

Minnesota 3M PFAS Settlement

Conceptual Drinking Water Supply Plan Annual Review, 2021–2022

January 12, 2023

Annual Review Purpose

The Conceptual Drinking Water Supply Plan (Conceptual Plan), released on August 18, 2021, serves as a guide for using the 3M per- and polyfluoroalkyl substances (PFAS) Settlement (Settlement) funds to provide safe, sustainable drinking water to the affected communities in Minnesota’s East Metropolitan Area. The Minnesota 3M PFAS Settlement website (<https://3msettlement.state.mn.us/>) has additional information on the Settlement and the Conceptual Plan. As a part of the Conceptual Plan, the Co-Trustees—the Minnesota Pollution Control Agency (MPCA) and the Minnesota Department of Natural Resources—recognize the need to annually evaluate progress in implementing projects (Figure 1). In addition, the Co-Trustees recognize that actual costs will likely differ from the estimated project costs in the Conceptual Plan, and therefore the amounts set in each fund allocation will need to be regularly evaluated.

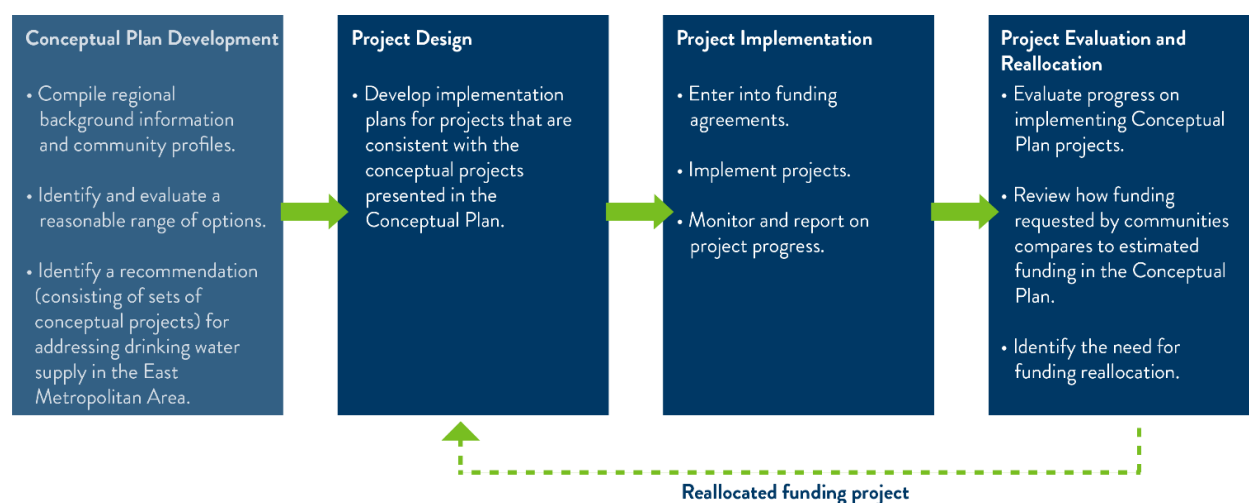


Figure 1. Process Diagram for Evaluating the Conceptual Plan Project Design, Implementation, Evaluation, and Reallocation

The Co-Trustees are conducting an annual review of the Conceptual Plan implementation efforts to evaluate progress, review how actual costs compare to estimates in the Conceptual Plan, and determine whether a funding reallocation is warranted. This first Conceptual Plan Annual Review (Annual Review) provides a year-in-review of progress made since the release of the Conceptual Plan on August 18, 2021, through the fiscal year end on June 30, 2022, and discusses anticipated progress for the following fiscal year: July 1, 2022–June 30, 2023.¹ Section 2 provides an evaluation of progress in implementing the Conceptual Plan, Section 3 provides an overview of new information that have affected or may affect the implementation of the Conceptual Plan, and Section 4 discusses anticipated fiscal year 2023 projects. Finally, Section 5 provides a review of contingency funding and a discussion of whether or not there is a need for a funding reallocation at this time.

¹ Future Annual Reviews will correspond to fiscal year dates July 1—June 30.

Progress on the Implementation of the Conceptual Plan

Priority 1 of the Settlement aims to fund a variety of projects to enhance the quality, quantity, and sustainability of drinking water in the East Metropolitan Area. The Conceptual Plan allocates \$700 million in available funding from the 3M Settlement, which is the amount of Settlement funding available after payment of legal fees and deducting the \$20 million set aside for Priority 2.² Settlement funding includes three priority funding allocations: capital infrastructure, operation and maintenance (O&M), and drinking water protection (Figure 2).



Figure 2. Conceptual Plan Priorities

Including these three priority funding allocations, the Settlement defines the following five funding allocations:

- **Capital funding (45%,³ or \$317 million)** allocated to construct and install the drinking water supply infrastructure for public water systems and private wells. The Conceptual Plan provides the affected communities with a tailored project list to meet the long-term goals of the Settlement based on their specific needs and cost estimates.
- **O&M funding (16%, or \$115 million)** allocated to operate and maintain public water systems for an estimated 20 years and private well treatment systems for an estimated 30 years, as outlined in the Conceptual Plan.
- **Drinking water protection funding (10%, or \$70 million)** allocated to improve drinking water quality at the source, starting with the source assessment and feasibility evaluation of PFAS impacts on soil, groundwater, surface water, and sediments along the Project 1007 corridor that is transported to the drinking water. More information about Project 1007 can be found here: <https://3msettlement.state.mn.us/project-1007>.
- **Contingency funding (26%, or \$183 million)** allocated to potentially fund work in several different areas of uncertainty, including providing treatment for drinking water wells that are not included in the capital and O&M budgets of the Conceptual Plan.
- **State administration (2%, or \$15 million)** allocated to administer and implement the Conceptual Plan, including review and development of grant agreements; tracking progress of project implementation; annual review and reallocation; reporting; and preparing for and holding public meetings.

