Investment Planning for the 3M Settlement

3M PFC Settlement Work Group Meetings

January 18-19, 2022

Overview

- Settlement funds currently in cash account earning roughly 1% annual interest
- For fund allocations in the Conceptual Plan, Co-Trustees assumed that some funds would be invested to achieve higher returns while managing risk; this will help meet O&M and other funding goals
- Co-Trustees worked with the State Board of Investment to evaluate investment options; SBI provided analyses to inform Co-Trustee recommendations
- Co-Trustees making separate recommendations for capital, O&M, contingency, and state administration allocations

Caveats

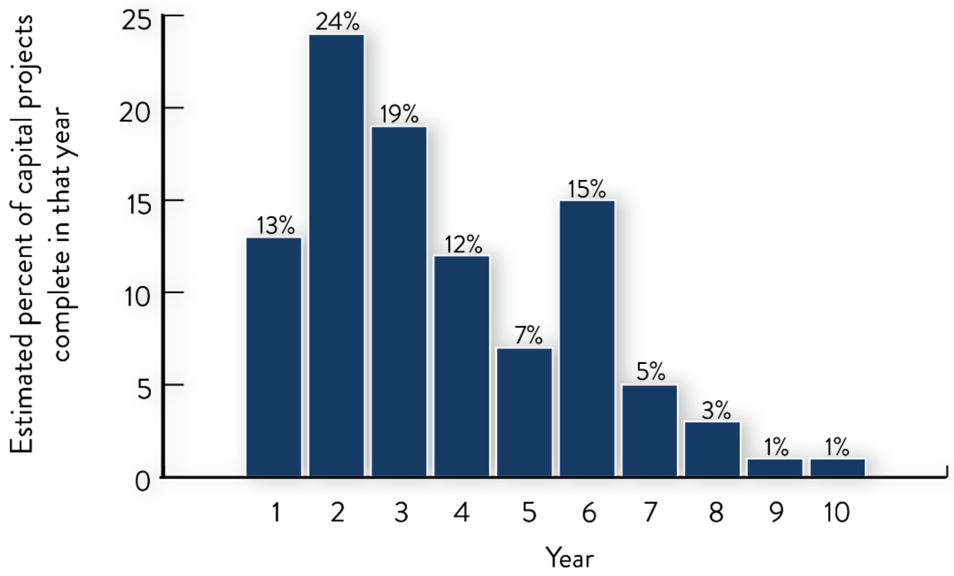
- Future performance of any investment is uncertain
- The analysis prepared by SBI are best estimates, but do not represent any guarantee about how investments will perform
- The returns could be higher or lower than what is presented here

Implementation and management of investments

- The SBI monitors investments regularly and will communicate with Co-Trustees about performance and changing market conditions
- Annual or more frequent (as needed) meetings with Co-Trustees to go over performance, forecasts and discuss potential changes to strategy
- Co-Trustees will review and discuss investment performance and potential changes to strategy with work groups and communities
- Surpluses or shortages will be managed according to the reallocation process described in Chapter 10 of the final plan

Capital funds

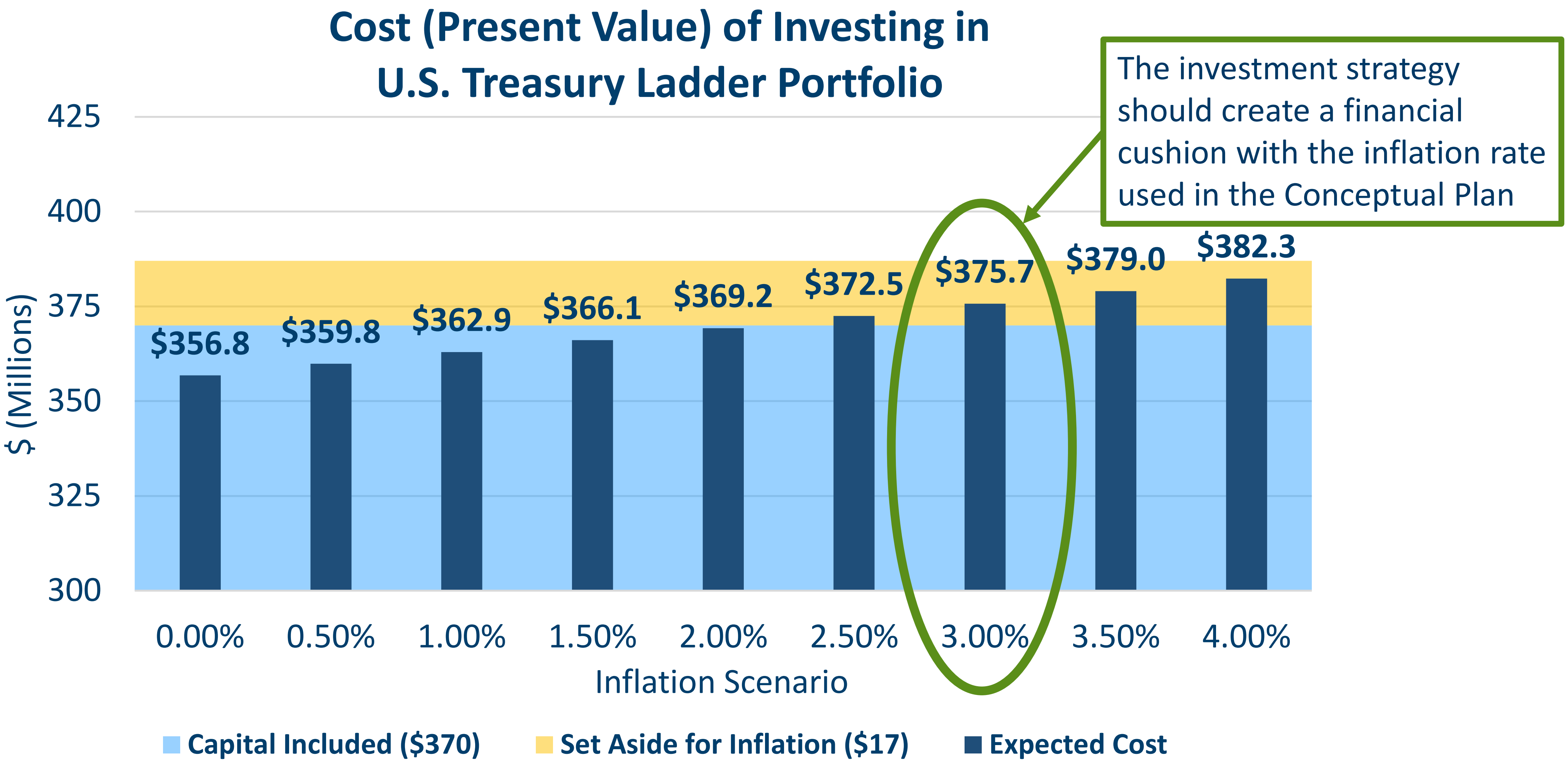
- Conceptual Plan allocates a total of $370M to capital
  - Includes $300M for drinking water infrastructure, $70M for drinking water protection projects and additional $17M to cover anticipated inflation
- Co-Trustees estimated capital spending schedule over 10 years and provided to the SBI (from Chapter 9 of the Conceptual Plan)



