DEPARTMENT OF NATURAL RESOURCES

Update
Minnesota-3M Settlement
PFAS Contamination in the East Metropolitan Area

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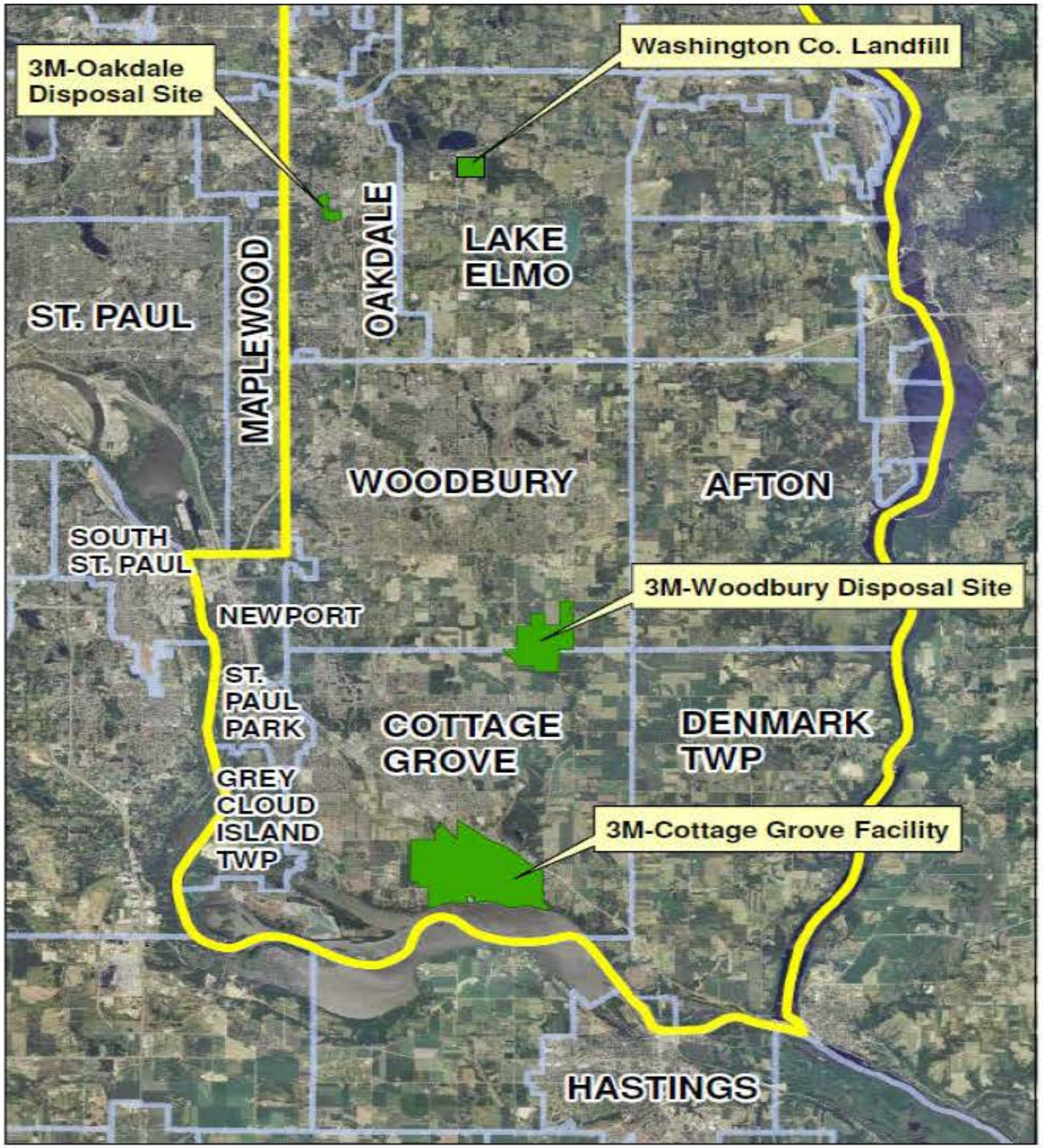
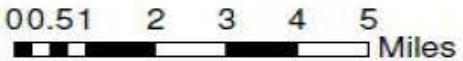
Widespread Groundwater Contamination in East Metro Area

1. In 2002, 3M informs MPCA of PFAS in wells at Cottage Grove facility
2. Resulted in 2007 Consent Order
3. 2018 3M Settlement
    - $700 million currently available

Location of 3M PFC Sites in Washington Co., Minnesota





Current Focus

First priority: To provide clean sustainable drinking water in the East Metro area to meet current and future needs.