² The second priority of the Settlement is to restore and enhance aquatic resources, wildlife, habitat, fishing, and outdoor recreational opportunities in the East Metropolitan Area and in downstream areas of the Mississippi and St. Croix Rivers.

³ Percentages do not sum to 100%, because of rounding.

This section focuses mainly on projects implemented starting from the release of the Conceptual Plan (August 18, 2021) through the end of fiscal year 2022 (June 30, 2022). Prior to the release of the Conceptual Plan, projects were funded using interest earned from Settlement dollars; these projects are described in Box 1.

Box 1. Projects Funded from Interest Earned on Settlement Dollars

Settlement funds are in an interest-bearing account, and, as of June 30, 2022, have earned approximately \$38.5 million in interest. Approximately \$37.5 million has been allocated to expedited projects, other early projects, drinking water projects, and state administration. Co-Trustees will allocate the remaining \$1 million to the Contingency allocation.

- **\$22.6 million in expedited projects** (10 grant agreements), including the Cottage Grove ion exchange pilot study, feasibility studies, well construction, connection of homes in various neighborhoods to municipal water, and initial coordination and planning for water treatment plants. These projects were approved for implementation before the Conceptual Plan was finalized because they aligned with the Conceptual Plan and were time-sensitive. The full list of expedited projects can be found at: <https://3msettlement.state.mn.us/expedited-and-request-funding-projects> (Note that the Request for Funding projects listed on this website were funded not from interest earned but from contingency funds; Section 2.1 provides additional detail.)
- **\$1.3 million in capacity grants and other early projects**, including capacity grants (18 grant agreements); as well as sampling wells; connecting individual homes to municipal water, or installing whole-home water filter systems, also called point of entry treatment systems (POETSs) for private wells; and well sealing. Like expedited projects, these projects were time-sensitive and consistent with the Conceptual Plan.
- **\$7.0 million in drinking water protection projects**, focusing on fieldwork to evaluate PFAS impacts on soil, groundwater, surface water, and sediments along the Project 1007 corridor, and their impacts on drinking water. More information about Project 1007 can be found at <https://3msettlement.state.mn.us/project-1007>.
- **\$6.6 million on state administration**, including state and consultant costs to develop the Conceptual Plan.

2.1 Awarded Implementation Funding

Between the release of the Conceptual Plan (August 18, 2021) and June 30, 2022, the State spent approximately \$13.9 million in Settlement funding across the five funding allocations (Figure 3).⁴

Spending during this period includes:

- **Capital funding (\$6.2 million)** spent on:
 - Land purchases and planning and design work for water treatment plants in the cities of Cottage Grove and Woodbury
 - Connecting homes in various neighborhoods to municipal water in the cities of Cottage Grove, Lake Elmo, Lakeland, Lakeland Shores, and Woodbury
 - Installing whole-home water filter systems—also called point of entry treatment systems (POETSs)—for private wells with a health advisory or for wells that meet or exceed the Health Index (HI) of at least 0.5,⁵ in most communities across the East Metropolitan Area
 - Beginning to develop communication plans in the City of Woodbury to share progress with residents
- **O&M funding (\$0.6 million)** spent on maintenance for POETSs and O&M for the St. Paul Park water treatment plant.
- **Drinking water protection funding (\$2.7 million)** spent on Project 1007, including contractor support for the feasibility study, and drinking water monitoring.
- **Contingency funding (\$3.1 million)** spent on extending water mains and connecting homes to the municipal drinking water supply system in Lake Elmo. These projects were similar to expedited projects in that they were consistent with the Conceptual Plan, were time-sensitive, and were reviewed and approved with input from the work groups. However, these projects were funded with contingency funds to maintain the capital allocation and because interest earned was not sufficient to cover these projects. These projects are referred to as the Request for Funding projects, listed here: <https://3msettlement.state.mn.us/expedited-and-request-funding-projects>.
- **State administration (\$1.3 million)** spent on administering and implementing the Conceptual Plan, including state and contractor review and development of grant agreements, tracking project implementation progress, annual review and reallocation, reporting, and preparing for and holding work group and public meetings.

Project status information is available at <https://3msettlement.state.mn.us/investing-east-metro-drinking-water>.

⁴ The legislative report includes \$14.2 million of Settlement spending (higher than the \$13.9 million listed in this Annual Review) because it includes some projects funded with interest earned from the Settlement (see Box 1), whereas Section 2.1 in the Annual Review focuses only on funding from the \$700 million included in the Conceptual Plan.

⁵ As stated in Section 6.2.3 of the Conceptual Plan, private wells throughout the affected communities that are not planned to be connected to municipal systems will be supplied with a POETS if they meet or exceed an HI value of at least 0.5 using the equation in the Conceptual Plan (August 18, 2021).

