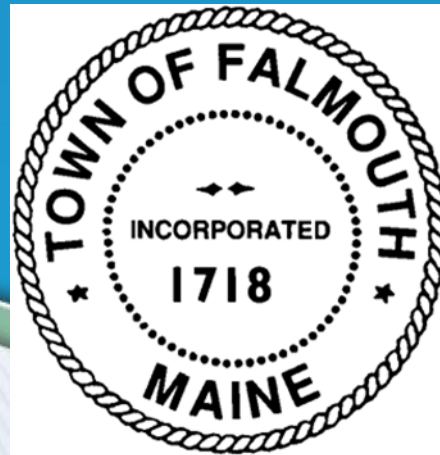


West Falmouth Sewer Master Plan

Presentation to Town Council

August 14, 2017

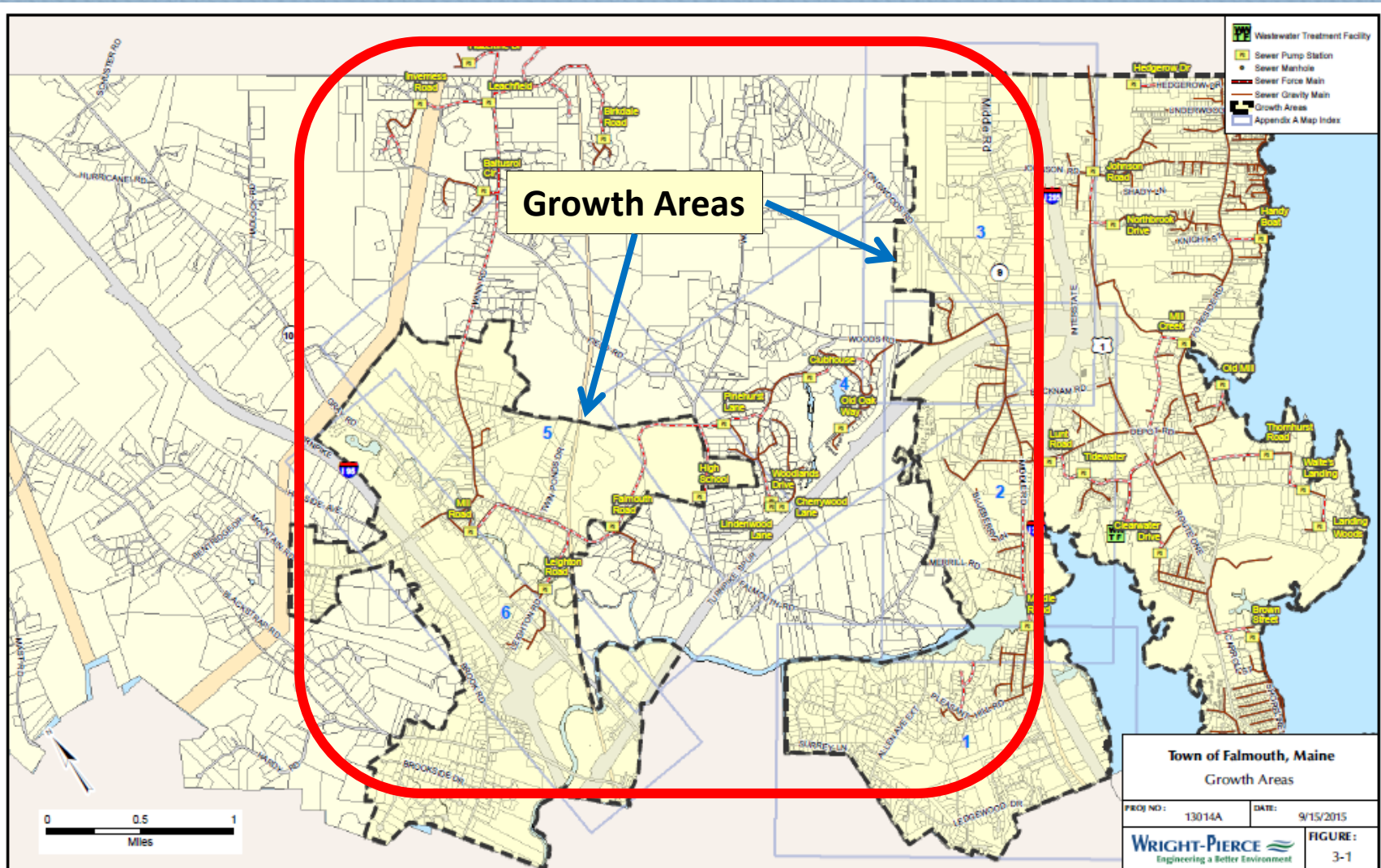


Presentation Overview

1. Impetus for Sewer Master Plan
2. Scope of Plan
3. Findings
4. Recommendations
5. Next Step



“West Falmouth” = Area West of I-295



Impetus for Sewer Master Plan

1. Capacity issues at 4 pump stations
2. Capacity issues in Middle Rd. sewer line
3. Establish a plan for targeted sewer service in the designated Growth Area
 - Anticipated development and future flows along Route 100 corridor and west of I-295

