

Summary of the Final Plan and Implementation

3M PFC Settlement Work Group Meetings

September 14-15, 2021

Overview and purpose

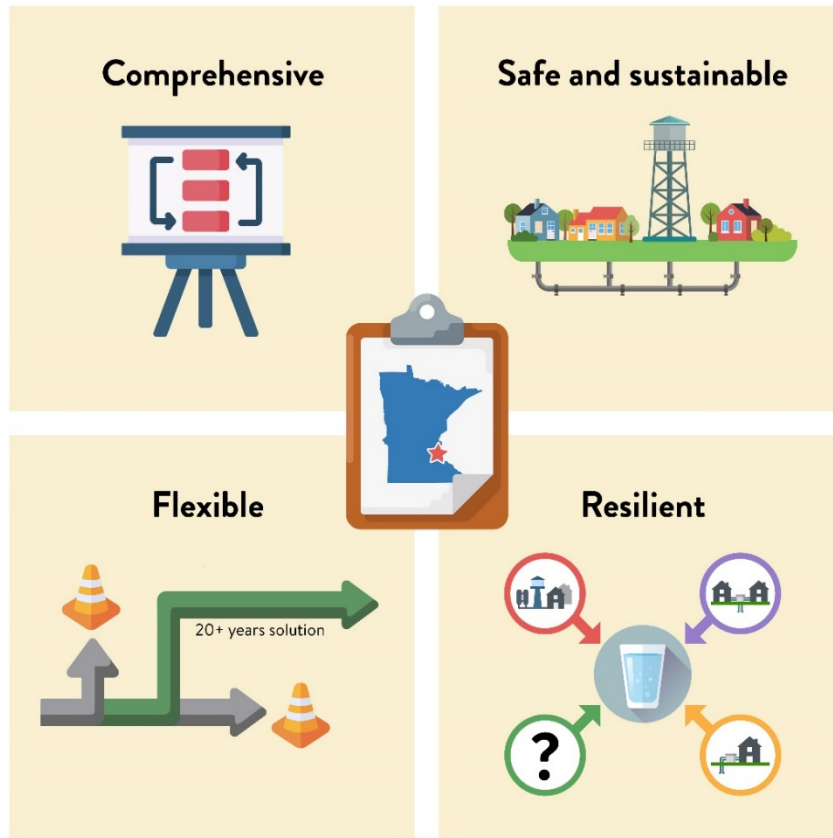
- Review key funding allocation decisions in the Final Plan
- Overview of projects included in the Final Plan for each community
- Plan implementation and next steps



Review key funding allocations in the Final Plan

- Review funding allocations and other decisions
- Explain rationale behind some key funding decisions in the Final Plan:
 1. Pretreatment
 2. O&M
 3. Drinking water protection
 4. Contingency
- Work group discussion

The final plan is...



Comprehensive approach that addresses what is coming out of the tap, as well as the source

Safe and sustainable plan that protects drinking water now and into the future

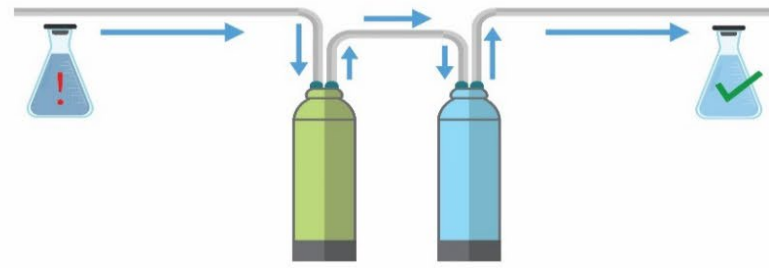
Resilient plan that can adapt as we learn more about PFAS