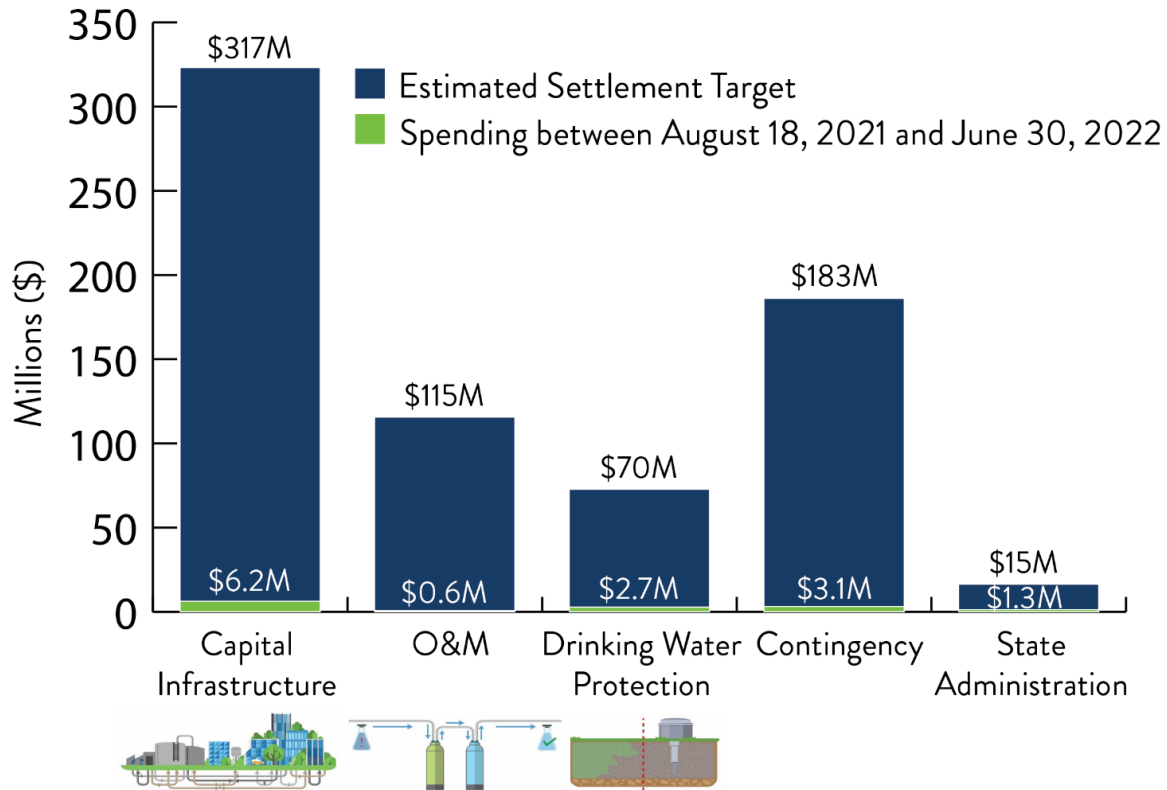


Figure 3. Funding Spent Across Project Types, August 2021–June 2022

2.2 Implementation of Grant Agreements

The Conceptual Plan identifies projects the Co-Trustees intend to fund; however, communities are not automatically allocated the portion of capital or O&M outlined in the Conceptual Plan. Rather, project implementation is driven by the communities through a grant process with the State. The State reviews information provided by communities and develops grant agreements to enable project implementation. Many communities will have multiple grants over several years for different phases of a given project (e.g., planning and design, construction, and O&M phases). Once a grant agreement is in place, each community follows their own processes for implementation, coordinating with the State as necessary.⁶

Co-Trustees have prioritized funding the projects outlined in the Conceptual Plan and have completed individual project funding reviews within the expected six- to eight-week timeframe. For grants that contain elements that are not specifically outlined in the Conceptual Plan, the Co-Trustees must ensure that projects are consistent with the Conceptual Plan and that adequate funding is available to cover project costs. Additional review time may be required as more information is gathered; however, the Co-Trustees are regularly refining the implementation process to increase efficiency.

⁶ For private wells, the MPCA will continue to manage the installation and maintenance of POETSs using contractors.

The state has executed a total of 20 grant agreements, through June 2022, using Settlement funding (Table 1).

- **Fifteen of the grant agreements** are associated with capital projects; 1 is complete (phase one of the City of Cottage Grove’s water main extension project), while the remaining 14 are ongoing. These ongoing projects include land purchases⁷ and planning activities for new water treatment projects in Cottage Grove and Woodbury, ion exchange pilot studies, and the connection of homes to municipal drinking water supply systems in various neighborhoods and communities.
- **One grant agreement** is associated with O&M for the St. Paul Park water treatment facility.
- **Four grant agreements** are associated with contingency funding to extend water mains and connect homes in Lake Elmo neighborhoods to the municipal drinking water supply system.

Table 1. Number of Settlement Grant Agreements Executed through June 2022

Funding Allocation Category	Grant Agreements Executed
Capital	15
O&M	1
Contingency	4
Total	20

2.3 Comparison of Estimated Costs to Awarded Funding

The sum of grant funding awarded for municipal capital projects between August 2021 and June 2022 is within the estimated sum included in the Conceptual Plan for those projects.⁸ Figure 4 shows this comparison for capital project grants for Cottage Grove and Woodbury, the two communities that submitted grant forms and subsequently had grants awarded during the above-mentioned timeframe. Projects may take place over multiple years, and grant amounts awarded may include full project costs even though the projects may not be completed within the annual review period. In some cases, project costs were lower than estimated and in other cases, costs were higher.

