

Alternative Analysis, no SRF funding

Dollar Bay - Lead Service Lines Only 5%/Year

No.	DISTRIBUTION	Qty	Unit	U/Cost	Total
1	Replace Watermain		LF		
2	Replace Lead Service Lines - Dollar Bay	6	LF	6000	\$36,000
4	Miscellaneous Hydrant Replacements		EA		
5	Misc. Watermain Valve Replacements		EA		
8	WM to Sandy Bottom - DB Channel		FT		
9	WM to Sandy Bottom - Hydrant		EA		
10	Replace Water Meters		EA		
Total Distribution					\$36,000
No.	WATER SOURCE	Qty	Unit	U/Cost	Total
11	Replace Well Pumps		EA		
12	Well House Improvements		LS		
13	Storage Tank Improvements		LS		
Total Source/ Storage					\$0
Construction Total					36,000
Contingency, Bonding, Legal, Constr. Obs/Admin., Design					\$0
Total					\$36,000
Assume 75% EGLE SRF Grant					
Assume 25% EGLE SRF Bond Debt Service (1.875%, 30 years)					
Total Debt Service					\$36,000
Customers					330
Additional Base Rate/Month					\$9.09
Current Base Rate/ Mo.					\$36.50
New Total Base Rate/ mo.					\$45.59
Water Usage: Included					
Ave. Residential Rate/ Mo.*					\$45.59
<i>*for use of 4,000 gallons</i>					
Total:					\$36,000 /year

Alternative Analysis, no SRF funding

Tamarack City - Lead Service Lines Only 5%/Year (35 ea)

No.	DISTRIBUTION	Qty	Unit	U/Cost	Total
3	Replace Lead Service Lines - TC (on private)	2	EA	5000	\$10,000
Total Distribution					\$10,000
No.	WATER SOURCE	Qty	Unit	U/Cost	Total
6	Extend Watermain Mason to Tamarack City		LF		
7	Booster Pump Station, Mason to Tamarack City		LS		
11	Replace Well Pumps		EA		
12	Well House Improvements		LS		
13	Storage Tank Improvements		LS		
14	UMWC Contract Clause		LS		
Total Source/ Storage					\$0
Construction Total					10,000
Contingency, Bonding, Legal, Constr. Obs/Admin., Design					\$0
Total					\$10,000
Assume 75% EGLE SRF Grant					
Assume 25% EGLE SRF Bond Debt Service (1.875%, 30 years)					
Total Debt Service					\$10,000
Customers					170
Additional Base Rate/Month					\$4.90
Current Base Rate/ Mo.					\$37.00
New Total Base Rate/ mo.					\$41.90
Water Usage: Included					\$24.90
Ave. Residential Rate/ Mo.*					\$66.80
<i>*for use of 3,000 gallons</i>					
Note: Current TC User at 3000 gal/mo. = \$61.90/mo.					
Total:					\$10,000 /year