MPCA and DNR evaluate and select options to fund working closely with:

- Citizen-Business Work Group
- Government-3M Working Group
- Technical Subgroup 1 (Drinking Water Supply)
- Local Governmental Units
- Public

Meeting the Needs of Affected Communities—Collaboration

Roles and contributions to the effort:

- Local Governmental Units understand their needs, intrinsic complexities, and constraints, and can provide necessary input
- MPCA & DNR:
  - Allocate (and are constrained by) funding
  - Provide up-front engineering services
  - Provide technical tools and expertise

An on-going dialogue between state agencies and communities is supported through:

- Monthly meetings of Government-3M Working Group and Technical Subgroup 1
- One-on-one meetings with communities

Conceptual Drinking Water Supply Plan (CDWSP)

Scenarios (18 total)

1. **Community-specific (two scenarios)**
   - Granular Activated Carbon (GAC) and Ion Exchange (IX)
2. **Regional (six scenarios)**
   - Water source: SPRWS extension, Mississippi River, St. Croix River, and/or new well field(s)
3. **Treatment (eight scenarios)**
   - GAC and IX
   - Four different treatment thresholds
4. **Integrated (two scenarios)**
   - GAC and IX

Key considerations for evaluating the scenarios

1. Health Index (HI) threshold for treatment
2. Long-term costs
3. Setting aside funds to address future uncertainties
4. Addressing sustainability and resilience

Approach to Evaluate Options and Scenarios

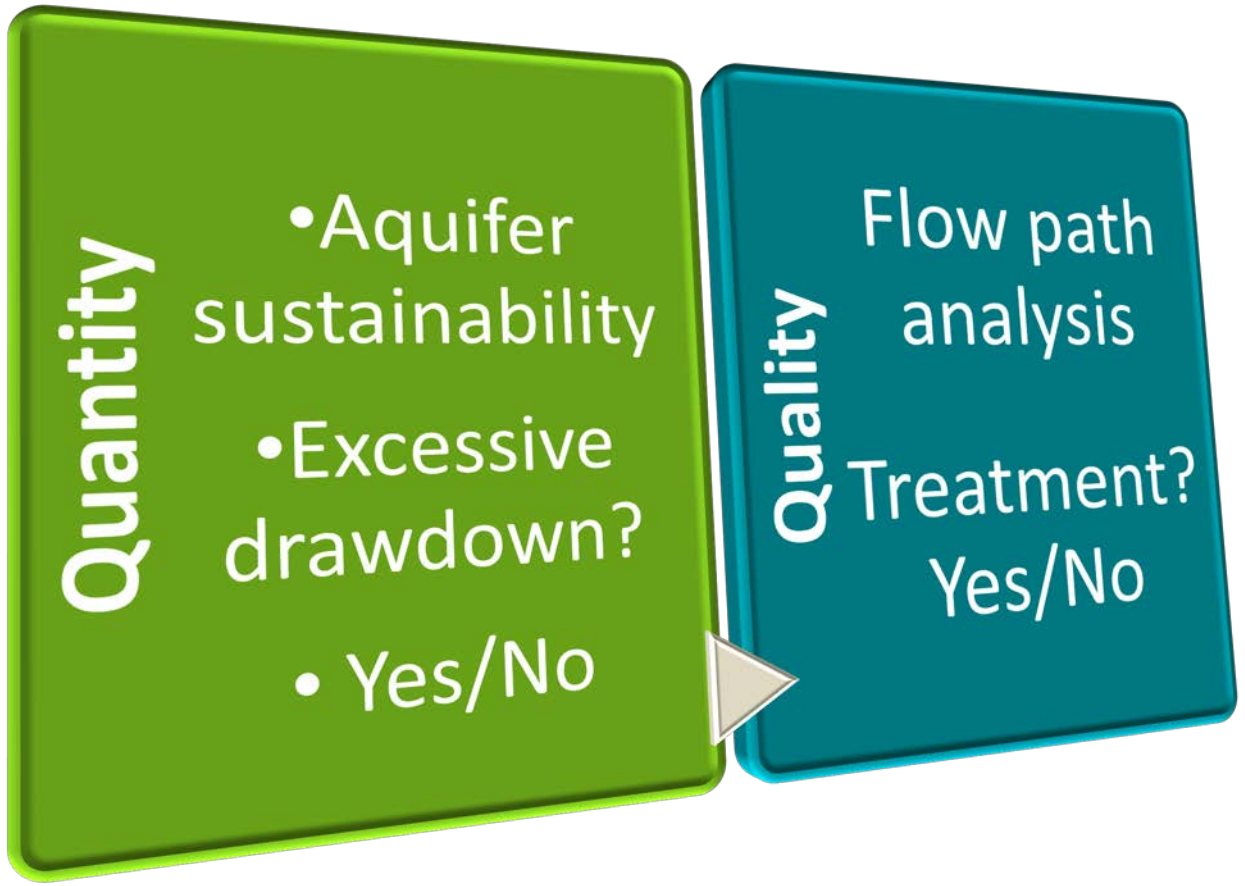
Modeling Tools:

- Drinking Water Supply System Hydraulic Model:
  - Evaluate feasibility of these alternatives for current water supply systems and future projected growth
- Groundwater Flow Model:
  - Impacts to groundwater and groundwater-dependent resources (e.g., White Bear Lake)

Preliminary scenario results

Objectives

- Is there enough water?
- Does it require treatment?