In instances where construction costs exceed the estimates in the Conceptual Plan, a combination of factors has contributed, such as increase in construction costs since the original estimates were completed, current bidding climate, and/or change in construction assumptions or methods. Both communities identified new planning needs, including grant administration and communication, and increased planning/design costs due to increased construction scopes. In one instance, a planned connection (originally assumed to be to a home) was actually to a church, requiring a larger supply of drinking water; therefore, additional infrastructure was required at a much higher cost than the estimate in the Conceptual Plan to connect it to the municipal drinking water supply system. Some community planning and design efforts have also required more grant funding than what was in the Conceptual Plan in communities where system operation assumptions have evolved, and new PFAS concentration data have led to changes in treatment strategies. Some of these changes, such as

⁷ Land purchases by the City of Cottage Grove and City of Woodbury for their water treatment facilities are associated with grant agreements that were executed prior to the release of the Conceptual Plan (August 18, 2021).

⁸ A comparison to estimates in the Conceptual Plan is not always exact, because some communities separate portions of projects into several different grant agreements, combine the costs of individual project elements, and/or propose projects that are different than the Conceptual Plan projects such that the costs cannot be directly compared.

additional treatment needs, were anticipated as possible costs outside of the final set of capital projects in the Conceptual Plan, but other changes, such as evolving system operations, were not.

Instances where proposed project costs have been lower than the estimates in the Conceptual Plan have offset some of the exceedances and are primarily related to professional services, such as preliminary design, design services, planning, investigatory work, and treatment pilot studies. In communities that have not experienced impacts from evolving system operation assumptions or new PFAS data over the review period, fewer planning activities were necessary during implementation of the Conceptual Plan because of the planning and preparation that had been completed prior to completion of the Conceptual Plan. Overly conservative assumptions built into the Conceptual Plan have also helped overall costs remain below the Conceptual Plan estimates. For example, conservative assumptions based on unknown site conditions were used in the Conceptual Plan for a water transmission main construction that ended up being less costly. It is anticipated, however, that projects will likely exceed Conceptual Plan estimates as communities move into the construction phase of their projects (further discussion of this issue is in Section 3).

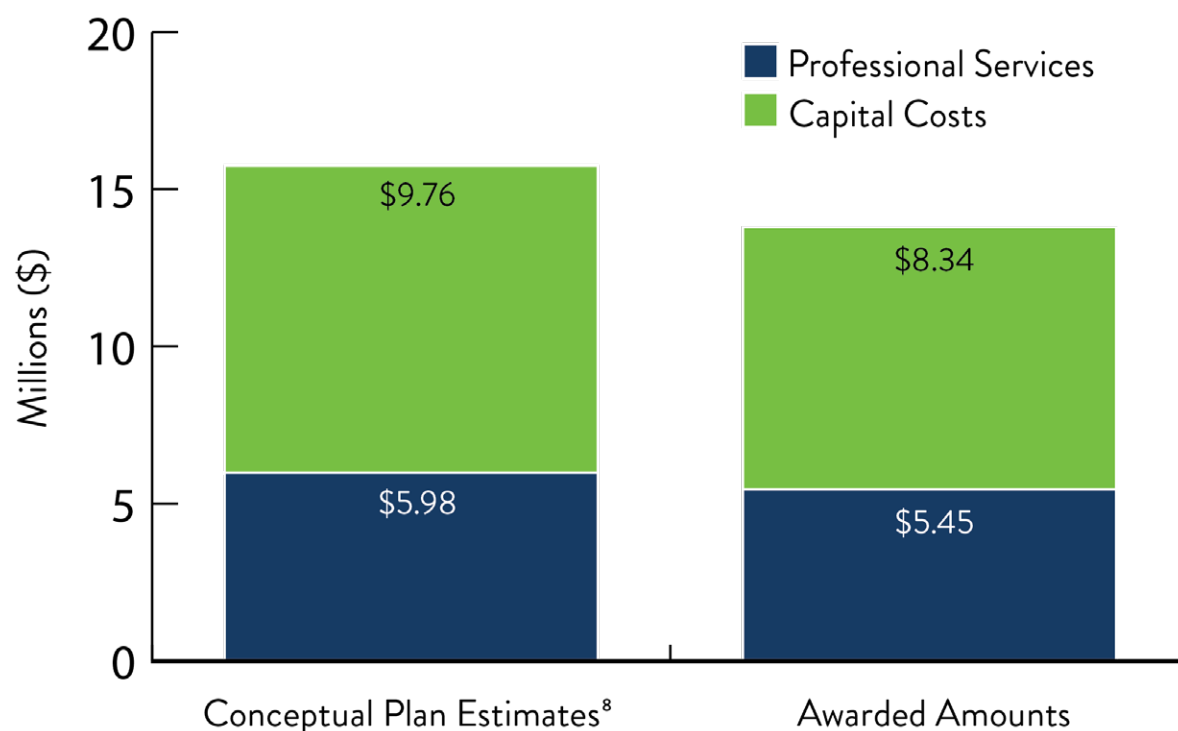


Figure 4. Cost Comparison of Conceptual Plan Estimates and Grant Awards for Cottage Grove and Woodbury (Combined) Municipal System Infrastructure, August 2021–June 2022

Overall professional services and capital costs have been balanced between individual project cost estimates in the Conceptual Plan (Figure 4). At a community level, one community (Cottage Grove) has experienced overall costs lower than Conceptual Plan estimates and the other (Woodbury) has experienced higher costs than the Conceptual Plan estimates (Figure 5). For Cottage Grove, construction cost increases (inflation, materials costs, transportation costs, etc.) have been offset by the conservative Conceptual Plan construction cost assumptions and minimal additional planning needs, as well as minimal change to the treatment strategy.

