



SHOREWAY OPERATIONS AND CONTRACT MANAGEMENT

STAFF REPORT

To: SBWMA Board Members
From: Hilary Gans, Senior Contracts & Operations Manager
Date: January 24, 2019 Board of Directors Meeting
Subject: 2020 Shoreway Capital Improvement Projects and Planning

Recommendation:

This staff report is for discussion purposes only and no formal action is requested of the Board of Directors.

Summary

The 2019 Bond Refunding process provides a unique window to access capital for the future needs of the agency. As part of this **Bond Refunding** process, staff is developing a **Plan of Finance** and a **2020 Capital Improvement Plan** to meet the Refunding milestone date of June 2019. This plan will be reviewed by the agency's Finance Committee in February and, if necessary, beyond.

Analysis

In 2009 the SBWMA issued \$56M in series 2009A bonds and \$3M in a 2009B series bond to fund the Shoreway Master Plan improvements (the Master Plan improvements rebuilt the MRF and allowed for the switch to a cart-based collection system that made recycling easier and boosted diversion). The current-day cost-effective convenient service enjoyed by businesses and residents of the SBWMA is the legacy of those capital improvements built by the 2009 bond issuance. Nearly ten-years later, the agency is evaluating a similar bond refunding to pursuit of lower interest rates and draw additional funds for capital upgrades for the next generation of our 16-acre solid waste facility.

Changes in state regulations, world commodity markets, materials streams, and major agency contracts have each placed new demands Shoreway infrastructure. (For example, long-term changes in the composition of the recycling stream (i.e. less newspaper and more plastic packaging) as well as the recent crisis in commodity markets have created a clear and compelling need for significant mechanical systems upgrading in the Shoreway MRF.) In creating a 2020 Capital Improvement Plan staff has evaluated these impacts and is proposing new infrastructure projects to meet diversion needs of the current and future regulations.

MRF Phase I Upgrades: (Est. \$7M CapEx; ~5-year ROI)

The MRF sort system is 10-years old and needs to be updated with highspeed optical sorting that can separate recyclables to meet the current commodity markets standards. Phase I MRF Upgrade includes a suite of projects that will: 1) replace obsolete electronics, 2) replace worn equipment, 3) add efficacy upgrades, and 4) install a new highspeed optical sort line that will improve material recovery and marketability. Phase I Upgrades have been design and priced by BHS and are anticipated to be installed in 2019. The cost of the Phase I Upgrades is approximately \$7M and the benefits of the upgrade are estimated at \$1.18M per year providing a ~5-year ROI.

Project details will be presented at the February Board meeting.

MRF Phase II Upgrades: (Est. \$5-8M; ~3-year ROI)

Now, into the second-year of the world fiber commodity market crisis, there is no indication that China will reverse its import ban. In response, the recycling industry is adding new highspeed optical sorting technology to meet the new paper standards. While optical sorting equipment is an expensive investment, equipment suppliers have refined this technology so that it is highly efficient and can pay for itself though reducing sort labor costs as well as generating commodity sales revenues. (“High-Grade” paper currently commands a \$100 per ton market premium over the Mixed Paper being sold from the Shoreway MRF.) SBWMA and SBR staff have design for a new optical sort system that will automate the fiber sorting. ***Project details will be presented at the June Board meeting.***

Organics-to-Energy (O2E)-Full Scale Project: (Est. \$10M - \$15M depending on building expansion)

In anticipation of new State regulations eliminating organics going to landfill by 2024, the SBWMA is embarking on the O2E project that promises to create green energy from food waste. In November 2018 the Board approved the O2E Pilot project and recommended funding the Full Scale O2E Project, after proof of concept is achieved. O2E milestone dates (see **Attachment 1**) include estimated O2E Full Scale project funding in mid-2020. A significant additional long term goal of this project is to produce a Bio-CNG for the new Recology collection fleet to be purchased starting in 2023. This 140-vehicle fleet currently consumes over one million-gallons of diesel per year. Cost of installing a BioCNG fueling station at Shoreway will be provided as planning assumptions are better understood.

Fiscal Impact

Table 1 shows the estimated cost of the above CIP projects and the potential source of agency funds to complete these projects.

