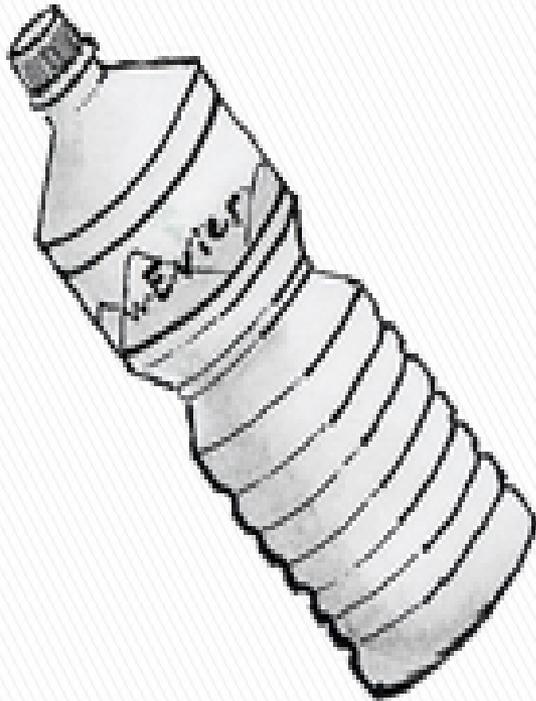


WATER & SEWER PRESENTATION 2016-2017



WHITEWATER RESERVOIR

Main Source of Drinking Water
2016



Until the spring of 1972, the City received all of its municipal water from the Whitewater Brook supply.

On May 4, 1972, the Whitewater Brook Upper Dam, storing 137 million gallons, was severely damaged due to water seepage through the dam.

THE CLEAN WATER ACT OF 1974
PROHIBITED OPEN RESERVOIRS AND
MANDATED THE FILTRATION OF BOTH
WATER AND SEWER.

THUS, THE CITY BUILT A WATER AND A
SEWER PLANT.

IN ADDITION, STORM WATER &
SANITARY SEWER LINES WERE
SEPARATED.