For Woodbury, the overall conservatism built into the Conceptual Plan (i.e., unit cost assumptions, and a 25% contingency included in the capital cost estimates) did not provide the buffer necessary to account for treatment strategy changes due to evolving system operation assumptions and/or new PFAS data. These changes have caused increased planning costs, and will require more treatment and higher capital and O&M costs in the future. Note that the Conceptual Plan is designed to adapt to and cover these higher costs so long as they are Settlement-eligible.

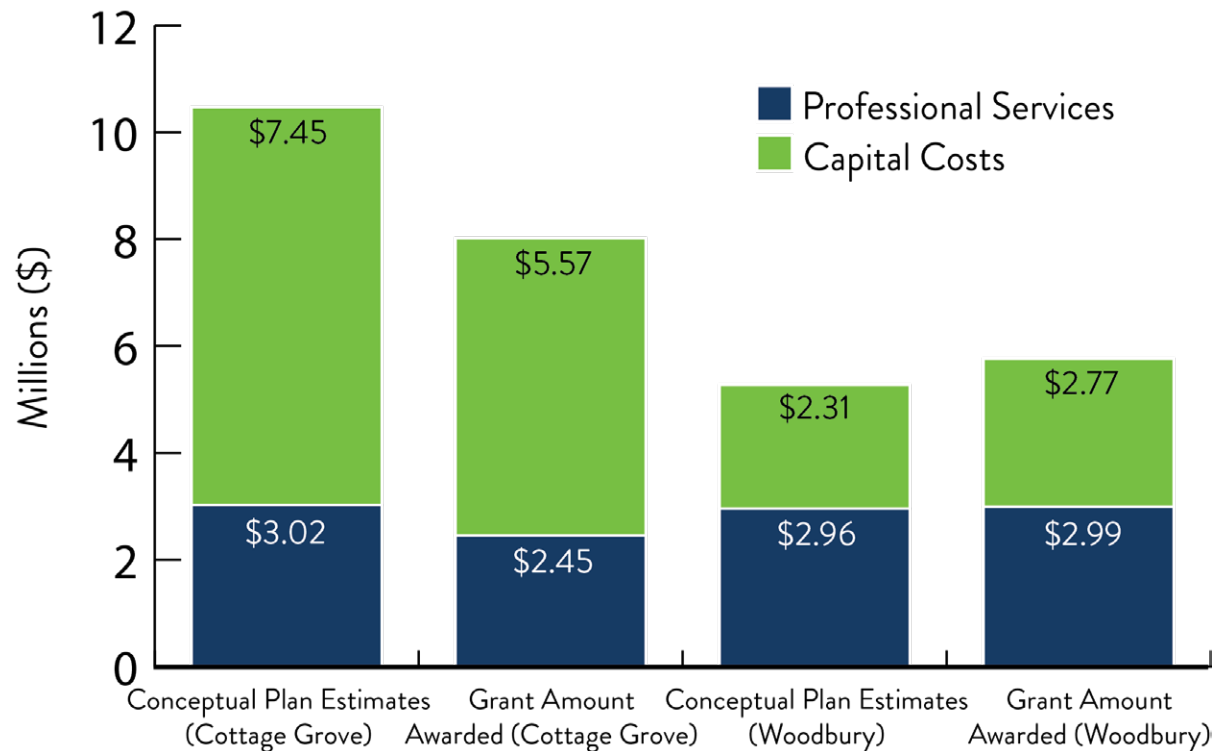


Figure 5. Cost Comparison of Conceptual Plan Estimates and Grant Amount Awarded for Cottage Grove and Woodbury Municipal System Infrastructure, August 2021–June 2022

Funding for O&M costs for long-term municipal drinking water treatment is under way, but it is too early in the process to make a comparison to Conceptual Plan estimates. Limited information on temporary treatment system costs currently in place suggests that costs for treatment media have increased since the Conceptual Plan was released; however, there is not enough data to identify a clear trend of potential impacts to overall O&M costs. More data will be available once additional long-term systems come online and/or when existing systems require media change-outs in the next few years.

A cost comparison was also conducted for POETs and municipal water connections costs. For state contractors and their vendors, capital and O&M costs for POETs are comparable to the costs estimated in the Conceptual Plan. For new POETs installation, capital costs are around \$2,765. The Conceptual Plan POETs installment cost estimate was \$2,500, plus a contingency of 25% for construction and 15% for professional services associated with capital projects. With the contingency and professional services accounted for, the total capital cost estimate in the Conceptual Plan is \$3,500, which is approximately 21% higher than the fiscal year 2022 expenditure per-POETs. O&M costs have remained below \$1,000/system/year as estimated in the Conceptual Plan. Those costs are anticipated to increase as early as 2023, yet remain within the Conceptual Plan estimated costs.