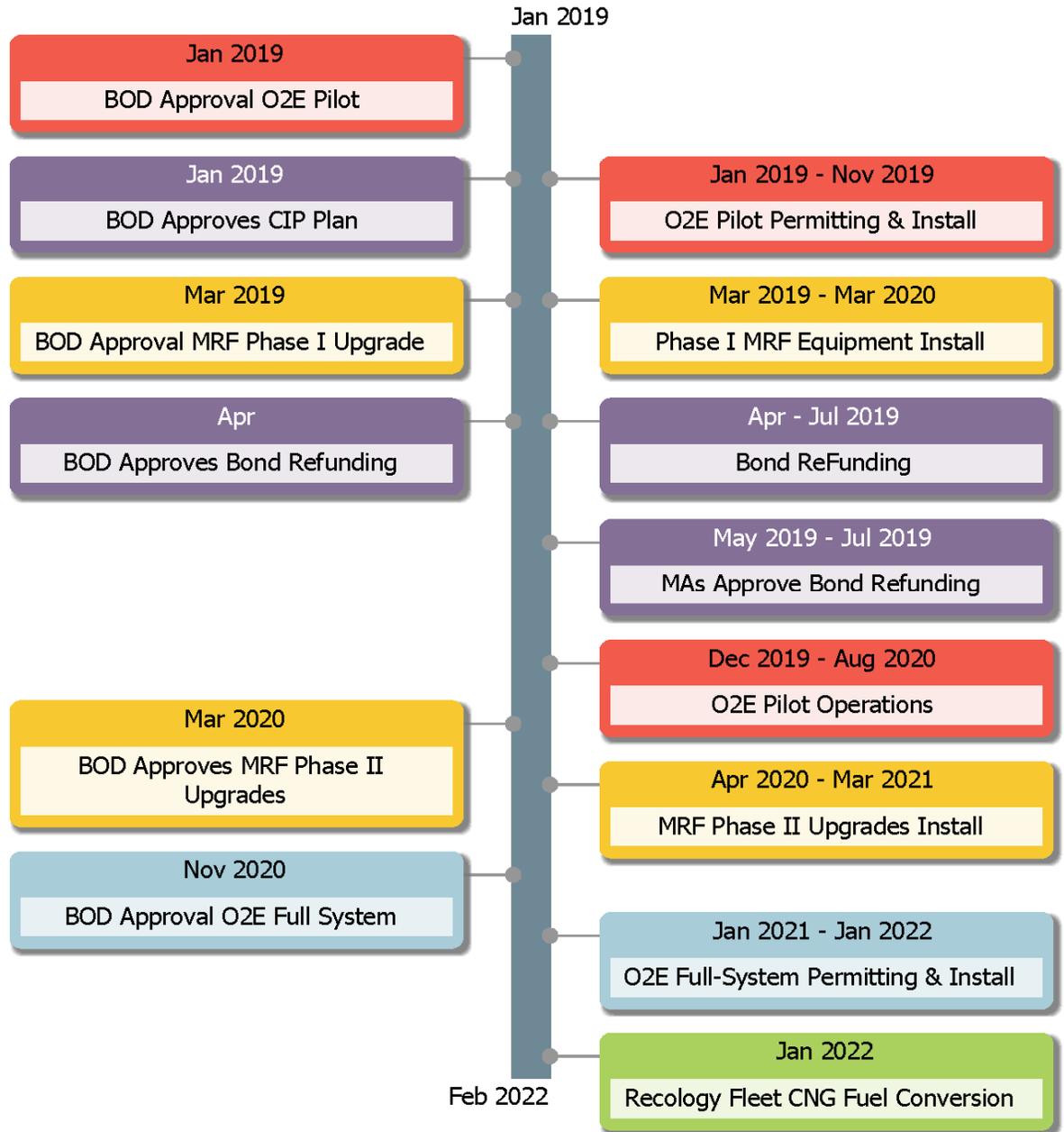
Table 1. Summary of CIP Projects and Potential Source of Funds			
Date	CIP Project	Cost	Status
2019	MRF Sort System Upgrades Phase I	\$7M	Pending BOD consideration
2020	O2E Full-Scale Project	\$10-15M	Conditionally Approved by BOD
2020	MRF Sort System Upgrades Phase II	<u>\$5-8M</u>	Pending BOD consideration
	Capital Projects Estimated Cost	\$22-\$30M	
	Agency Sources of Funds	Amount	Status
	Bond Refunding Savings	\$10M	Pending refunding process completion in 2019
	Optional Funds from Bond Refunding	\$10M	Additional funds from extending Bond term
	Capital Reserve	<u>\$5.5M</u>	Mid-Year Budget projected balance
	Total of Estimated Funds	\$25.5M	

Attachments:

Attachment 1: Capital Improvement Plan Milestone Dates

CAPITAL IMPROVEMENT MILESTONES

BOD Approval Action Item



■ CNG
 ■ financial
 ■ MRF
 ■ O2E Phase II
 ■ O2E Pilot

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