Sugar River Pump Station



Whitewater Reservoir - 150 mg



Rice Reservoir - 40 mg



Dole Reservoir - 50 mg



MUNICIPAL WATER

WATER TREATMENT PLANT

3,600 CONNECTIONS

DAILY AVERAGE GALLONS OF 1,100,000



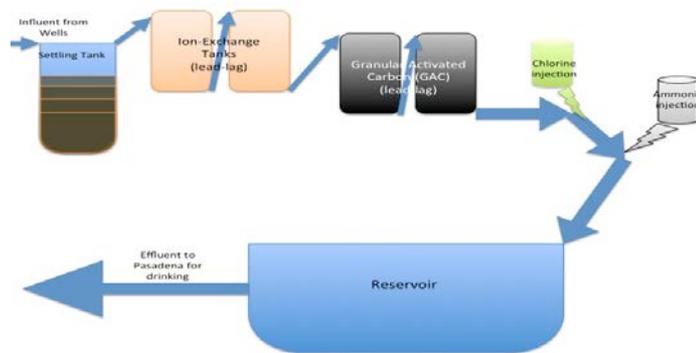
WATER TREATMENT PLANT - COMPLETED

CONVERTED LIME SILO TO SODIUM BICARBONATE

UPDATED SCADA COMPUTER SYSTEM

REPLACED SAND FILTER MEDIA

RE-TILED LAB FLOOR



INSTALLED

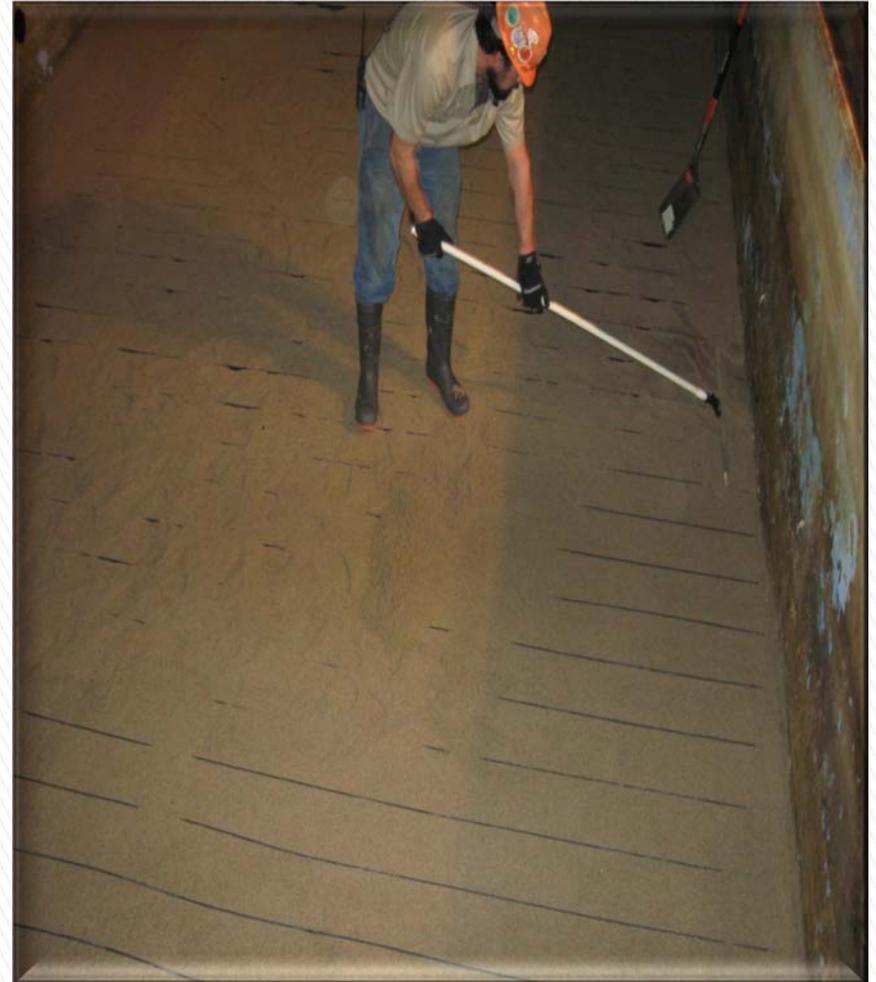
ABOVE GROUND OIL TANK

SECURITY CAMERAS

BACKWASH VALVES

CHEMICAL PUMPS

SAND FILTER MEDIA REPLACEMENT



WATER SYSTEM

- 90 Miles of Distribution Mains
 - 3 Reservoirs
 - 2 Storage Tanks
 - 2 Pump Stations
-
- 3,600 Services
 - 1,100 Main Line Valves
 - 434 Hydrants & Valves

WATER PROJECTS - completed

UPGRADED NUMEROUS WATER METERS



UPGRADED SEVERAL OLD SERVICE LINES

"OPERATION - GET THE LEAD OUT"

WATER PROJECTS -completed

BAKER STREET (early 1900's infrastructure)

- ✓ NEW WATER SERVICES TO (4) HOUSES

HENRY STREET (early 1900's infrastructure)

- ✓ NEW WATER SERVICES TO (10) HOUSES

WATER PROJECTS -completed

SEVERANCE STREET

(early 1900's infrastructure)

- ✓ NEW WATER SERVICES TO (9) HOUSES

COTTAGE STREET (1916 infrastructure)

- ✓ NEW WATER SERVICES TO (12) HOUSES

WATER PROJECTS -completed

LEFEVRE AVENUE (1950 infrastructure)

- ✓ (60') OF NEW WATER LINE
- ✓ (5) NEW SERVICE LINES
- ✓ (1) NEW FIRE HYDRANT

WATER PROJECTS - completed

GIRARD AVENUE (1950 infrastructure)

✓ (4) NEW SERVICE LINES

WATER PROJECTS -completed

WALNUT STREET (1853 infrastructure)

- ✓ (60') OF NEW WATER LINE
- ✓ NEW SERVICE LINES TO (19) HOUSES
- ✓ (1) SEWER MANHOLE
- ✓ (1) NEW FIRE HYDRANT
- ✓ (3) NEW GATE VALVES



WATER PROJECTS -completed

PEARL STREET (1851 infrastructure)

- ✓ NEW SERVICE LINES TO (3) HOUSES

PLEASANT STREET (1890 infrastructure)

- ✓ NEW SERVICE LINES TO (11) HOUSES

WATER PROJECTS - completed

FIRST STREET (1938 infrastructure)

- ✓ NEW WATER SERVICES TO (10) HOUSES
- ✓ (1) NEW FIRE HYDRANT

SECOND STREET (1938 infrastructure)