Neighborhood connections to municipal water supply have been under way since before the release of the Conceptual Plan in the cities of Cottage Grove and Lake Elmo. The awarded grant amounts have all been higher than the amount estimated in the Conceptual Plan (Figure 6). Note that four different projects are depicted for Lake Elmo. These increases are largely indicative of inflationary increases in the construction sector, which are discussed further in Section 3.2, as well as the site-specific nature of these projects compared to in conceptual estimates.

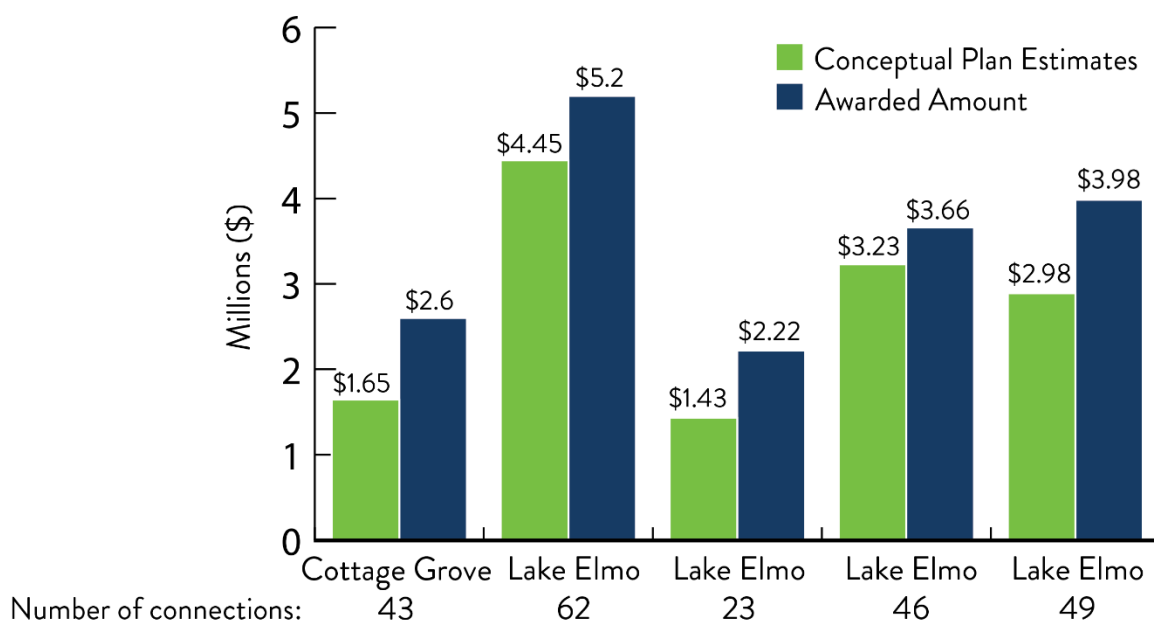


Figure 6. Cost Comparison of Conceptual Plan Estimates and Grant Awards for Cottage Grove and Lake Elmo Neighborhood Connections

Impacts to Implementation from New Information

The Conceptual Plan was built with a degree of resiliency to proactively account for future potential changes. For example, the Conceptual Plan uses the HI to determine which wells to treat. Instead of using an HI of 1 or greater, which is when a well receives a health advisory, the Conceptual Plan treats wells that have an HI of 0.5 or greater using the equation in the Conceptual Plan and the health-based values (HBVs)/health risk limits (HRLs) at the time it was finalized (August 18, 2021). The Conceptual Plan also includes a designated contingency allocation for future changes and unknowns. While the Conceptual Plan outlines estimated costs for projects, unknown conditions have introduced additional costs as communities implement drinking water infrastructure projects. This section focuses on new information and unknown conditions since the release of the Conceptual Plan (August 18, 2021) that have had the greatest impact on implementation. Section 5 describes how the fund reallocation process takes this information into consideration.

If Settlement funds are depleted in the future, the Settlement Agreement and 2007 Consent Order require 3M to fund treatment costs for drinking water wells with a health advisory (issued when the PFAS HI ≥ 1). A summary of the Consent Order is available at <https://3msettlement.state.mn.us/file/368>.

3.1 Changing PFAS Health Values for Drinking Water

The Minnesota Department of Health (MDH) released new and updated HBVs for PFAS since the release of the Conceptual Plan. An HBV is a non-regulated value that may be used by the public, state, and other stakeholders to assist in evaluating potential health risks to humans from exposures to a chemical. The MDH released an HBV for perfluorohexanoate (PFHxA) of 0.2 micrograms per liter (or parts per billion [ppb]) in January 2022, and an updated HBV for perfluorobutane sulfonate (PFBS) of 0.1 ppb (was 2 ppb) in March 2022. No additional public wells received a health advisory from MDH because of these new/updated HBVs; however, 12 private wells received a health advisory from MDH with the new PFHxA HBV, and eight private wells received a health advisory from MDH with the updated PFBS HBV. All 20 wells had been previously identified in the Conceptual Plan to receive treatment, as they had an HI \geq 0.5 using the equation in the Conceptual Plan (August 18, 2021), demonstrating the resiliency built into the Conceptual Plan.