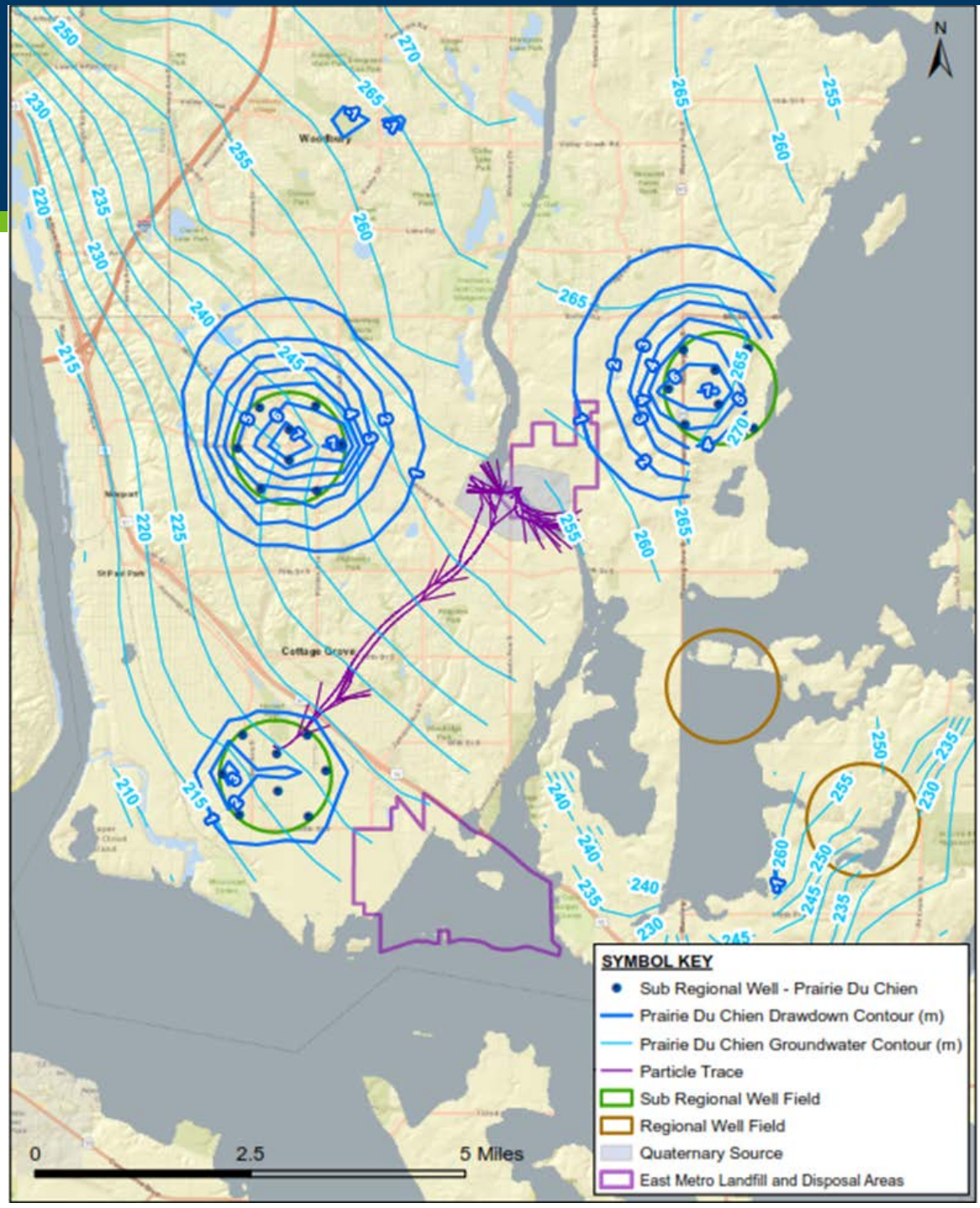


Example of Model Output

Sub-Regional Scenario

Prairie Du Chien Aquifer

Wet Condition Contours



Key Considerations for Evaluating the Scenarios

1. Health Index (HI) threshold for treatment
2. Long-term costs
3. Setting aside funds to address future uncertainties
4. Addressing sustainability and resilience
5. Cost-sharing

Refine scenarios and determine good/better/best

- MPCA and DNR consider many factors to evaluate and refine scenarios:
  - Complies with Settlement requirements
  - Feedback from multiple parties, including impacted communities
  - Consultation with MDH and project consultants (Wood and Abt)
  - Modeling results, including DNR's White Bear Lake groundwater model
- Scenarios are updated based on feedback from steps above in an iterative process
- Co-Trustees then recommend three scenarios as Good/Better/Best

Schedule

2020

- June – July: Continue evaluation of scenarios for the CDWSP
- August: Draft Good/Better/Best recommendations
- September – October: Meet with communities to discuss recommendations, public meetings, and public comment period
- November: Finalize evaluations and select final decision
- December: Finalize CDWSP

2021

- January: Communicate final CDWSP, public meeting.

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Questions?

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