- ✓ NEW WATER SERVICES TO (13) HOUSES

WATER PROJECTS - completed

BUENA VISTA ROAD

(1919 infrastructure)

- ✓ NEW SERVICE LINES TO (13) HOUSES

WATER PROJECTS - completed

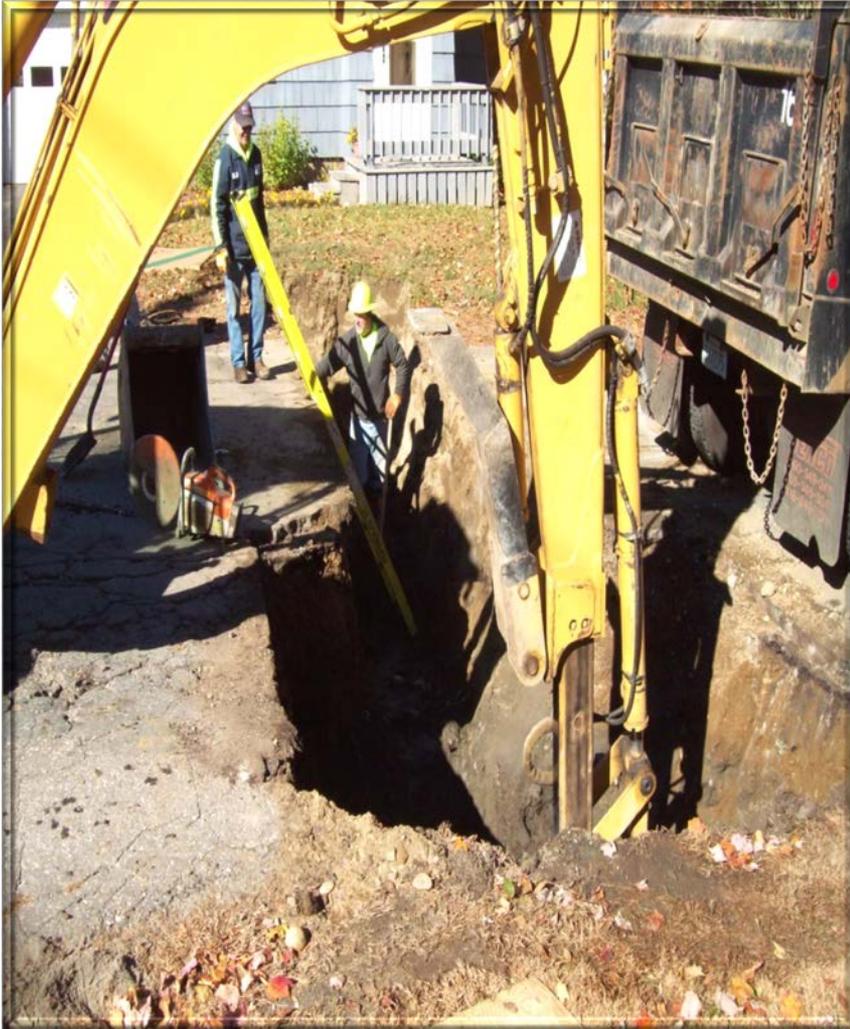
**ELM STREET
TO DUNNING STREET**

(1900 infrastructure)

✓ NEW SERVICE LINES TO (24) HOUSES

**TOTAL SERVICE LINE REPLACEMENTS
(137)**

WATER SERVICE PROJECTS



WATER PROJECTS -completed



INTERSECTIONS OF:

NORTH/ELM STREET

&

NORTH/HANOVER STREET

ALL NEW VALVE BOXES

LEAD & IRON WATER PIPES REMOVED FROM CITY STREETS



WATER PROJECTS - pending

STEVENS STREET (early 1900's infrastructure)

- ❑ (300') OF WATER LINE
- ❑ (1) NEW FIRE HYDRANT
- ❑ (5) INDIVIDUAL SERVICE LINES

WATER PROJECTS - pending

NEILSON STREET (1967 infrastructure)

- ❑ (250') OF WATER LINE
- ❑ (1) NEW FIRE HYDRANT
- ❑ (4) INDIVIDUAL SERVICE LINES

WATER PROJECTS - pending

WOONSOCKET AVE (1950 infrastructure)

