



**MERRIMACK VILLAGE DISTRICT
SUMMARY OF PROJECTS
(updated for Fiscal Year 2016-2017)**

<u>PROJECT</u>	<u>YEAR</u>	<u>AMOUNT</u>	<u>POSSIBLE SOURCE OF FUNDING</u>	<u>EXPLANATION</u>
Distribution System Improvements – CIP Planning Study –Phase II	2013-2014 (ongoing)	\$7,000	Capital Reserve/ Budget	This is Phase II of the project to review the entire distribution system and establish a long term plan to prioritize and fund recommended infrastructure repair or replacement.
Final Design and Construction for Iron and Manganese Treatment Facility	2013-2014 (ongoing)	\$4,300,000	SRF Funding pending Annual Meeting vote/completion 2014-2015	Based on UEI's report dated December 2010, a filtration treatment facility for iron and manganese at Wells #7 & #8 was found to be cost-effective and the most reliable to provide additional water supply with improved water quality. First payment due 1 year after project completion.
	TOTAL 2013-14	\$4,307,000		

Land Purchase – site TBD	2014-2015 (ongoing)	400,000	Capital Reserve	To secure (investigate and purchase) potential future supply site.
Potential new well site development	2014-2015 (ongoing)	400,000	Capital Reserve	Investigation and development of potential new well site to increase supply. Possibly spread out over 3 years.
Sunset Drive, Dawn Ave and High Noon waterline extension as part of the Town sewer/drainage project	2014-2015	300,000	Capital Reserve	Awaiting Town bids for actual MVD portion
	TOTAL 2014-15	1,100,000		



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Projects on Hold

Blending of Wells 6, 7 & 8	Indefinite Hold	835,000	Previously bonded in 2011 – not included in CIP total	If the Blending pilot from 2008-2009 is successful and in conjunction with the hydraulic improvements on Continental Blvd., the MVD may opt to blend Wells #6, #7 & #8 to improve the water quality of the three wells. (CWIP)
Increase production in Well #2	Indefinite Hold	300,000	Capital Reserve/ Budget or SRF	This includes cost to update permitted production volume at Well #2 from 1100 gpm to 1500 gpm and infrastructure improvements to increase capacity (pumps, motor, VFD, SCADA) \$7,500 set aside in the budget for preliminary design.
New MVD Office	Indefinite Hold	600,000	Capital Reserve /Budget	Cost to construct an office down at 30 Continental Blvd. where Distribution and Treatment are presently located.
		1,735,000		

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FUTURE PROJECTS

Future “Distribution System Improvements” will be funded by budgeting \$700,000 per year beginning in 2015 (Per Underwood Engineers, Inc report dated November 2, 2012)

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Future projects – (15 years)	2028-2029			
Distribution System Improvements-replacement period 2020’s		8,250,000*	Capital Reserve/ Bond/SRF	Projected cost for repair/replacement of main lines installed in 1950’s per UEI report dated 9/13/12
Future projects – (20 years)	2033-2034			
Well #6 Treatment Facility - includes electrical upgrades		2,600,000	Bond	Depending on future supply needs, the MVD may need to construct a Packed Tower Aeration treatment facility to further address the VOC’s and/or other treatment for sodium and chloride issues at Well #6 to bring this source back on line to its full capacity. (Subject to the success of the blending project, water quality changes, and the need for increased production).
New Well – north central location - Engineering & Construction Mitchell Woods		1,500,000	Bond/SRF	Estimated cost for engineering and construction for new well.
Future projects – (25 years)	2038-2039			
Distribution System Improvements-replacement period 2030’s		16,900,000*	Capital Reserve/ Bond/SRF	Projected cost for repair/replacement of main lines installed in 1960’s per UEI report dated 9/13/12
Future projects – (35 years)	2048-2049			
Distribution System Improvements-replacement period 2040’s		44,100,000*	Capital Reserve/ Bond/SRF	Projected cost for repair/replacement of main lines installed in 1970’s per UEI report dated 9/13/12
Future projects – (45 years)	2053-2054			
Distribution System Improvements-replacement period 2050’s		800,000*	Capital Reserve/ Bond/SRF	Projected cost for repair/replacement of main lines installed in 1980’s per UEI report dated 9/13/12