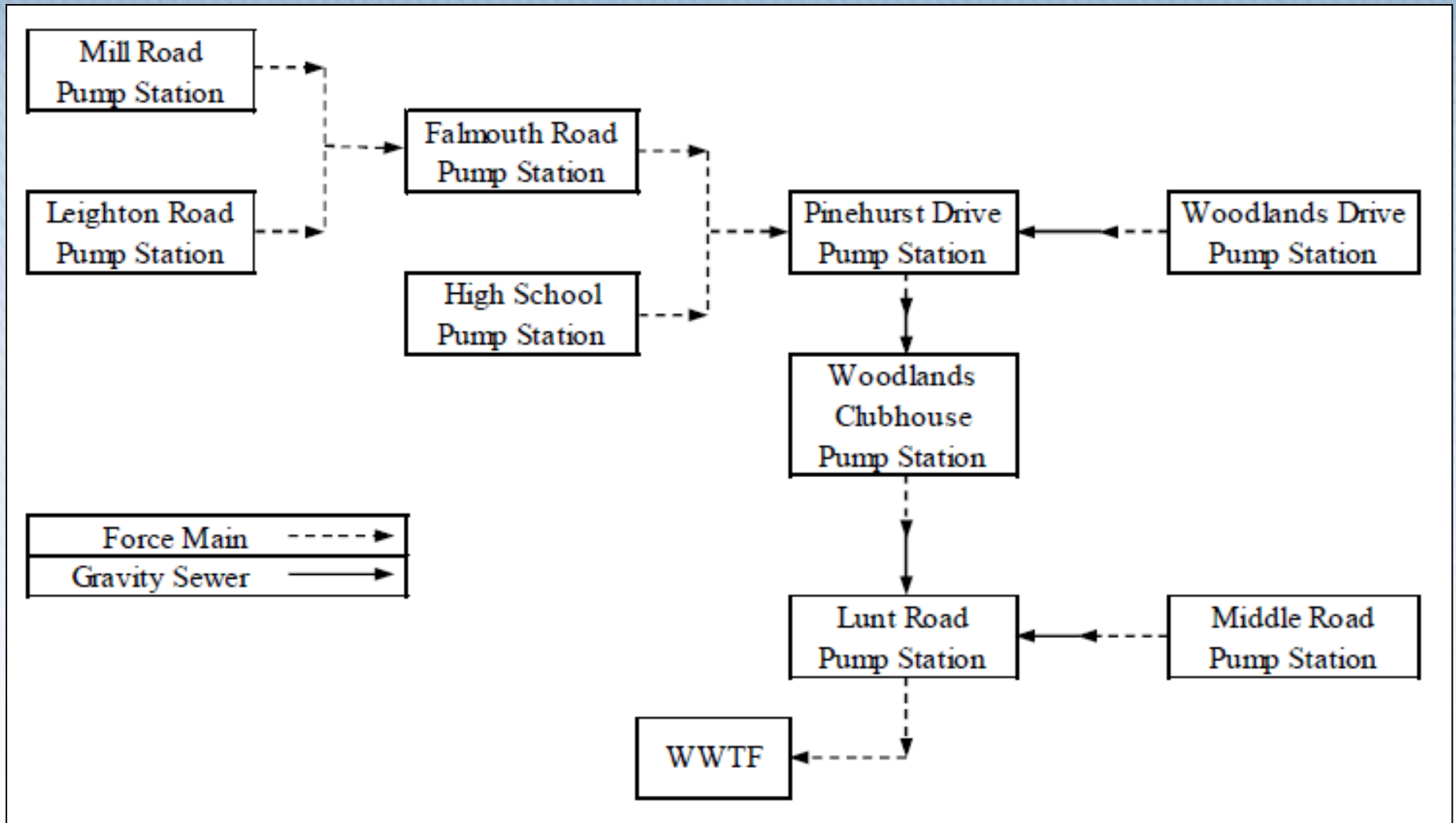


Scope of Master Plan

1. Determine existing infrastructure constraints
2. Estimate possible future sewer flows
3. Determine required upgrades and new infrastructure
4. Prepare cost estimates
5. Prioritize recommendations



Scope approved by Council in May 2014

Portion of Existing Linked Pumping Station System Studied



Town of Falmouth Sewer Study

Legend

-  Growth Area
-  Future Flow Study Area

Areas excluded from study due to constraints

I-95

Route 100

Spur

I-295

Route 1

General Findings

1. There is **little or no excess flow capacity** in current system (“constraints”).
2. Some pump stations are reaching **end of their expected life** and will need work regardless.