Total: \$10,000 /year

OSCEOLA TOWNSHIP WATER SYSTEM
PROPOSED EGLE SRF APPLICATION
FOR
WATER SYSTEM IMPROVEMENTS - DOLLAR BAY AND TAMARACK CITY

SYSTEM	CURRENT BASE RATE	WATER RATE	ADDITIONAL BASE RATE	TOTAL CURRENT RATE	FUTURE WATER RATE IN 20 YEARS, ASSUMING A 2.5% RATE OF INFLATION
DOLLAR BAY	\$36.50	INCLUDES 4KGAL	\$11.35	\$36.50	
FUTURE WATER RATE IN 20 YEARS, ASSUMING A 2.5% RATE OF INFLATION* ASSUMING 75% GRANT FUNDING, 40 YEAR TERM, FULL PROJECT					\$54.24
*Inflation increase only applied to water rate for comparison purposes, maintenance cost inflationary increase not included.					
TAMARACK CITY	\$37.00	3000 GALLONS	\$17.38	\$61.90	
FUTURE WATER RATE IN 20 YEARS, ASSUMING A 2.5% RATE OF INFLATION* ASSUMING 75% GRANT FUNDING, 40 YEAR TERM, FULL PROJECT					\$61.57
*Inflation increase only applied to water rate for comparison purposes, maintenance cost inflationary increase not included.					
TAMARACK CITY	\$37.00	3000 GALLONS	\$7.35	\$61.90	
FUTURE WATER RATE IN 20 YEARS, ASSUMING A 2.5% RATE OF INFLATION* ASSUMING NO SRF PROJECT, + LEAD SERVICE LINE REPLACEMENT					\$84.16
*Inflation increase only applied to water rate for comparison purposes, maintenance cost inflationary increase not included.					
TAMARACK CITY	\$37.00	3000 GALLONS	\$1.58	\$61.90	
FUTURE WATER RATE IN 20 YEARS, ASSUMING A 2.5% RATE OF INFLATION* ASSUMING SRF PROJECT BUT ONLY LEAD SERVICE LINE REPLACEMENT IN TC.					\$79.38
*Inflation increase only applied to water rate for comparison purposes, maintenance cost inflationary increase not included.					

TAMARACK CITY	CURRENT BASE RATE	WATER RATE	ADDITIONAL BASE RATE	TOTAL CURRENT RATE	FUTURE WATER RATE IN 20 YEARS, ASSUMING A 2.5% RATE OF INFLATION
TAMARACK CITY	\$37.00	3000 GALLONS	\$17.38	\$57.75	
FUTURE WATER RATE IN 20 YEARS, ASSUMING A 2.5% RATE OF INFLATION* ASSUMING 75% GRANT FUNDING, 40 YEAR TERM, FULL PROJECT					\$61.57
*Inflation increase only applied to water rate for comparison purposes, maintenance cost inflationary increase not included.					
TAMARACK CITY	\$37.00	2500 GALLONS	\$7.35	\$57.75	
FUTURE WATER RATE IN 20 YEARS, ASSUMING A 2.5% RATE OF INFLATION* ASSUMING NO SRF PROJECT, + LEAD SERVICE LINE REPLACEMENT					\$77.52
*Inflation increase only applied to water rate for comparison purposes, maintenance cost inflationary increase not included.					
TAMARACK CITY	\$37.00	2500 GALLONS	\$1.58	\$57.75	
FUTURE WATER RATE IN 20 YEARS, ASSUMING A 2.5% RATE OF INFLATION* ASSUMING SRF PROJECT BUT ONLY LEAD SERVICE LINE REPLACEMENT IN TC.					\$72.58
*Inflation increase only applied to water rate for comparison purposes, maintenance cost inflationary increase not included.					

Osceola Township Water Supply Cost Calculation

Electrical Use Cost:

T.C. users	Unit per 1,000 gal	Pump Rate gpm	Pump*	Cost elec: \$/kwh	Cost \$/year	Cost \$/1000 gal.		
170	1000	300	T.C.	\$0.17	\$564.40	\$0.11	TC only	*10 HP
170	1000	300	D.B.	\$0.17	\$2,257.60	\$0.42	TC only	*40 HP

D.B. users	Unit per 1,000 gal	Pump Rate gpm	Pump	Cost elec: \$/kwh	Cost \$/year*	Cost \$/1000 gal.		
330	1000	300	D.B.	\$0.17	\$10,200.00	\$0.67	DB only	*from UPPCO bill

Note: DB system pumps 2X water sales, ie. 50% water loss through distribution system.

Pump Repair and Replacement:

	\$/year	Ave. gpmo.	Users	Cost \$/1000 gal.	
pump RRI (15 y 2 @ 10 HP x \$7,500 =	\$1,000	3000	170	\$0.16	TC only
pump RRI (15 y 2 @ 40 HP x \$20,000 =	\$2,667	3000	500	\$0.15	DB+TC

T.C. Supply Rate: \$0.84 /\$1000 gal
D.B. supply cost: \$0.82 /\$1000 gal