On June 15, 2022, the U.S. Environmental Protection Agency (EPA) issued updated interim and final health-based guidance values, also referred to as health advisories. The EPA health advisories are non-regulatory values designed to provide context and guidance for policy makers. The updated interim EPA health advisories are for perfluorooctanoate (PFOA) of 0.000004 ppb (or 0.004 parts per trillion [ppt]) and perfluorooctane sulfonate (PFOS) of 0.00002 ppb (0.02 ppt); health advisories for both PFOS and PFOA were previously 70 ppt. The final EPA health advisories are for PFBS of 2 ppb (2,000 ppt) and GenX chemicals of 0.01 ppb (10 ppt). EPA issued the interim updated EPA health advisories for PFOA and PFOS because of new scientific information on these chemicals' health effects. More information is available at <https://www.epa.gov/sdwa/drinking-water-health-advisories-pfoa-and-pfos>.

EPA uses maximum contaminant levels (MCLs) for regulatory purposes. EPA plans to release draft MCLs for PFOA and PFOS in the first part of 2023, and final MCLs around January 2024. The final MCLs are typically not effective or enforceable until three to five years after they are released, to allow time for the new values to be implemented (the timeframe will be specified in the MCL rule documentation).

The MDH is also reviewing the new information on health effects of PFOA and PFOS, and is in the process of updating their HBVs. The HBVs are anticipated to be released in 2023, and are effective immediately upon release. It is anticipated that the new HBVs and MCLs will be more stringent than current HBVs and HRLs.

The MPCA and MDH are assessing various scenarios to better understand how anticipated future, more-stringent, standards might impact wells in the East Metropolitan Area. Based on the different scenarios, the need is clear for additional sampling of some public and private wells to determine the potential impacts to the East Metropolitan Area. The MDH is working with communities to increase sampling at public wells, and the MPCA continues to sample private wells based on plume location.

The State agencies are working with communities that are currently planning and designing long-term treatment for their municipal drinking water systems. The Co-Trustees determined that design costs for providing PFAS treatment to existing municipal wells, not currently included in the Conceptual Plan to receive treatment, are Settlement-eligible for Cottage Grove and Woodbury. These communities are currently in the process of designing their new long-term water treatment plants. This includes municipal wells with an HI below 1. The Co-Trustees also determined that some construction costs to treat wells with an HI below 0.5 may be eligible for reimbursement, if those costs are connected with exceedances of the upcoming PFOA and PFOS HBVs and MCLs. The level of reimbursement is based on

cost-effectiveness and eligibility of projects under the Settlement and as identified in the Conceptual Plan. Lastly, a grant agreement must be in place prior to any bidding and any construction costs incurred, and would detail portions of the project(s) that are currently eligible for reimbursement and portions of the project(s) that would be potentially eligible in the future.

3.2 Inflation and Other Cost Increases

It is anticipated that construction of capital projects under the Conceptual Plan will likely take approximately 10 years to complete. Costs for materials and labor are expected to increase over this time due to ongoing and anticipated construction sector inflation. Currently, Settlement funds are in an interest-bearing account; however, the earnings are not expected to keep pace with inflation. Given the high-level estimates in the Conceptual Plan and uncertainty associated with 10 years of construction costs, the Co-Trustees reserved contingency within the capital funding allocation in two ways:

1. A 25% contingency was built into capital costs, rather than using a more traditional 10%.
2. An additional \$16 million in capital funds was set aside to cover potential future inflation of costs.⁹

The \$16 million for inflation assumed 3% annual inflation and 1% annual earnings for funds allocated to capital projects over 10 years. The assumed inflation rate was based on information from past inflation trends and professional judgment among the technical team that developed the Conceptual Plan, in coordination with the State Board of Investment. However, inflation is currently higher than anticipated when the Conceptual Plan was developed and as a result, actual costs are higher than what was anticipated. For example, between 2020 and 2022 material and equipment costs have increased by approximately 35% for water treatment and ductile iron, and over 100% for plastics and rubber.¹⁰ At the same time, the assumed 1% interest rate is based on historical earnings on the Settlement fund; however, annual earnings for Settlement funds were 0.4% from August 1, 2021, through June 30, 2022, which is lower than what was assumed in the Conceptual Plan. Other factors, such as labor shortages and supply chain issues, have also made costs harder to predict since the release of the Conceptual Plan.

Moving forward, Co-Trustees anticipate that increased inflation and labor may result in the need to use funds from the contingency fund allocation (see Section 5.1 for additional information about the use of contingency funding).

3.3 Accounting for Temporary Drinking Water Treatment Systems

Under the terms of the Settlement, 3M is to provide up to \$40 million for a period of up to five years (February 20, 2018–February 20, 2023) or until the long-term plan is put in place, whichever comes first, to fund temporary drinking water treatment systems. The \$40 million is in addition to the Settlement grant amount.

These temporary treatment systems meet 3M's obligation to provide safe, alternative drinking water where public or private drinking water wells receive a health advisory from the MDH due to PFAS contamination, as outlined in the 2007 Consent Order between 3M and the MPCA. Temporary municipal

⁹ This section covers contingency reserved for capital costs; these funds are associated with the capital fund allocation and not in the separate contingency fund described in Section 5.1.