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Future projects – (55 years)	2063-2064			
Distribution System Improvements-replacement period 2070's		3,350,000*	Capital Reserve/ Bond/SRF	Projected cost for repair/replacement of main lines per UEI report dated 9/13/12
Future projects – (75 years)	2083-2084			
Distribution System Improvements-replacement period 2080's		33,970,000*	Capital Reserve/ Bond/SRF	Projected cost for repair/replacement of main lines installed in 1980's per UEI report dated 9/13/12
Future projects – (85 years)	2093-2094			
Distribution System Improvements-replacement period 2090's		18,920,000*	Capital Reserve/ Bond/SRF	Projected cost for repair/replacement of main lines installed in 1990's per UEI report dated 9/13/12
Future projects – (95 years)	2103-2104			
Distribution System Improvements-replacement period 2100's		16,000,000*	Capital Reserve/ Bond/SRF	Projected cost for repair/replacement of main lines installed in 2000's per UEI report dated 9/13/12
Future projects – (105 years)	2113-2114			
Distribution System Improvements-replacement period 2110's		6,780,000*	Capital Reserve/ Bond/SRF	Projected cost for repair/replacement of main lines installed in 2010's per UEI report dated 9/13/12
*Distribution System Improvements will be funded with approximately 50% from Capital Reserve and 50% from future debts or other funds and offsets. \$700,000 annually represents 50% of the identified needs above.				

BASED ON PROGRESS OF THE VARIOUS PROJECTS AND WHAT NEEDS TO BE COMPLETED FROM ONE YEAR TO THE NEXT, SEVERAL PROJECTS MAY BE MOVED INTO SUBSEQUENT YEARS.

All costs are internal estimates as of December 2012 and will need to be updated as necessary and as engineering estimates are received.

EGGI – Emery & Garrett Groundwater, Inc.
MVD – Merrimack Village District
VOC – Volatile Organic Compound
UEI – Underwood Engineers, Inc.
SRF – State Revolving (Loan) Fund
CWIP – Construction Work in Progress



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COMPLETED PROJECTS

<u>PROJECT</u>	<u>YEAR</u>	<u>AMOUNT</u>	<u>POSSIBLE SOURCE OF FUNDING</u>	<u>EXPLANATION</u>
Installation of two (2) 16” sleeves and pipe in Turkey Hill bridge in conjunction with the Town of Merrimack’s bridge replacement project of the Turkey Hill bridge. Work also includes 1,000 feet of water main on Turkey Hill Road. (This may be accomplished in 2010 in it’s entirety depending on the Town’s schedule)	2010-2011 COMPLETE	670,000	Capital Reserve	This project will remove a 12” and a 16” under river water line crossing in Turkey Hill Road bridge and provide for inserting two (2) 16” new lines suspended from the bridge. This will accommodate the planned 16” water line installation in Turkey Hill Road. This is the first recommended sequence of projects so the work can occur concurrently with the Town’s project. (CWIP)
Hydraulic Improvements on Continental Boulevard – New 16” main from the end of the existing 16” main on Continental Boulevard via Camp Sargent and Amherst Roads to Turkey Hill Road (9,400’).	2010-2011 COMPLETE	2,800,000	Bond	Per UEI “Distribution System Hydraulic Evaluation” the MVD has hydraulic limitations in several areas of town. Hydraulic improvements must be done to allow supplies in the south to flow through the distribution system unrestricted. This is the second recommended sequence of projects. (CWIP)
Installation of a 16” water main loop from an existing 16” main cross country to the 12” main on Route 3.	2010-2011 COMPLETE	\$2,000,000	Private	Merrimack Premium Outlets, LLC (Chelsea) will construct the necessary water line connection to service the property for domestic and fire flow including design and engineering.
Hydraulic Improvements – Amherst Road and Turkey Hill Road – New 16” main (7,900’)	2010-2011 COMPLETE	1,500,000	Balance of \$2.8 million bond funds and Capital Reserve	Per UEI “Distribution System Hydraulic Evaluation” the MVD has hydraulic limitations in several areas of town. This is the third recommended sequence of projects. (CWIP)
Distribution System Improvements – CIP Planning Study –Phase I	2012-2013 COMPLETE	\$7,000	Budget	The purpose of this study was to perform a general review of the entire distribution system and establish a long term plan to prioritize and fund recommended infrastructure.