Flexible funding for communities

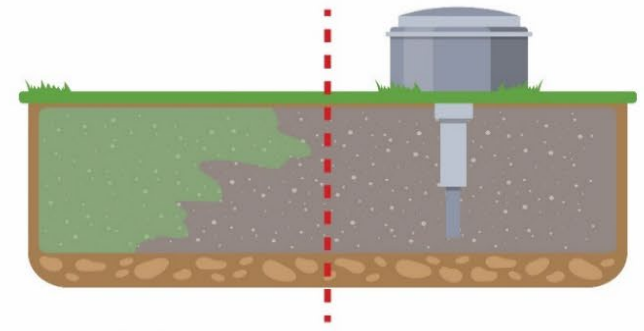
Plan priorities



Capital infrastructure



Operation & maintenance



Drinking water protection

Key decisions points

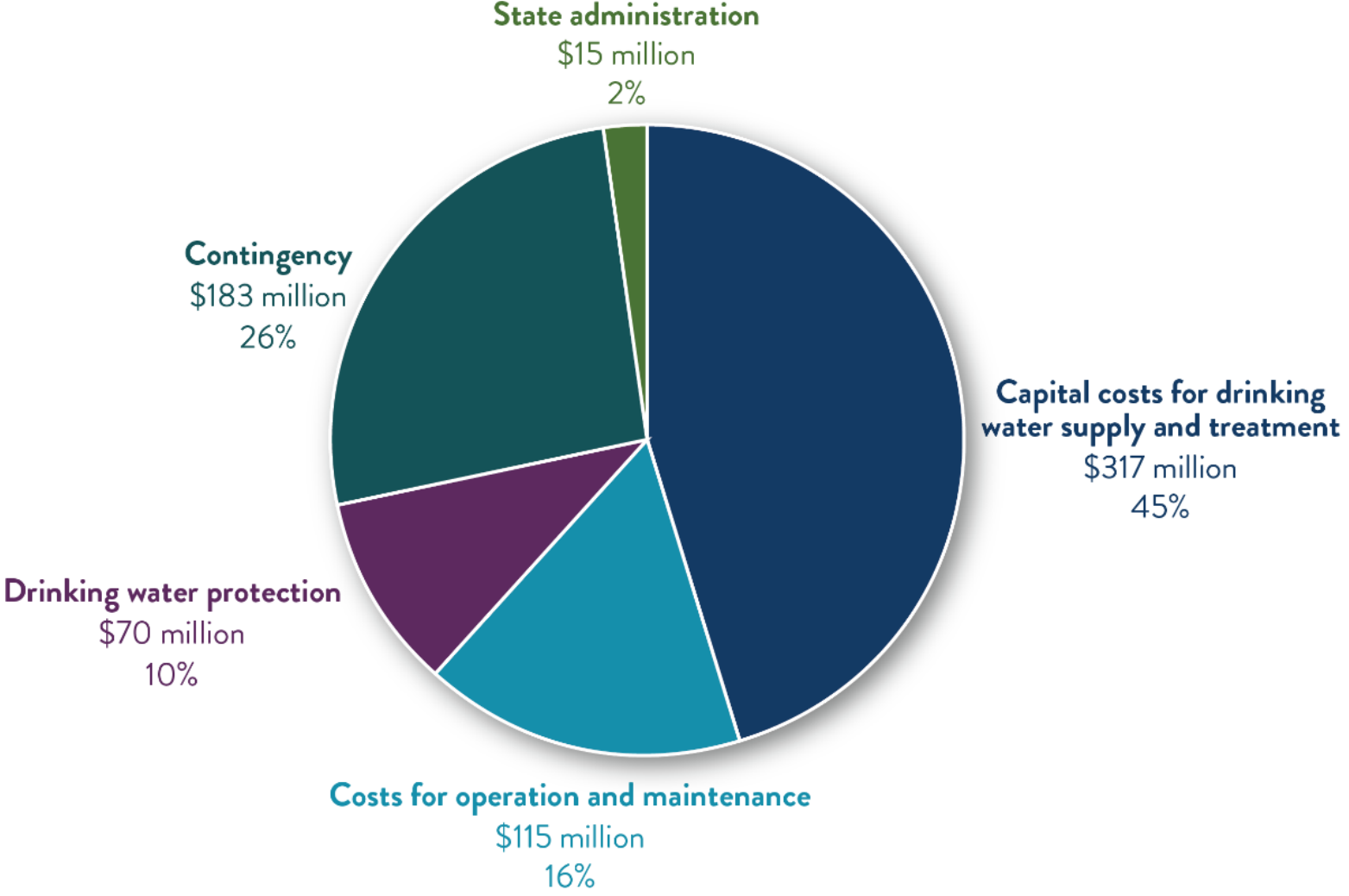
- Treat drinking water wells with a health index of at least 0.5 ($HI \geq 0.5$) using the current health index calculation
- Increased capital for pretreatment, stormwater, and inflation
- West Lakeland Township to remain on private wells and receive whole home treatment systems, as applicable
- Municipal system O&M: 20 years
- Private well O&M: 30 years

Key decisions points

- Eliminated phase II neighborhood municipal connections funding allocation
- Eliminated conservation/sustainability funding allocation
- Increased contingency for cost overruns, future treatment and new drinking water sources, if needed
- Funding reallocation strategy to cover future shortfalls and surpluses as costs are refined during implementation

Final plan

Item	Final allocation (Dollars in Millions)
Capital	\$317
PWS O&M	\$87 / 20 yrs
POETS O&M	\$28 / 30 yrs
Drinking water protection	\$70
Contingency	\$183
Sustainability & conservation	\$0
Phase II capital (neighborhoods)	\$0
State administration costs	\$15
Total	\$700



Pretreatment

- Pretreatment is meant to remove metals in groundwater to help extend the life of GAC or IX treatment media and reduce O&M costs
- Since the primary benefit is to reduce frequency of treatment media change outs and reduce O&M costs, the Plan requires a cost-benefit (C/B) analysis to determine whether and where pretreatment is warranted
- If the capital cost of pretreatment is likely to be offset by long-term savings on treatment O&M, the Plan will fund pretreatment
- Co-Trustees will work with communities to scope the necessary C/B analyses, which can be implemented as part of planning and design
- The Final Plan dedicates \$25 million for potential pretreatment capital costs

O&M allocations

- \$87 million allocated to cover annual treatment O&M costs for municipal treatment systems; \$28 million allocated for POETS O&M
- These two allocations will be managed separately by SBI
- With best estimates for inflation and interest earnings on the fund, this is estimated to cover about 20 years for municipal systems and 30 years for POETSs
- O&M costs ramp up as projects are implemented. Costs will be covered as they arise until the two funds are depleted

O&M allocations (continued)

- The allocations and estimated durations are lower compared to the draft recommended options from September 2020
- Co-Trustees balanced among capital costs and covering future uncertainties. Capital costs went up compared to the draft Plan and future risks/uncertainties were also prioritized.
- Co-Trustees prioritized a longer duration for POETSs given the higher annual cost of maintaining a POETS compared to the typical annual cost for municipal water service