- ❑ (1,100') OF WATER LINE
- ❑ (1) NEW FIRE HYDRANT
- ❑ (15) INDIVIDUAL SERVICE LINES

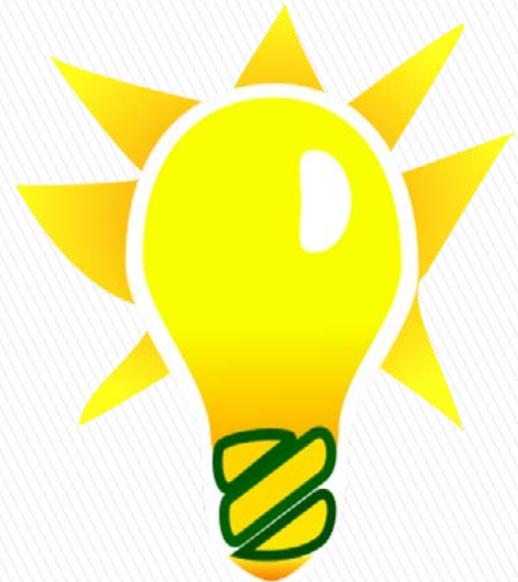
WATER PROJECTS - pending

FITCH RESERVOIR RD (1900 infrastructure)

- ❑ (200') OF WATER LINE
- ❑ (1) NEW FIRE HYDRANT
- ❑ (3) INDIVIDUAL SERVICE LINES

WATER/SEWER PROJECTS ENERGY AUDIT

In conjunction with the street light replacement project, the interior lighting in the water and sewer plants will be replaced with cost-saving LED lights



MUNICIPAL WASTEWATER

WASTEWATER TREATMENT PLANT

2400 CONNECTIONS

DAILY AVERAGE GALLON FLOW 1,300,000

***NEW DISCHARGE
PERMIT
(EPA)***



PUMP STATIONS & TANKS

SEWER

ELM STREET
CONE VALVE
GULLY BROOK
MILL DISTRICT
WESTSIDE AVE.
INDUSTRIAL PARK
SULLIVAN STREET
WASHINGTON STREET
PLEASANT VALLEY ESTATES

WATER

TANKS

MAPLE HEIGHTS (3 MG)
BIBLE HILL (500,000 GAL)
WATER PLANT (600,000 GAL)

PUMP STATIONS

SUGAR RIVER INTAKE (1979)
BIBLE HILL (2006)

WASTEWATER SYSTEM

→ 70 Miles of Sewer Lines

→ 9 Pump Stations

→ 1150 Manholes

SEWER PROJECTS - COMPLETED

- ✓ RECONSTRUCTED WALNUT STREET SEWER LINES
- ✓ INSTALLED NEW BIOXIDE TANK @ GULLY BROOK PUMP STATION FOR ODOR CONTROL
- ✓ INSTALLED NEW MANHOLE ON STEVENS STREET