3. In some cases, when making upgrades, **extra capacity can be created for relatively little extra cost** to serve long term needs (20-40 years).

Recommended Phased Work

(by expected timing and priority)

1. Current Projects
2. Near Term Projects (next 3-6 years)
 - Major projects + Route 100
 - Other projects
3. Long term projects (likely within 7-15 years)

Recommended Current Projects (\$1.3M +/-)

- Slope Repair near Town Landing and Mackworth Point
- Manhole reinforcement along Shoreline Drive
- Risk assessment of flood prone assets
- Infiltration reductions

Recommended Major Near Term Projects

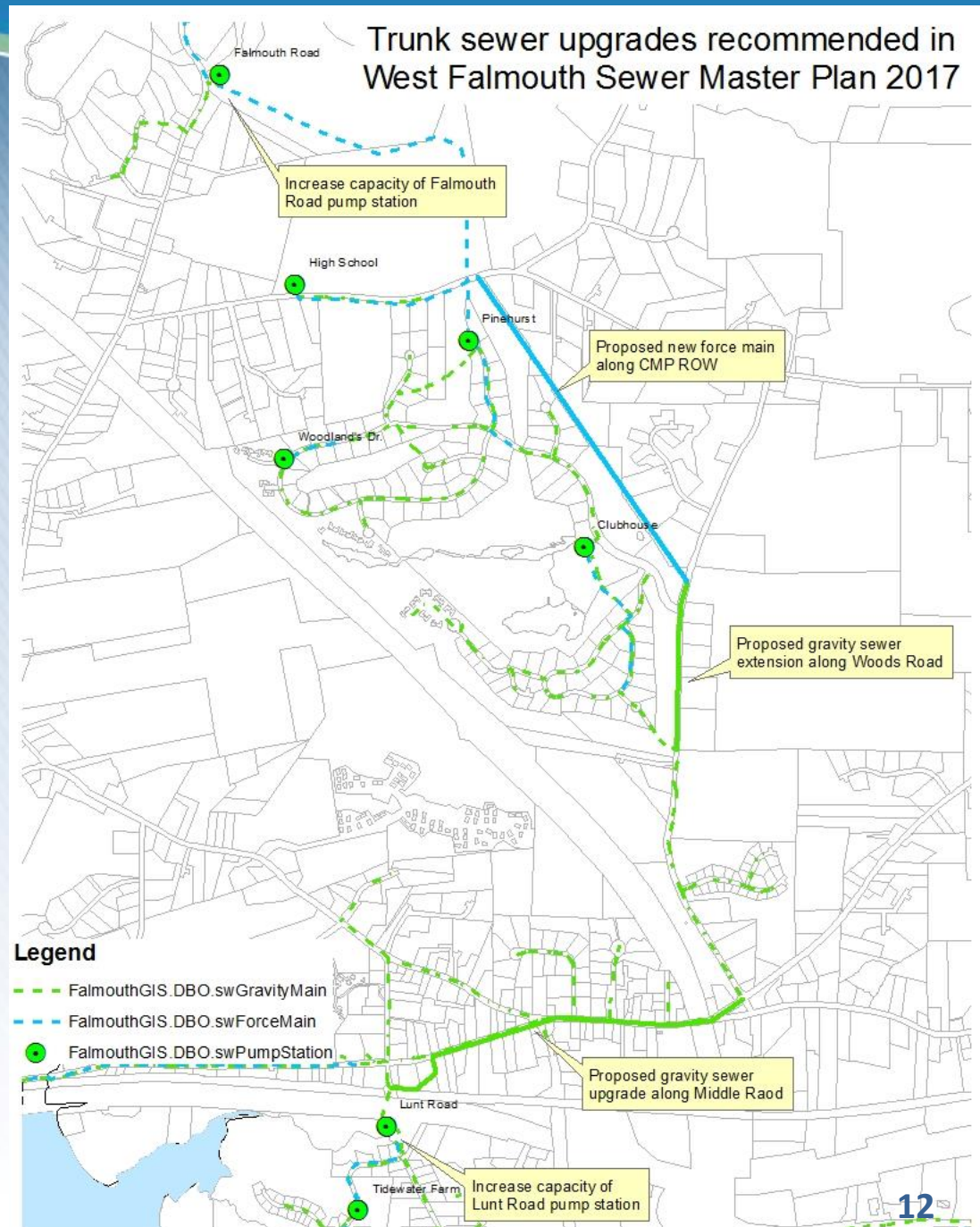
West Falmouth Projects (\$2.8M +/-):