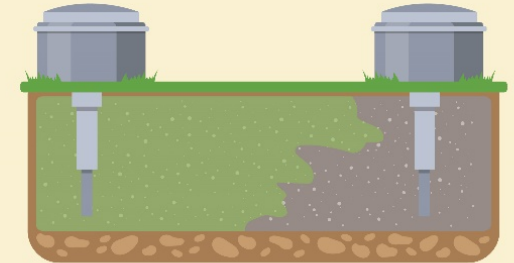
Drinking water protection

- The \$70 million allocated to drinking water protection will improve water quality at the source, reducing future treatment needs
- This addresses some of the goals of Priority 1 of the Settlement Agreement
- Potential actions are being evaluated, and may include restoration of groundwater (beyond 3M's actions at the three disposal sites) and/or restoration of surface water and sediment that is connected to groundwater aquifers
- Restoration actions could include multi-benefit wells that treat groundwater and then supply the treated water to one or more communities.

- \$183 million set aside to address future needs that are difficult to predict now
- The contingency fund will be managed in coordination with work groups and communities

How contingencies work

- 1 PFAS protective levels contingency**
If the PFAS moves to new areas or the protective levels of PFAS changes, money is reserved to treat additional wells



- 2 Capital cost contingency**
Additional money is set aside for capital cost overruns



- 3 Alternative drinking water source**
Additional money is reserved to ensure sustainable drinking water sources for the east metro communities



Contingency (continued)

- In balancing among initial capital costs, long-term O&M costs, and other priorities, Co-Trustees concluded that \$183 million is reasonable to fund future uncertainties.
- Two estimates related to future sources of uncertainty helped inform the amount set aside for contingency:
 1. Potential future treatment – based on treatment needs identified using particle tracking model results, as well as trends in recent sample results in Woodbury
 2. Potential alternative sources of water – based on cost estimate for Lake Elmo and Oakdale to switch to SPRWS if necessary to comply White Bear Lake court order
- The contingency amount is based on a conservative approach because it is unlikely that all the future needs will actually arise in the future



Overview of projects included in the Final Plan for each community

Final Plan per community

- Alphabetical listing
- Higher level capital and O&M discussed in Chapter 9
- Basis for costs per community provided in Appendix E and Appendix F
- O&M for 20 years for municipal treatment and 30 years for POETSS
 - Estimates provided in Chapter 9

Plan includes:

- ✓ POETSs only
- ✓ O&M estimated for 30 years

Capital project category	Details for Afton	Total cost in the Final Plan
Capital and O&M for POETSs installed since the Settlement	39 existing POETSs	\$169,000
Estimated new GAC POETSs	13 estimated new POETSs	\$32,500
Contingency	25% added for contingency	\$8,125
Professional services	15% added for professional services	\$4,875
Total capital		\$214,500

Cottage Grove

Plan includes:

- ✓ Municipal system improvements
- ✓ Home connections
- ✓ POETSs
- ✓ O&M estimated for 20 year for municipal treatment and 30 years for POETSs

Capital project category	Details for Cottage Grove	Total cost in the Final Plan
Capital and O&M for POETSs installed since the Settlement	32 existing POETSs	\$156,000
Estimated new GAC POETSs	49 estimated new POETSs	\$122,500
Treatment on municipal wells	2 WTPs and 1 sewer line to convey backwash	\$21,265,750
New wells and well modifications	1 replacement well for wells 1 and 2; modifications and SCADA upgrades for 9 wells	\$3,978,000
Distribution system	3.7 miles of raw water mains, 67 neighborhood mains and home connections (i.e., service laterals); 16" distribution line to grange tank	\$11,408,918
Land acquisition	12.3 acres for treatment plants and easements for mains	\$4,429,510
Stormwater compliance	Stormwater costs 5% of linear and facility projects	\$1,691,733
Other	Municipal well sealing and demolition; private well sealing; existing GAC POETSs removal; City connection fees	\$2,161,800
Contingency	25% added for contingency	\$11,264,553
Professional services	15% added for professional services	\$6,758,732
Total capital		\$63,237,496

Plan includes:

- ✓ POETSs only
- ✓ O&M estimated for 30 years for POETSs

Capital project category	Details for Denmark	Total cost in the Final Plan
Estimated new GAC POETSs	4 estimated new POETSs	\$10,000
Contingency	25% added for contingency	\$2,500
Professional services	15% added for professional services	\$1,500
Total capital		\$14,000

Grey Cloud Island

Plan includes:

- ✓ POETSs only
- ✓ O&M estimated for 30 years for POETSs

Capital project category	Details for Grey Cloud Island	Total cost in the Final Plan
Capital and O&M for POETSs installed since the Settlement	8 existing POETSs	\$38,000
Estimated new GAC POETSs	23 estimated new POETSs	\$57,500
Contingency	25% added for contingency	\$14,375
Professional services	15% added for professional services	\$8,625
Total capital		\$118,500

Lake Elmo

Plan includes:

- ✓ Municipal system improvements*
- ✓ Home connections
- ✓ POETSS
- ✓ O&M estimated for 20 years for municipal treatment and 30 years for POETSS