¹⁰ The Chemical Engineering Plant Cost Index: <https://www.chemengonline.com/pci-home>; Producer Price Index by Industry: Iron Foundries: <https://fred.stlouisfed.org/series/PCU3315113315111> Ductile Iron Pressure Pipe and Fittings: <https://fred.stlouisfed.org/series/PCU3315113315111>; Producer Price Index by Commodity: Rubber and Plastic Products: Plastics Water Pipe: <https://fred.stlouisfed.org/series/WPU072106033>.

treatment systems are currently operating in Cottage Grove, Oakdale, and Woodbury. The temporary treatment system in Oakdale is in addition to the permanent treatment system already in place. The St. Paul Park water treatment facility was initially built as a temporary treatment system and is now operating as the long-term treatment facility as identified in the Conceptual Plan. Under the terms outlined in the 2007 Consent Order, the MPCA seeks cost recovery of state expenses related to these temporary treatment systems. Once this provision expires on February 20, 2023, Settlement funds will cover the O&M costs of these temporary systems until the long-term water systems are in place.

Projects in Fiscal Year 2023

Communities are continuing to move forward in implementing projects outlined in the Conceptual Plan. The Co-Trustees, in coordination with communities, anticipate several major projects in fiscal year 2023 (with some already under way), including the following activities:

- Continue planning and construction of new and expanded water treatment plants in the cities of Cottage Grove, Oakdale, and Woodbury, such as extending water mains.
- Begin planning and construction of improvements to the St. Paul Park water distribution system to accommodate the connection of a third well to its centralized water treatment plant.
- Begin planning for water system interconnections between the City of Newport and the cities of Woodbury and Cottage Grove.
- Connect homes to municipal drinking water supply systems in various neighborhoods and communities.
- Continue the connection of homes with private wells to municipal water supplies, where cost-effective.
- Continue sampling private wells and installing whole-home water filter systems or POETSs as appropriate.
- Continue to fund the Project 1007 feasibility study under the drinking water protection allocation, including investigations and reporting to complete the feasibility study.

Funding has also been provided to communities for other administrative and communication efforts necessary to implement the projects.

Contingency Funding and Fund Reallocation

As the Co-Trustees continue implementing the Conceptual Plan, they will evaluate progress on projects, compare actual costs to estimates, and monitor where and when funds may warrant reallocation. The Conceptual Plan includes contingency plans to ensure it is flexible and resilient to help address uncertainties into the future and fund safe drinking water in additional areas if necessary. (See Section 5.1 for additional detail.) Contingency funds may be used during implementation of the Conceptual Plan if Co-Trustees determine it is necessary to implement projects that are consistent with the Conceptual Plan; use of contingency funds does not require fund reallocation. In addition to contingency funding, the Conceptual Plan also provides a framework to reallocate funding; this includes incorporating work group and public feedback, should it be necessary (see Section 5.2 for additional detail). If future needs exceed the Settlement Agreement, the 2007 Consent Order requires 3M to fund the treatment costs for drinking water wells with a health advisory (i.e., those wells with HI \geq 1).

5.1 Contingency Funding

The contingency allocation reserves funding to address different areas of future uncertainty.¹¹ For instance, contingency dollars may be used to fund treatment for drinking water wells that receive a health advisory in the future but were not included in the Conceptual Plan. These additional health advisories could result from several situations, including:

- Increased concentrations of PFAS as groundwater migrates
- Improvements in analytical methods that can measure PFAS constituents at lower levels
- Reduced HBVs or HRLs for the PFAS compounds used to calculate the HI
- HBVs or HRLs being developed for additional PFAS compounds
- Final MCLs for PFAS compounds

The contingency fund allocation may also be used to help PFAS-affected East Metropolitan Area communities fund the cost of providing an alternative source of drinking water due to potential restrictions on use of aquifers that affect White Bear Lake. Finally, the contingency funding may be used to address project cost increases, such as increases in construction costs (e.g., inflation, labor increases) since the original estimates were completed, and/or change in construction and system operation assumptions or methods. See the Conceptual Plan (Section 10.3) for additional information about the contingency fund.

Contingency funding can be applied at any time and does not require fund reallocation. As described in Section 2, \$3.1 million (or 1.7%) of the \$183 million allocated in contingency funds have been used within this Annual Review period for Settlement-eligible neighborhood connection projects. If future needs exceed the Settlement Agreement funds, the Consent Order requires 3M to fund the costs of treatment for drinking water wells with a health advisory (i.e., those wells with $HI \geq 1$).

5.2 Fund Reallocation

The Conceptual Plan provides a framework with flexibility to reallocate funding should it be necessary. In general, savings associated with the capital allocation will not be reallocated to other uses until the majority of projects are completed, while any annual O&M savings will remain within the O&M allocation. See the Conceptual Plan (Section 10.4) for additional information about the fund reallocation strategy.

After reviewing how actual costs compare to estimates and considering new information, the Co-Trustees determined that a funding reallocation is not necessary at this time, because:

- Implementation costs are overall within the estimate in the Conceptual Plan, as described in Section 2.3.
- EPA MCLs and MDH HBVs for PFOA and PFOS have not yet been released; the MPCA and the MDH will rely on those values to understand how the lower health-based values might impact wells in the East Metropolitan Area, as described in Section 3.1.

¹¹ This contingency fund is a separate allocation from the 25% contingency built directly into capital costs. It is also separate from the additional \$16 million set aside to cover potential future inflation described in Section 3.2.

- As communities complete planning and design, Co-Trustees will have a better sense of construction and other project implementation costs, including future cost increases for materials and labor as described in Section 3.2.

In the next Annual Review, the Co-Trustees will continue to consider new information, including impacts to drinking water treatment implementation costs under new PFAS health values, and impacts to inflation in fiscal year 2023, as well as the amount earned from interest and any additional unknown conditions, to determine whether reallocation is needed.