

Memorandum

To George Meservey, Director of Planning & Community Development
Michael Domenica, PE, Program Manager

CC Betsy Shreve, AICP, AECOM Project Director
Mark Abrahams, The Abrahams Group
Matt Abrahams, The Abrahams Group
Paula Winchell, AECOM

Subject **Town of Orleans, MA**
Water Quality and Wastewater Planning
Task Number 5.2 – Financial Evaluation
50 percent Draft Technical Memorandum on Evaluation of SRF and Other Financing Options

Project Number 60476644

From Thomas Parece, P.E., AECOM Project Manager

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1. Background

a. Purpose

This technical memorandum presents a high-level overview of financing options for Orleans' wastewater program. This document discusses financing available through the Massachusetts' Clean Water State Revolving Fund (CWSRF) program and USDA and conventional financing. The State Revolving Fund (SRF) Program is the financial assistance program for water pollution abatement projects authorized under M.G.L. c. 21, § 27A and the Clean Water Act, including the Water Pollution Abatement Revolving Loan Program established pursuant to M.G.L. c. 29C, MassDEP's related authority and responsibilities set forth in M.G.L. c. 21, § 27A and elsewhere in M.G.L. c. 21, § 27A, and the Water Pollution Abatement Revolving Fund established pursuant to M.G.L. c. 29, § 2L.

2. Introduction

a. Description of Financing Options

The Town may access SRF, USDA, or conventional financing to fund the wastewater program. SRF financing includes an origination fee and administrative fees, but typically allows towns to finance projects at interest rates lower than those with conventional financing.

b. Definitions

- **Existing Financial Model** – The financial model in place and used by the Town.

- **Updated Financial Model** – The financial model in development for the Town’s use as part of the Water Quality and Wastewater Planning program.
- **SRF Financing** – SRF financing is offered through the Massachusetts’ Clean Water State Revolving Fund (CWSRF) program. Under this program, certain nutrient-management projects may receive an enhanced state-financed subsidy on the interest rate. The Town may receive:
 - 0 percent financing on certain nutrient-management projects over a 20-year period;
 - 2 percent financing on non-nutrient-management projects over a 20-year period; and
 - 2.4 percent financing on non-nutrient-management projects over a 28-year period.

A nutrient-removal project is defined as a water pollution abatement project undertaken by the Town primarily to remediate or prevent nutrient enrichment of a surface water body or a source of water supply to comply with effluent limitations established under a NPDES permit or an EPA-approved TMDL or to otherwise implement a nutrient-management plan approved by MassDEP. Nutrient-removal projects include those portions of such projects approved by the MassDEP as reasonably necessary for cost-effective nutrient removal or recovery, and as evidenced by the Town’s Comprehensive Water Resource Management Plan or a corresponding engineering report.

Specifically, projects that meet the following criteria are eligible for 0 percent SRF financing:

- The project is primarily intended to remediate or prevent nutrient enrichment of a surface water body or a source of water supply;
- The applicant is not currently subject, due to a violation of a nutrient-related total maximum daily load standard or other nutrient based standard, to a MassDEP enforcement order, administrative consent order or unilateral administrative order, enforcement action by the United States Environmental Protection Agency or subject to a state or federal court order relative to the proposed project;
- The applicant has a Comprehensive Wastewater Management Plan (CWMP) approved pursuant to regulations adopted by MassDEP;
- The project has been deemed consistent with the regional water resources management plans if one exists; and
- The applicant has adopted land use controls, subject to the review and approval of MassDEP in consultation with the Department of Housing and Economic Development and, where applicable, any regional land use regulatory entity, intended to limit wastewater flows to the amount authorized under the land use controls that were in effect on the date the Secretary of the Executive Office of Energy and Environmental Affairs issued a certificate for the CWMP pursuant to the Massachusetts Environmental Policy Act, M.G.L. c. 30, §§ 61-62H, and the MEPA regulations at 301 CMR 11.00.

Planning and construction costs are eligible for SRF financing, but design costs are not. The 0 percent interest rate is specifically restrictive, establishing thresholds that borrowers must meet to be eligible for the enhanced subsidy. Borrowers that are unable to meet the threshold will not receive the 0 percent rate, though they will continue to qualify for the standard 2 percent or 2.4 percent rate. SRF financing requires that the Town pays an origination fee in the first year of the borrowing and an administrative fee each year of the borrowing.

- **Conventional Financing** - Another financing option is conventional borrowing under M.G.L. Chapter 44, Section 8. Sub-section 15 of Chapter 44 allows for the construction of sewers, sewerage systems and sewage treatment and disposal facilities, or for the lump sum payment of the cost of tie-in to such services in a contiguous city or town. M.G.L. Chapter 44, Section 7, Sub-section 1 allows borrowing for up to 30 years for the construction or reconstruction of surface drains, sewers, sewerage systems and sewage treatment and disposal facilities also. Sub-section 1A allows borrowing for the lining by cement or metal of sewers constructed for sanitary and surface-drainage purposes and for sewage disposal, for up to 10 years.

Long-term debt may be authorized under this section only by a two-thirds vote of Town Meeting. This option provides financing through a lending institution at the market rate. The Town typically borrows short-term (one year) and long-term (5, 10 and 20 years) for capital projects at different interest rates.