Capital project category	Details for Lake Elmo	Total cost in the Final Plan
Capital and O&M for POETSS installed since the Settlement	7 existing POETSS	\$27,500
Estimated new GAC POETSS	18 estimated new POETSS	\$45,000
Interconnect and booster pump station	1 interconnect station and 1 booster pump station for Woodbury to Lake Elmo	\$2,075,500
Distribution system	2.37 miles of neighborhood distribution mains in Lake Elmo for 257 homes; 3.59 miles of transmission or connecting mains; 0.48 miles of raw water distribution mains; 800 linear feet of mains from distribution system to booster pump station; connections for 97 homes in Lake Elmo (i.e., service laterals)	\$12,810,369
Land acquisition	12.4 acres in Lake Elmo and 1.8 acres in Woodbury	\$2,820,289
Stormwater compliance	Stormwater costs 30% of linear and facility projects in Lake Elmo and 25% of projects in Woodbury	\$4,166,639
Other	97 private well sealings; removal of 25 existing POETSS; City fees for new connections	\$809,280
Contingency	25% added for contingency	\$5,681,769
Professional services	15% added for professional services	\$3,409,062
Total capital		\$31,845,409

*The costs shown include the highest cost alternative for capital (interconnect with Woodbury)

Plan includes:

- ✓ Home connections
- ✓ POETSs
- ✓ O&M estimated for 30 years for POETSs

Capital project category	Details for Lakeland, Lakeland Shores	Total cost in the Final Plan
Capital and O&M for POETSs installed since the Settlement	1 existing POETS	\$4,500
Distribution system	Connecting 29 homes to existing mains (i.e., service laterals)	\$144,275
Other	Removal of 4 existing POETSs; sealing 309 private wells; City fees for new connections	\$859,825
Contingency	25% added for contingency	\$251,025
Professional services	15% added for professional services	\$150,615
Total capital		\$1,410,240

Plan includes:

- ✓ POETSs only
- ✓ O&M estimated for 30 years for POETSs

Capital project category	Details for Maplewood	Total cost in the Final Plan
GAC POETSs	5 estimated new POETSs	\$12,500
Contingency	25% added for contingency	\$3,125
Professional services	15% added for professional services	\$1,875
Total capital		\$17,500

Plan includes:

- ✓ Municipal system improvements
- ✓ Home connections
- ✓ POETSs
- ✓ O&M estimated for 30 years for POETSs (no municipal O&M)

Capital project category	Details for Newport	Total cost in the Final Plan
Estimated new GAC POETSs	6 estimated new POETSs	\$15,000
Interconnect stations	1 interconnect station with Woodbury and 1 interconnect station with Cottage Grove	\$400,000
Distribution system	0.51 miles of interconnect mains with Woodbury; 0.76 miles of interconnect mains with Cottage Grove; connecting 3 homes to existing mains (i.e., service laterals)	\$1,134,700
Land acquisition	1.5 acres for water main easements	\$208,370
Stormwater compliance	Stormwater costs 5% of linear and facility projects	\$75,610
Other	Demolition of 2 municipal wells; sealing 3 wells; removal of 1 existing POETSs; City fees for new connections	\$274,200
Contingency	25% added for contingency	\$526,970
Professional services	15% added for professional services	\$316,182
Total capital		\$2,951,032

Plan includes:

- ✓ Municipal system improvements
- ✓ Home connections
- ✓ O&M estimated for 20 years for municipal treatment

Capital project category	Details for Oakdale	Total cost in the Final Plan
Treatment on municipal wells	1 WTP	\$5,890,000
New wells and well modifications	3 new wells to replace wells 1, 2, and 7; well and SCADA upgrades to 2 wells	\$6,934,000
Distribution system	0.53 miles of raw water transmission mains, 4 home connections (i.e., service laterals)	\$1,135,942
Land acquisition	3.1 acres for treatment plants and easements for mains	\$561,875
Stormwater compliance	Stormwater costs 5% of linear and facility projects	\$2,483,983
Other	Demolition and sealing of 4 municipal wells; demolition of temporary treatment facility at well 7; WTP site prep; City fees for new connections	\$1,284,920
Contingency	25% added for contingency	\$4,572,680
Professional services	15% added for professional services	\$2,743,608
Total capital		\$25,607,008

Prairie Island Indian Community

Plan includes:

- ✓ Municipal system improvements
- ✓ Home connections
- ✓ O&M estimated for 20 years for municipal treatment

Capital project category	Details for Prairie Island Indian Community	Total cost in the Final Plan
Treatment on municipal wells	1 WTP	\$1,734,956
New wells and well modifications	Well upgrades to 1 well	\$113,250
Distribution system	1.66 miles of mains; 80 home connections (i.e., service laterals); 1 60k gallon storage tank	\$2,022,610
Land acquisition	1.5 acres for WTP site and easements for distribution mains	\$211,702
Stormwater compliance	Stormwater costs 30% of linear and facility projects	\$1,043,270
Contingency	25% added for contingency	\$1,281,447
Professional services	15% added for professional services	\$768,868
Total capital		\$7,176,102

St. Paul Park

Plan includes:

- ✓ Municipal system improvements
- ✓ Home connections
- ✓ POETSSs
- ✓ O&M estimated for 20 years for municipal treatment and 30 years for POETSSs

Capital project category	Details for St. Paul Park	Total cost in the Final Plan
Capital and O&M for POETSSs installed since the Settlement	4 existing POETSSs	\$21,000
Treatment on municipal wells	1 WTP	\$5,706,804
New wells and well modifications	Well & SCADA upgrades to 3 wells	\$600,000
Distribution system	0.61 miles of raw water transmission mains; 1.05 miles of water distribution mains; 6 home connections (i.e., service laterals)	\$4,098,617
Land acquisition	3 acres for WTP site and water main easements	\$408,592
Stormwater compliance	Stormwater costs 5% of linear and facility projects	\$488,021
Other	Sealing 6 wells; removing 1 existing POETSSs; City fees for new connections	\$26,110
Contingency	25% added for contingency	\$2,832,036
Professional services	15% added for professional services	\$1,699,222
Total capital		\$15,880,401

