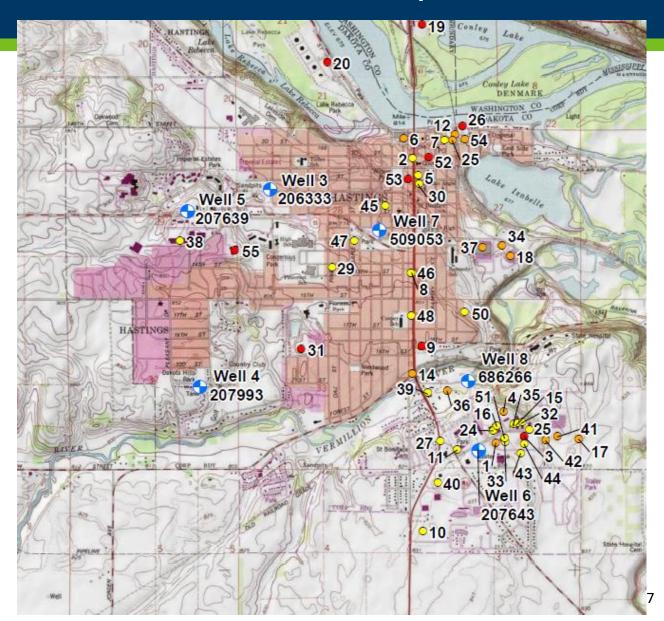


Site Assessment efforts

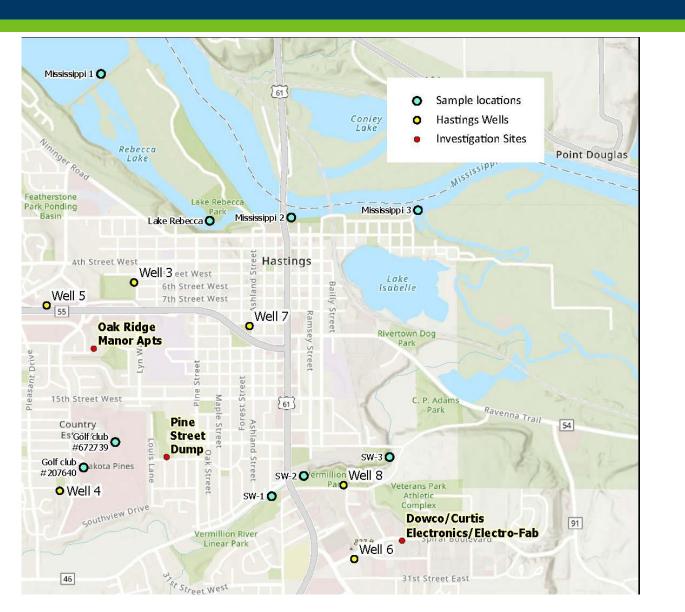
- Site Assessment is a multi-pronged, phased approach. Efforts for Hastings so far include:
 - Investigation
 - Desktop evaluation
 - Sample collection from groundwater and surface water, drilling wells at new potential source locations
 - Pine Street Dump Superfund site investigation
 - Required 3M to conduct evaluation of potential connection between Cottage Grove facility and PFAS in Hastings' wells

Desktop Evaluation

- The desktop evaluation included research to better understand known and potential sources of PFAS that may contribute to groundwater contamination in Hastings' municipal wells
- Identified 54 potential source locations based on current/historical industry and use, and existing sample data
- Multiple sources may be impacting Hastings' wells, and each well may be impacted by different sources



Sampling/drilling efforts



Sampling/drilling efforts include:

- Sampled municipal wells, private wells, irrigation wells, and surface water
- Drilling new wells at two potential source locations: former Curtis Electronics and Oak Ridge Manor Apartments
- Evaluation of existing PFAS data from Mississippi River
- Results ready this summer

Pine Street Dump Superfund site



Pine St Dump site:

- Pine Street Dump was operated by the city of Hastings from the 1930s until approximately 1957 and may have been used for disposal of industrial solvents and mixed municipal wastes
- Installed and sampled 5 monitoring wells and sampled two deep irrigation wells
- Results ready this summer

Bedrock Geology **ORDOVICIAN** HASTINGS 2 Od, Decorah Shale HASTINGS 3 Opg. Platteville and Glenwood Fms. HASTINGS 5 Os, St. Peter Sandstone Ops, Prairie du Chien Gp., Shakopee Fm. Opo, Prairie du Chien Gp., Oneota Dolomite **CAMBRIAN** Ci. Jordan Sandstone Cs, St. Lawrence Fm. Ct, Tunnel City Group HASTINGS 4 Cw, Wonewoc Sandstone Ce, Eau Claire Fm. Cm, Mt. Simon Sandstone HASTINGS 6

Additional potential pathways

- Primary groundwater flow direction is from the SW to the NE towards the Mississippi River
- All groundwater aquifers from the north side of the Mississippi empty into the river except the deepest (Mt. Simon)
- There are underground features (faults and fractured rock) that may provide pathways for contamination to travel from the north towards Hastings

3M efforts

- 3M finalized a report in 2023 that showed there was migration of PFAS from the 3M Cottage Grove Facility (facility) into the Mississippi River
- A specific PFAS compound appears to be unique to the facility and has been found in one of Hastings' municipal wells
- MPCA required 3M to complete an evaluation in northern Dakota County to determine if the facility is impacting the Hasting's municipal wells
- More data is needed to understand the relationship between the different portions of the facility and Hastings's municipal wells

What's next?

- Investigation work:
 - Monitor groundwater at Pine Street dump, former Dowco, and Oak Ridge apartments
 - Additional drilling and/or sample collection at other potential sources identified by the desktop evaluation
- Evaluate groundwater-surface water interactions and interaction between Hastings' municipal wells
- 3M continue evaluation and sampling
- Bring additional PRPs into the Superfund program as they are identified

Funding assistance

- MPCA proposed and received \$25 million last year from the Legislature to help find potential responsible parties, sample and treat private drinking water wells, and provide cities grants to plan and design treatment systems
 - City of Hastings received \$3.2 million to design drinking water treatment facilities
- State agencies have a funding request before the Legislature to provide funds to communities for the cost of building treatment systems
- MDH and PFA will receive \$120 million over 5 years from the federal government for addressing Contaminants of Emerging Concern (PFAS is one of the eligible contaminants)