Capital fund investment recommendation

- The SBI analyzed a ladder of treasury bonds that will mature over time to match the expected schedule of capital expenditures
- This investment strategy is adaptable if expenses come sooner or later than anticipated (e.g., bonds can be sold sooner than their maturity date with minimal risk)
- The SBI analysis shows that this investment strategy should cover inflation greater than the 3% rate estimated for the Conceptual Plan
- **Co-Trustees recommend using the ladder of treasury bonds analyzed by SBI**

Impact of inflation on capital funds



Operations and maintenance for treatment

- Conceptual Plan allocates $28M for O&M on POETSs and $87M for O&M on public water systems, for a total of $115M
- The Plan estimates that these allocations could cover 30 years for POETSs and 20 years for public water systems, assuming 3% inflation and 3.5% earnings on the funds
  - This was based on previous SBI analysis when the Plan was being updated and finalized
- SBI updated their analysis after release of the Plan and provided a range of options for the Co-Trustees to consider
  - ➢ Co-Trustees must decide the portion of O&M funds that will be invested in equities and the portion that will be invested in bonds/cash based on a risk tradeoff

Risk tradeoff for investing O&M funds

- Greater share of equity leads to greater expected return and lower probability of shortfall (relative to the 20- and 30-year duration estimates)
- Risk of bigger losses and shortfall in bad market scenarios (e.g., the 5th percentile shown below)
- For context, $35.4 million shortfall would cut about 6-7 years from O&M funding for both POETSs and public water systems

% Equity	Gain/Shortfall (Median), million	Gain/Shortfall (Worst 5%), million	Expected Return	Expected Standard Deviation	Probability of O&M Shortfall
0%	-$16.9	-$33.0	1.8%	2.2%	98%
10%	-$10.5	-$29.0	2.2%	2.8%	86%
20%	-$4.4	-$29.6	2.6%	4.1%	63%
30%	$1.0	-$32.2	3.0%	5.6%	48%
40%	$6.0	-$35.4	3.4%	7.1%	39%

Co-Trustee conclusions and recommended strategy for investing O&M funds

- Higher share invested in equities substantially increases annual returns and lowers the probability of shortfall in most market conditions
- It also increases the likelihood of very good returns, increasing ability to cover 20- and 30-year durations and potentially enable extending coverage of O&M beyond what was estimated in the Plan
- We would face a shortage in bad market conditions regardless of investment strategy, but higher share invested in equity does increase the magnitude of shortages in bad market conditions
- Investing with 40% in equities represents a favorable tradeoff between expected returns plus the potential for very good returns versus the downside risk
- **Co-Trustees recommend investing O&M funds with 40% in equities and 60% in bonds/cash**

Contingency

- Conceptual Plan allocated $183M to address various sources of future uncertainty, including future treatment needs, alternative sources of drinking water (if needed), and cost overruns
- Timing of future spending under contingency is highly uncertain
- Co-Trustees emphasize a low-risk approach for investing contingency funds to ensure funds are available
- **Co-Trustees recommend the majority of funds (87.5%) be invested in cash, with a small portion (12.5%) invested in equities**

Funds for state administration costs

- The Conceptual Plan allocates $15 million to cover annual state administration costs over the next 20 years
- **Co-Trustees recommend keeping the $15 million in the current cash account,** a low-risk investment strategy that will help ensure funds are available as needed to fund on-going agency expenses

Questions and Discussion

- Co-Trustees are ready to move forward implementing investment strategies
- ***Do work group members have any concerns with any of the recommendations presented here for Settlement fund investment?***