West Lakeland

Plan includes:

- ✓ POETSs only
- ✓ O&M estimated for 30 years for POETSs

Capital project category	Details for West Lakeland	Total cost in the Final Plan
Capital and O&M for POETSs installed since the Settlement	412 existing POETSs	\$1,958,000
Estimated new GAC POETSs	103 estimated new POETSs	\$257,500
Contingency	25% added for contingency	\$64,375
Professional services	15% added for professional services	\$38,625
Total Capital		\$2,318,500

Plan includes:

- ✓ Municipal system improvements
- ✓ Home connections
- ✓ POETSs
- ✓ O&M estimated for 20 year for municipal treatment and 30 years for POETSs

Capital project category	Details for Woodbury	Total cost in the Final Plan
Capital and O&M for POETSs installed since the Settlement	1 existing POETS	\$3,500
Estimated new GAC POETSs	18 estimated new POETSs	\$45,000
Treatment on municipal wells	1 WTP and sewer line to convey backwash	\$20,502,800
New wells and well modifications	Replacement for Well 1 in South Well Field and well & SCADA upgrades for 15 wells	\$5,178,000
Distribution system	12.81 miles of mains, 5 home connections (i.e., service laterals); 2 pressure reducing valves	\$41,345,394
Land acquisition	16 acres for treatment plants and easements for mains	\$6,709,000
Stormwater compliance	Stormwater costs 25% of linear and facility projects	\$15,458,299
Other	Municipal well sealing and demolition; private well sealing; City connection fees	\$151,115
Contingency	25% added for contingency	\$22,347,402
Professional services	15% added for professional services	\$13,408,441
Total capital		\$125,148,951



Implementation and next steps

Settlement funding for project implementation

- The MPCA and DNR are ready to provide communities with Settlement funds to begin project implementation
 - For private well owners, the MPCA will continue to manage the installation and maintenance of POETS using contractors
 - For municipal capital projects:
 - For planning and/or design of municipal capital projects, the MPCA has a grant form available that allows communities to access grant funding under the Conceptual Plan
 - MPCA will develop similar forms for construction and O&M phases
 - For any construction-ready expedited municipal capital projects, please reach out to MPCA for guidance

Private well POETSS installation

- MPCA will continue to manage the installation and maintenance of POETSS using contractors
 - MPCA to notify homeowners of eligibility for POETS installation
 - During implementation of the Settlement, private wells will continue to be tested by the State of Minnesota for PFAS at no cost to the homeowners: <https://www.pca.state.mn.us/waste/well-sampling-east-metro-area>
 - Homeowners can request that their well be added to the sampling program by using the Well Sampling Request form: <https://survey.vovici.com/se/56206EE36F5EF3E5>
- Standard schedule of media change-out of private wells is once per year
 - Could be adjusted depending on actual use and performance of the POETSS
- Contacts:
 - Tim Lockrem (primary): Timothy.Lockrem@state.mn.us, 651-757-2686
 - Chris Formby (backup): Christopher.Formby@state.mn.us, 651-757-2712
 - Gary Krueger (supervisor): Gary.krueger@state.mn.us, 651-757-2509