- Falmouth Road Pump Station Upgrade
- Falmouth Road Force Main Extension
- Gravity sewer extension in Woods Road
- Sewer replacement, Middle Road from Woods Road to Lunt Road
- Lunt Road Pump Station Interim Upgrade

New Route 100 Sewer Extension and Pump Station (\$1.9M +/-):

- Part of Route 100 project

Recommended West Falmouth Sewer Upgrades



Other Near Term Projects (\$1M +/-)

- Treatment Plant:
 - Modifications to Accommodate Increased Peak Flow
 - New Centrifuge Dewatering Unit
- Middle Road Pump Station Improvements
- Brown Street Pump Station Improvements
- Clearwater Drive Pump Station Renewal

What will Town get for its West Falmouth investment?

1. Resolve existing pump station and pipeline capacity issues
2. Upgrade infrastructure that is up to 35 years old
3. Serve future growth in designated Growth Areas
 - Serve portion of unsewered section of Route 100

Possible Future Flow

- Near Term Improvements will create collection system capacity to handle 600-900 new units in area west of I-295 (“West Falmouth”)
- Collection capacity issue addressed for 40-50 years instead of 5-15 years

Likely Long Term Projects (\$10.6M +/-)

- Lunt Road Pump Station Phase I and II Upgrades
 - Middle Road Pump Station Upgrade
 - At Treatment Plant:
 - Add 3rd Aeration Basin
 - Add Outfall Extension
 - Enhanced Nutrient Removal Upgrade
 - Brown Street Pump Station Replacement
- Creates capacity to handle up to 2,200 new units

Financing Plan

Expenses:

- Pay remaining low interest, long term debt for 2008 Treatment Plant and 2016 Mill Creek work
- Issue bond for new near term projects

Revenue Sources and Preliminary Recommendations:

- User fees
 - Keep rate as stable as possible
 - Add new bond debt as old debt is retired
 - Will require annual, modest increases (2-3%)
- Connection fees
 - Remove exemption
 - Redefine fee structure
 - Change to “equity buy-in fee”
- Route 100 project

March 2016 Update for Council

- Do you agree that this plan is in keeping with 2014 Comprehensive Plan and 2016 Plan for Route 100?
- Do you agree that this plan represents good facility management?
- Do you agree that the financing plan for the recommended improvements is reasonable?

Next Steps for Council

- August 14, 2017: Review final draft plan + public input + decision to authorize preliminary engineering for **Near Term projects**
- 2018: Review updated cost estimates and financial plan for **Near Term projects**

Questions