WASTEWATER TREATMENT PLANT- COMPLETED

REPAIRED PISTONS, COMPOST & OPERATION PUMPS

REPLACED INFLUENT CUTTER EXCHANGE

REPLACED BELTS FOR FILTER PRESSES

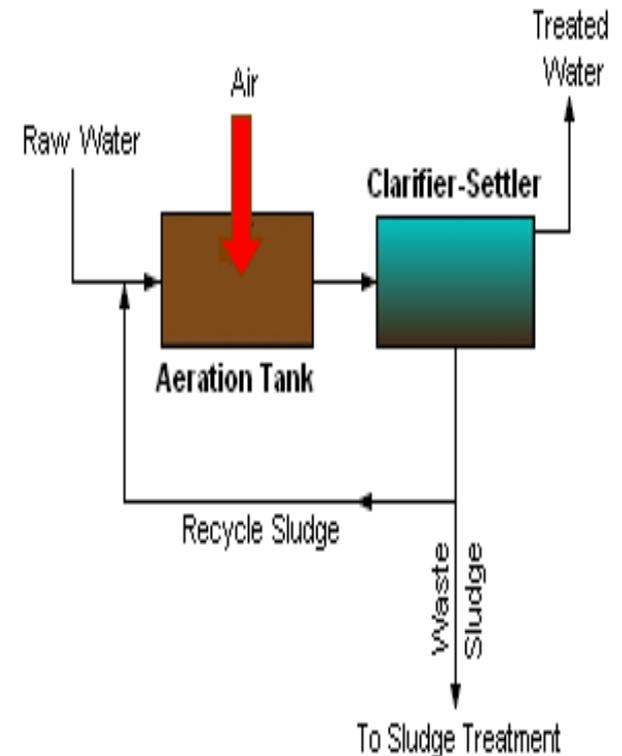
INSTALLED SECURITY CAMERAS

INSTALLED NEW WASH PRESS

UPDATED SCADA COMPUTERS

REBUILT AERATION BLOWER

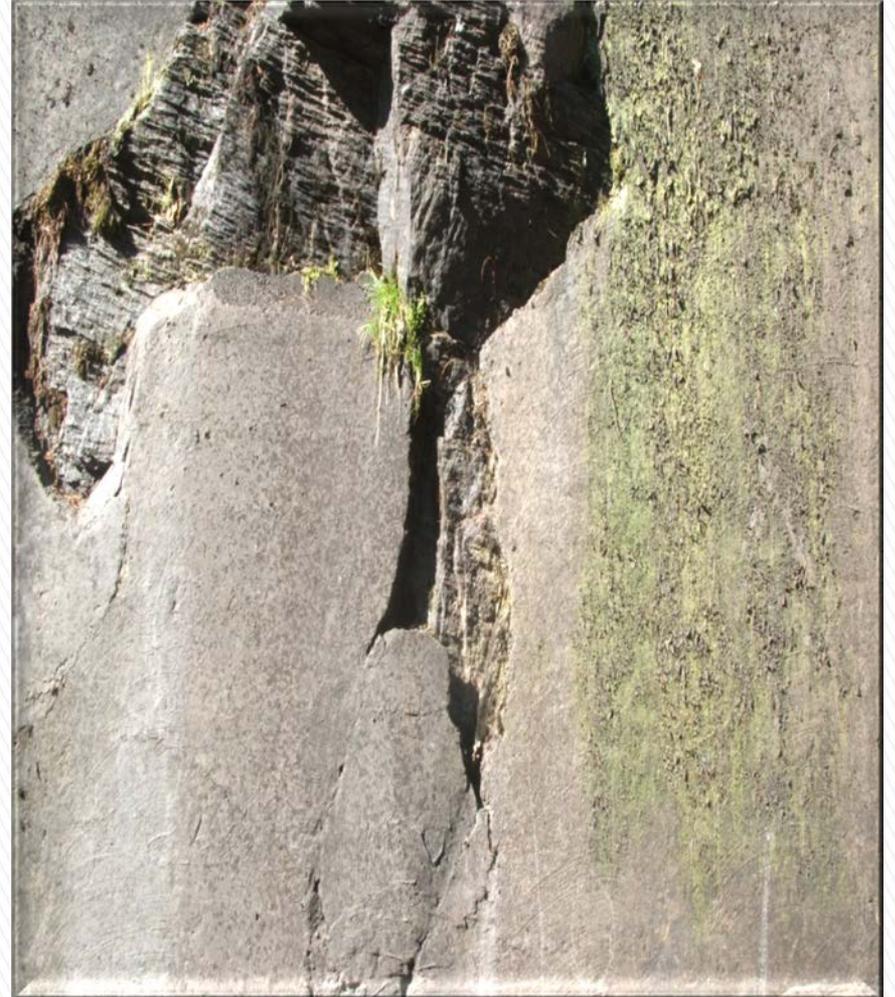
PAVED COMPOST SECTION



PENDING PROJECTS

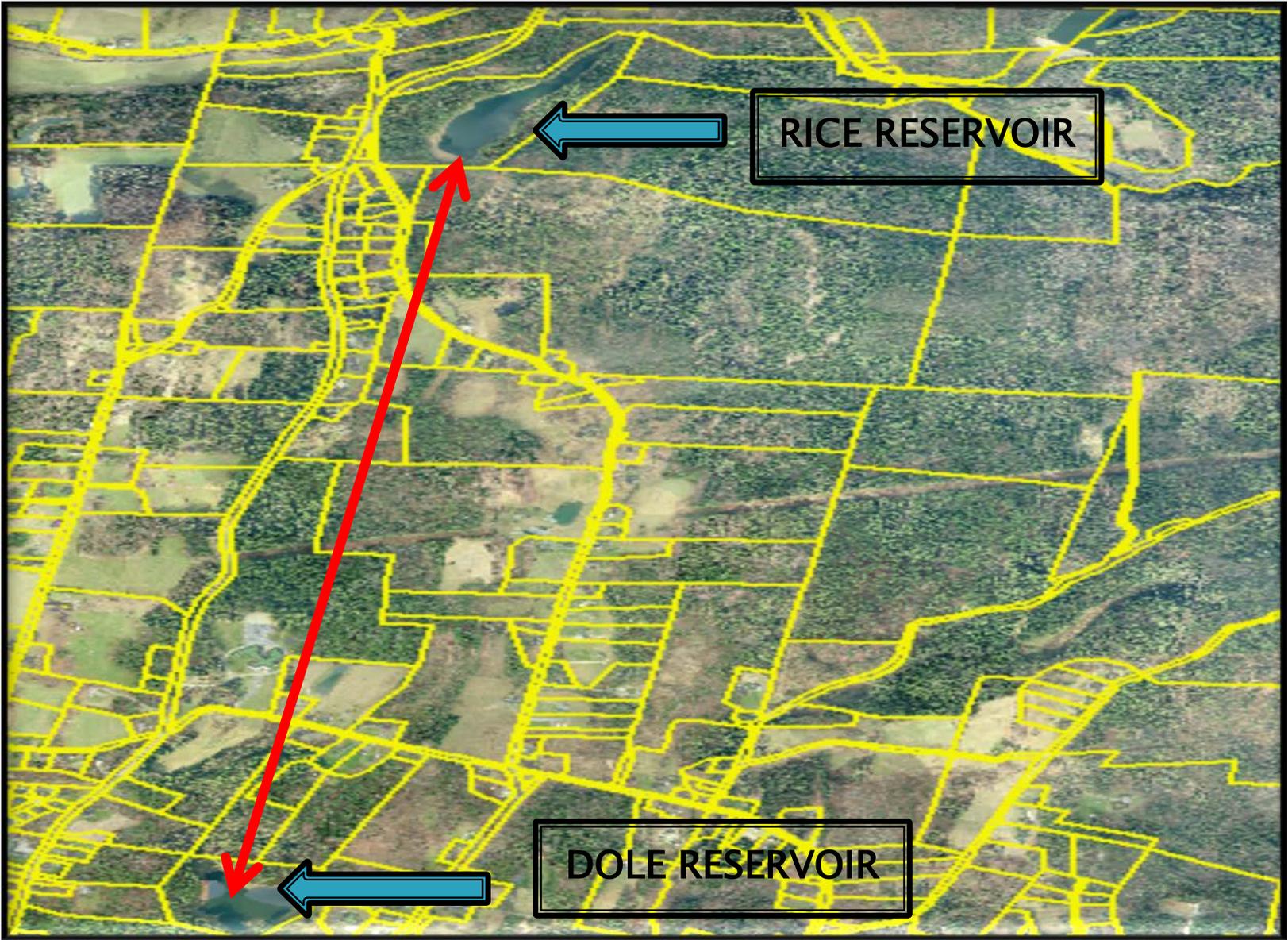
2016/2017

WHITEWATER RESERVOIR DAM SPILLWAY



RICE RESERVOIR SPILLWAY





RICE RESERVOIR

DOLE RESERVOIR

WATER TREATMENT

A NEW WATER LINE BETWEEN THE RICE RESERVOIR AND THE DOLE RESERVOIR MUST BE BUILT.

THE EXISTING LINE PRODUCES ONLY ONE-HALF OF THE REQUIRED FLOW.

THIS LINE MEASURES 14,400 FEET

WATER/SEWER RATE STUDY

- ✓ ENSURE THE CONTINUED FINANCIAL HEALTH OF EACH FUND - (INDUSTRIAL USE IS DOWN FROM 1972 WHEN IT WAS 37%)
- ✓ ADOPT A RATE STRUCTURE THAT WILL INCREASE COLLECTED REVENUES TO COVER EXPENSES, ENCOURAGE CONSERVATION, AND PROMOTE ECONOMIC DEVELOPMENT
- ✓ ESTABLISH A REPAIR, RENEWAL AND REPLACEMENT RESERVE FOR BOTH FUNDS

MAIN STREET PROJECT

\$2,500,000

Prior to Paving

REPLACE LINES

for

WATER

SEWER

DRAINAGE



NORTH/MAIN STREET PROJECT

Prior to Paving

ADD NEW

WATER LINE



CLAREMONT DPW UTILITY DIVISION



*Scott W. Sweet, Director
Victor St. Pierre, Assistant Director*