Home connections

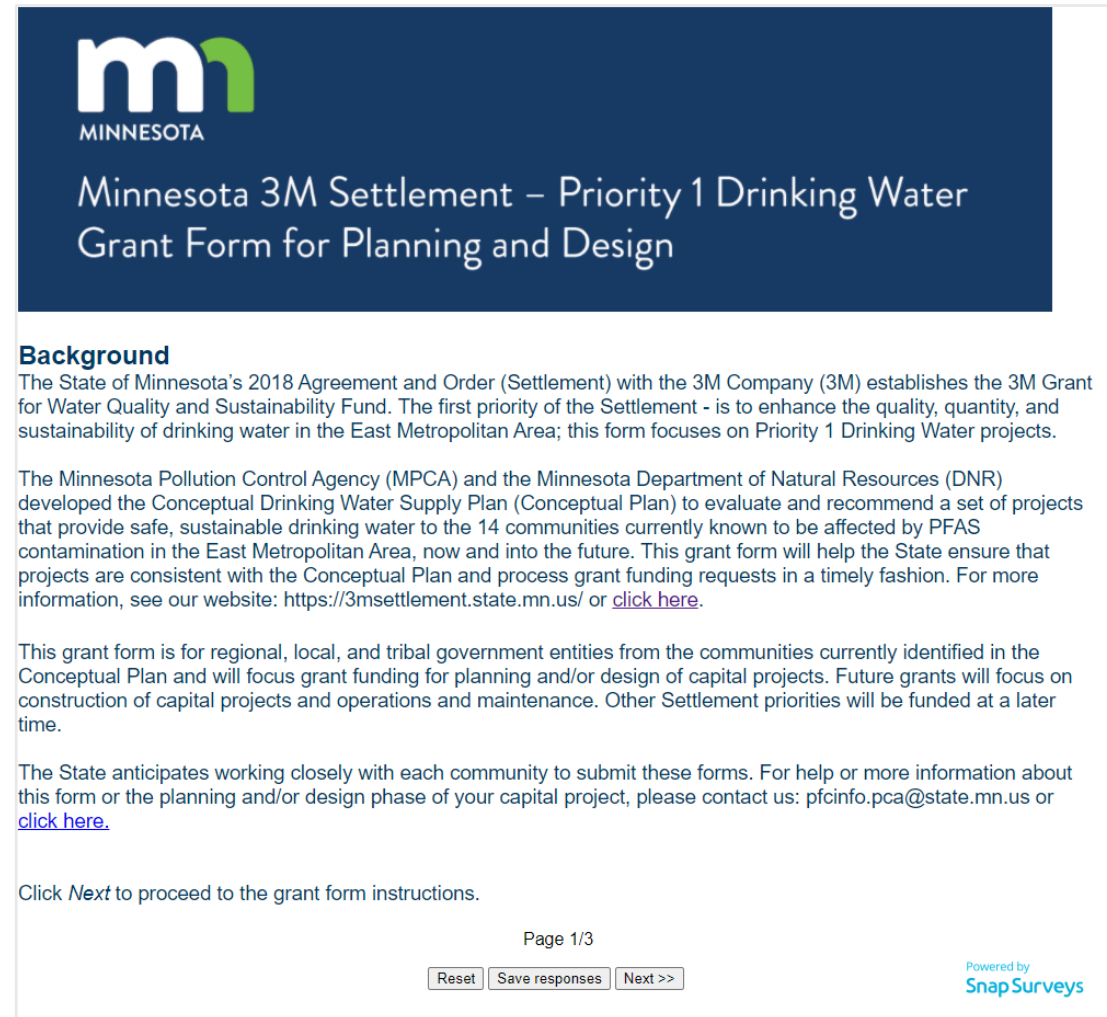
- Individual home connections where municipal supply is readily available will be reimbursed by MPCA
 - MPCA will inform homeowner regarding eligibility for home connection and process for reimbursement
 - Resident obtains contractor to complete home connection
 - Private well must be sealed, costs reimbursed
 - Contact Tim Lockrem, Chris Formby or Gary Krueger
- Neighborhood or community-wide connection projects to be done through grants with community
 - Private wells must be sealed
- MPCA/Community coordination during implementation

Municipal capital projects

- First need is to distribute funding for capital projects design (and construction of capital projects that received early design funding)
 - Funding for construction and O&M will follow
- Will track progress of capital projects
 - Grant agreements will require progress and cost updates to State
 - Projects will likely have multiple grants for different phases. Follow-on requests should reference prior Grant IDs
- Use an online grant form
 - Relatively simple information request. All on one page so you can preview questions before beginning to fill out form.
 - Simple form balances need to distribute funding with State's Statutory requirements and documentation of 3M grant expenditures

Settlement funding for capital projects

- MPCA developed grant form for regional, local, and tribal government entities to plan and/or design for capital projects identified in the Conceptual Plan
 - Future grants & forms will focus on construction of capital projects and operations and maintenance
- Grant form available at Final Drinking Water Supply Plan webpage:
<https://3msettlement.state.mn.us/investing-east-metro-drinking-water>
- For more information, contact:
pfasinfo.pca@state.mn.us



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MINNESOTA

Minnesota 3M Settlement – Priority 1 Drinking Water Grant Form for Planning and Design

Background
The State of Minnesota's 2018 Agreement and Order (Settlement) with the 3M Company (3M) establishes the 3M Grant for Water Quality and Sustainability Fund. The first priority of the Settlement - is to enhance the quality, quantity, and sustainability of drinking water in the East Metropolitan Area; this form focuses on Priority 1 Drinking Water projects.

The Minnesota Pollution Control Agency (MPCA) and the Minnesota Department of Natural Resources (DNR) developed the Conceptual Drinking Water Supply Plan (Conceptual Plan) to evaluate and recommend a set of projects that provide safe, sustainable drinking water to the 14 communities currently known to be affected by PFAS contamination in the East Metropolitan Area, now and into the future. This grant form will help the State ensure that projects are consistent with the Conceptual Plan and process grant funding requests in a timely fashion. For more information, see our website: <https://3msettlement.state.mn.us/> or [click here](#).

This grant form is for regional, local, and tribal government entities from the communities currently identified in the Conceptual Plan and will focus grant funding for planning and/or design of capital projects. Future grants will focus on construction of capital projects and operations and maintenance. Other Settlement priorities will be funded at a later time.

The State anticipates working closely with each community to submit these forms. For help or more information about this form or the planning and/or design phase of your capital project, please contact us: pfasinfo.pca@state.mn.us or [click here](#).

Click *Next* to proceed to the grant form instructions.

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Settlement funding for capital projects

- Priority 1 Drinking Water Grant form for Planning and Design provides background and instructions, and then asks for responses to 6 sections:
 - A. Grantee information**
 - B. General Project Information:** Project description, including project location, and how the project aligns with Conceptual Plan
 - C. Budget information:** Estimated planning and/or design costs, budget breakdown for amount requested from 3M Settlement, and how the budget aligns with the Conceptual Plan (e.g., the planning and design budget should be less than your community's total professional services budget)
 - D. Conflict of Interest:** Confirmation that there is no individual or organizational COI due to competing duties or loyalties
 - E. Supporting Documents:** Opportunity to attach reports, designs, or other supporting documents
 - F. Additional comments:** Opportunity to provide additional comments

Municipal capital projects - Grant process

PRE-AWARD PHASE

COMPLETING
THE FORM



RECEIVING
THE FORM



REVIEWING
THE FORM

AWARD PHASE

COMMUNICATION WITH THE
GRANT RECIPIENT



SETTING UP
THE GRANT



BEGINNING THE
HARD WORK

POST-AWARD PHASE

PROVIDING SUPPORT
AND OVERSIGHT



REPORTING
PROGRESS



GRANT
CLOSE-OUT

Municipal capital projects – How will funding be provided?