- **USDA Financing** - Another financing option is USDA financing under USDA's Water & Waste Disposal Loan & Grant Program. This program provides funding for clean and reliable drinking water systems, sanitary sewage disposal, sanitary solid waste disposal, and storm water drainage to households and businesses in eligible rural areas. Loans awarded through this program are long-term, low-interest loans, for up to 40 years.

c. **Financing Functionality in Existing Financial Model**

The Town's existing financial model includes financing. It allows the user to select (1) the project years, (2) bonded years, and (3) interest rate for seven cases. It does not differentiate SRF from USDA financing from conventional financing, nor does it include SRF administrative and origination fees. It also does not isolate design costs separate from other construction costs, which is important since design costs are ineligible for SRF financing.

d. **Financing Functionality in Updated Financial Model**

The updated financial model will provide flexibility to allow users to create conventional, USDA, and SRF borrowings, using user-defined terms. SRF financing schedules will be limited to the schedules allowed by the CWSRF. The SRF financing schedules will include origination and administrative fees. The origination fee will be high enough to cover interim financing costs. Alternatively, users can select short-term financing options. Short-term borrowings will be included in the functionality. Financing costs will be totaled and tracked.

3. **Description of Financing Options**

a. **Short-Term Financing**

The updated financial model will allow the user to select the number of years and interest rate for short-term borrowing for conventional and USDA borrowings. Short-term or interim SRF financing costs are built into the SRF origination fee.

b. Long-Term Financing

SRF financing includes origination and administrative fees and conventional and USDA financing do not. SRF options include:

- 0 percent interest over 20 years, for nutrient-removal projects;
- 2 percent interest over 20 years, for non-nutrient-removal projects; and
- 2.4 percent interest over 28 years.

The user can select any terms for conventional and USDA borrowing options in the updated financial model.

c. Applicability of Financing Options

Table F-1 describes the applicability of Financing Options to specific treatment types.

Table F-1

Treatment Types	Applicability to Financing Options to Treatment Types	
	SRF	Conventional
Aquaculture	X	X
PRBs	X	X
Floating Wetlands	X	X
Sewering	X	X

Town Counsel should validate the applicability of the treatment types to the financing options relative to M.G.L Chapter 44.

Table F-2 describes the applicability of Financing Options to planning, design, and construction costs. Design costs are not eligible for SRF financing.

Table F-2

Costs	Applicability of Financing Options to Planning, Design, and Construction Costs	
	SRF	Conventional
Planning	X	X
Design		X
Construction	X	X

d. Non-Capital Costs

Non-capital costs include operating, maintenance, monitoring, and replacement costs. These include salary, contractual services, supplies, energy, and other related costs.

e. Financing Options and Capital Outlay

Capital outlay refers to purchases funded by cash for items that are greater than \$5,000 with a useful life greater than one year. These purchases may be funded by retained earnings, taxes, or other non-borrowing sources.

f. Use of Reserves

There are multiple reserves that could be used to fund certain project costs. They are:

- **Renewal and Replacement Reserve Fund** – funds set aside for capital replacements; and
- **Debt Service Reserve Fund** – funds, potentially from betterments, set aside for the repayment of debt principal and/or interest that accumulate in a reserve for future debt service payments.

g. Key Factors for Financing Options

- Who is/are responsible for their administration?

The Financing Options should be discussed with the Town’s Finance Director/Town Accountant.

- What are the steps by which these options are implemented, including the approvals that are needed?

SRF

1. The Town will need to determine the projects that qualify for the 0 percent financing.
2. The Town will then need to apply for such financing.
3. For non-nutrient-removal projects, the Town will need to decide whether to focus on a 2 percent, 20-year loan or on a 2.4 percent, 28-year loan.

Conventional and USDA

1. Generally, wastewater projects qualify for long-term borrowings of up to 30 years. The Town will need to decide the length of the borrowings recognizing the Town does not typically borrow for 30 years.
2. Term for USDA long-term borrowings is up to 40 years.

Financing Plan

1. The Town should use the updated financial model to determine if SRF, USDA, or conventional financing is more beneficial.
2. The Town will then need Town Meeting approval to (1) authorize the project and (2) authorize the Treasurer to borrow to finance the project. Borrowing requires a 2/3 vote of Town Meeting.

4. Development of Financing Based on Project Costs

a. Borrowing Schedules

The updated financial model will have the ability to generate SRF, USDA, and conventional borrowing schedules based on user selections. SRF financing requires that certain schedules are used, but conventional and USDA borrowings can be created with whatever terms the user sees fit.

b. Capital Costs as Input

The capital costs related to certain treatment types that are not funded by some other means, like capital outlay, are to be used as inputs for borrowings created.

c. Non-Capital Costs

Even though the financing options focus on capital costs only, the non-capital costs, which are operating, maintenance, replacement, and monitoring costs, shall be presented for the engineering solutions selected so the user sees the complete picture.

d. Flexibility with Borrowings

If the input data, which is the capital costs of the treatment types, changes, then the updated financial model can be used to create additional or new borrowing schedules based on the latest data in the model.

5. Conclusion

To be developed, once the Town's Revenue Options objectives are clearer.