- Advance payment can be made available to cover required costs related to starting large capital projects
 - Grant Agreement must be in place first
- Reimbursement of costs for approved invoices starting with 1st construction invoice
 - Grantee must present itemized invoice for the services actually performed, monthly or at least quarterly
 - State's Authorized Representative accepts the invoiced services
 - Invoices must be emailed to mpca.ap@state.mn.us
- The Grantee must return to the State any unexpended funds at grant closeout

Municipal capital projects – Change-outs

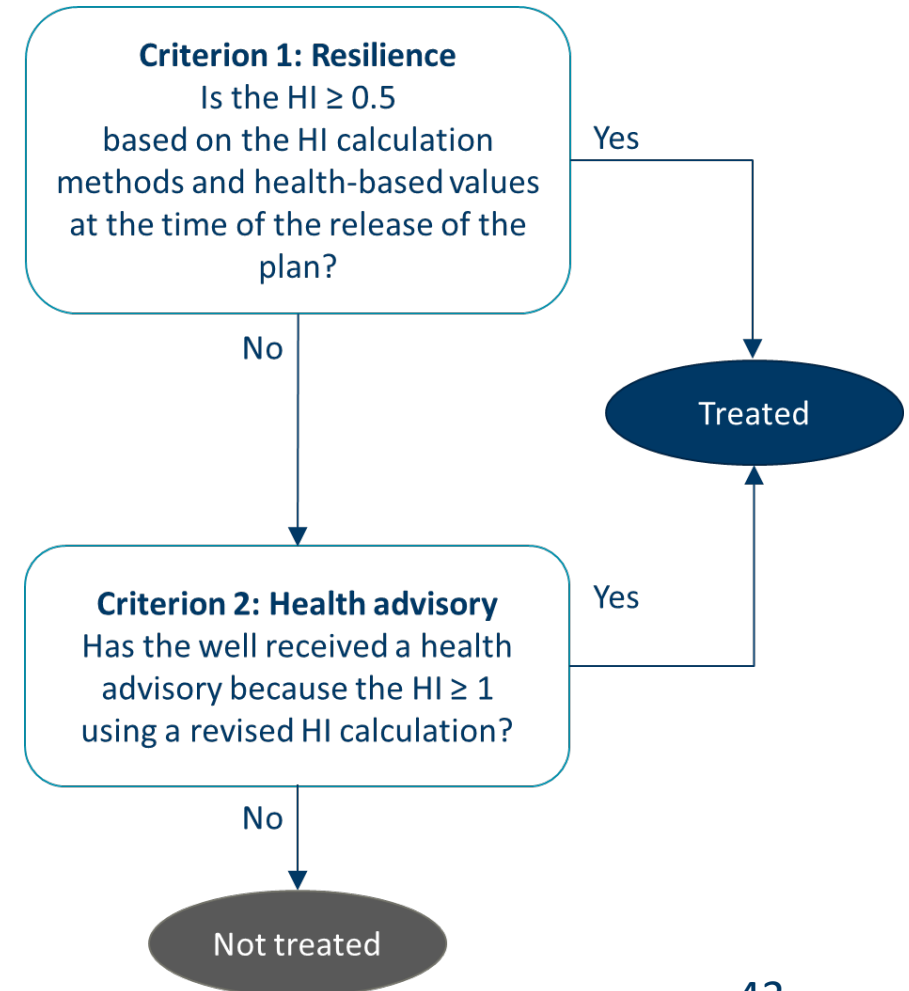
- Change-outs of media in municipal systems will be managed under grant agreements for O&M and based on:
 - Monitoring of raw water quality
 - Number of treatment vessels
 - Post-filter testing
 - Performance of filter media
- Frequency will vary across the communities
- MPCA will coordinate with community to determine appropriate timing and plan for reimbursable change-outs

Drinking water protection

- Co-Trustees are currently evaluating actions that would protect drinking water by reducing PFAS concentrations in groundwater or protecting areas from migration of PFAS
- Co-Trustees will also explore other types of drinking water protection projects
- Using results, Co-Trustees will identify potential projects and determine how to apply funding to actions that are likely to yield the most benefit.

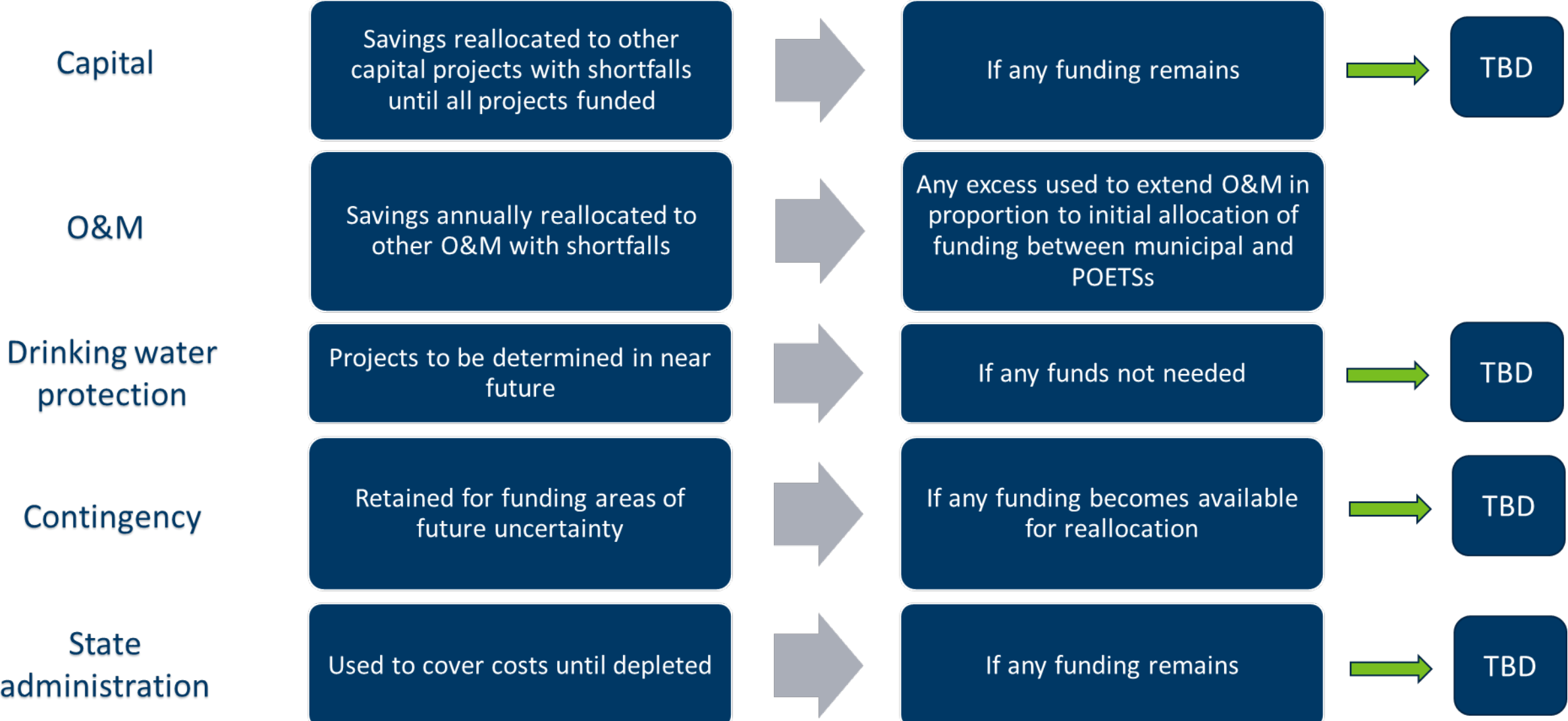
Contingency

- Contingency will be used to treat additional wells
 - **Criterion 1: Resilience.** Additional wells that exceed the treatment threshold of $HI \geq 0.5$ using the HI calculation at the time of the release of the Final Plan
 - **Criterion 2: Health advisory.** Additional wells that receive a health advisory. Should the health-based guidance for PFAS change, the resulting recalculation of the HI could mean that additional wells receive a health advisory because they have an $HI \geq 1$ using an updated HI calculation method and values.
- Contingency may also be used to provide alternative sources of water for certain PFAS-affected East Metropolitan Area communities should it become necessary due to court-ordered restrictions on use of aquifers that affect White Bear Lake water levels



- As implementation progresses, actual costs may differ from initial amounts for each fund allocation
- Co-Trustees will periodically (at a minimum annually)
 - Reevaluate progress
 - Review how actual costs compare to estimates
 - Monitor where and when funds may warrant reallocation
 - Consider new information that has evolved over the previous year
 - Obtain feedback from the work groups
- If necessary, Co-Trustees will determine how to spend any significant excess funds from fund allocations with input from the work groups and public (see next slide)

Strategy for fund reallocation



Priority 2 of the Settlement

- Priority 2: “projects that restore and enhance aquatic resources, wildlife, habitat, fishing, resource improvement, and outdoor recreational opportunities”
- DNR and MPCA engaged in initial start-up planning for work on Priority 2
 - Identify natural resource restoration priorities, goals, and evaluation criteria with planning support from work group
 - Will likely be more traditional and streamline grant solicitation-based approach
- Preliminary timeline would have work on Priority 2 ramping up in early 2022

Future role for work groups

- Co-Trustees recognize that these work groups have met more often and for a longer period of time than originally envisioned.
- There is a need for continued engagement with working groups. Co-Trustees would like feedback from the work groups to inform major Co-Trustee decisions.
 - What role should the working groups play for implementation of the Plan? What about for Priority 2?
 - What kinds of issues or decisions should require working group input in the future?
 - How often should working groups meet (whether virtual or eventually in person again)?
 - Should the meetings be different? For example, shorter? Scheduled only as needed? Joint meetings between the two working groups?

- 3M Settlement community meeting
 - Tuesday, September 21, 6:00 - 7:30 PM (virtual)
 - Please help spread the word to residents
- Future work group meetings
 - Subgroup 1: Wednesday, September 22, 1:00-4:00 PM (virtual)
 - Subgroup 1: Wednesday, October 20, 1:00-4:00 PM (in-person or virtual TBD)
 - Discuss implementation details
 - Citizen-Business and Government and 3M: TBD
 - Would it be beneficial for work group members to meet in October?
 - Future meeting to discuss investment plan for Settlement funds