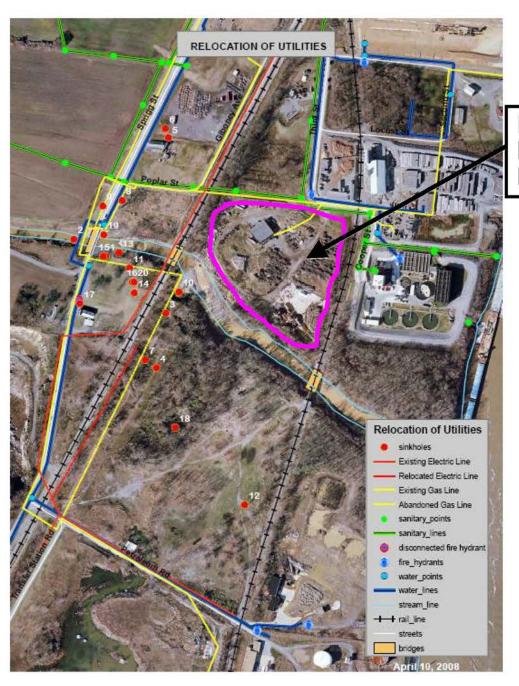
Regional Water Finance Forum

Wastewater Treatment in Cape Girardeau Presenter: City Manager Scott Meyer

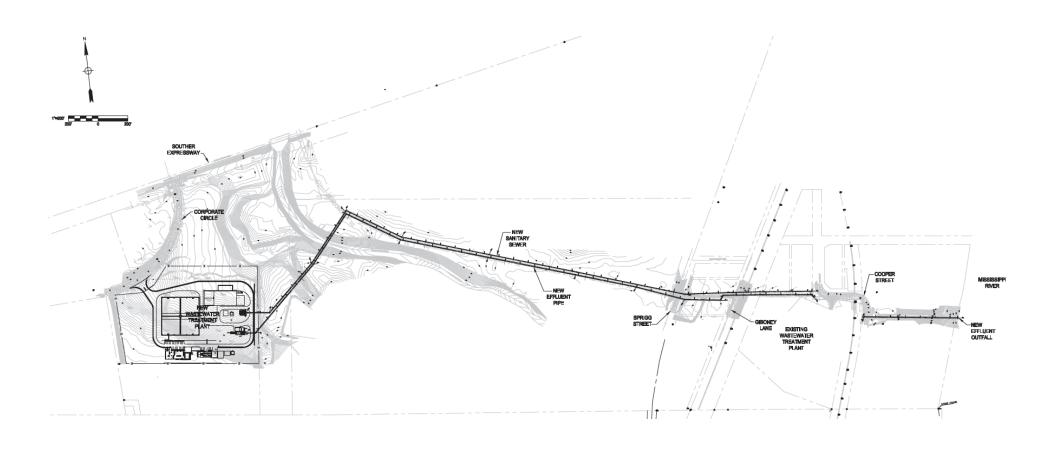
September 12, 2017 St. Joseph, Mo.

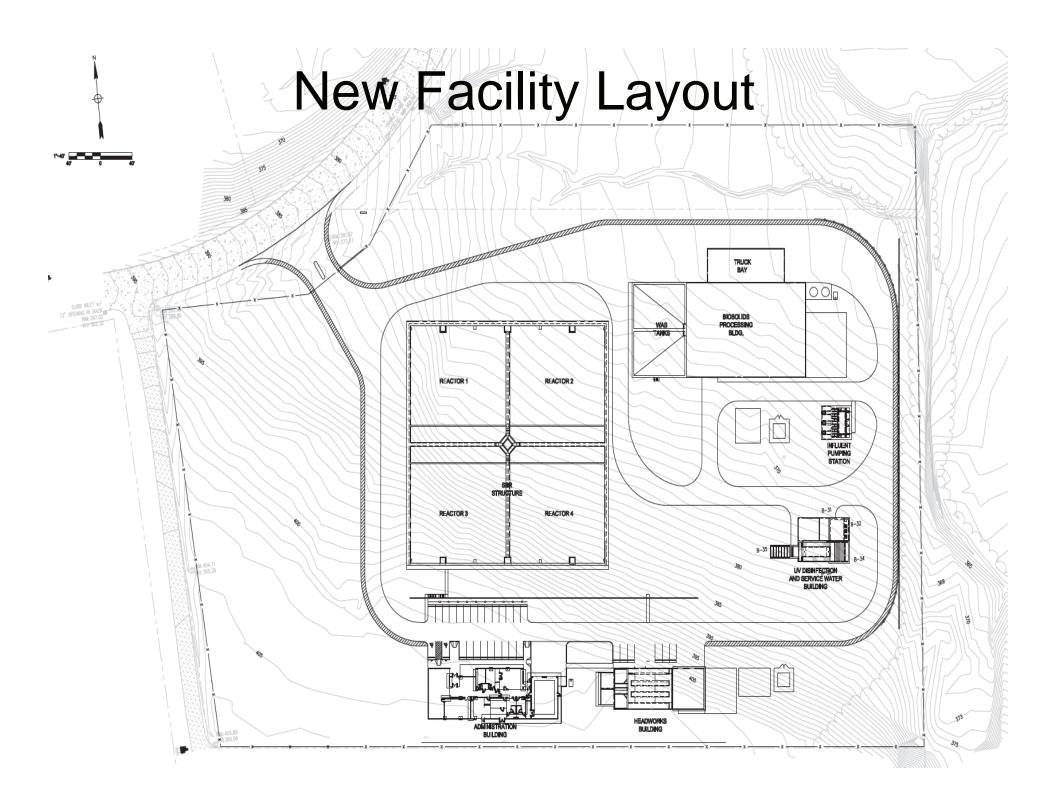




Initial Expansion Property







	<u>Timeline</u>
1962	Existing Wastewater Treatment Facility Built
1977	Facility Upgraded for Secondary Biological Treatment
1988	Facility Upgraded for Biosolid Management System
2003	Facility Equipment Upgrade
2006	Department of Natural Resources no longer allows untreated bypasses in permit
2006	City began looking to expand/upgrade existing facility
2007/2008	<u>Sinkholes</u> develop near facility; expansion no longer feasible
2009	Began to talk about a new facility at new location; Hired design firm
2010	Negotiated settlement agreement with DNR to set timeline/fines and build new facility & make system improvements
April 2011	Vote on Sales Tax Extension & Bonding to help reduce rate hike needed to build new facility
2012	Begin Construction
2013	Implement Supplemental Environmental Project
June 2014	New Treatment Facility in operation

New Treatment Facility

Design Capacity

11 mgd daily average 50 mgd peak

Sequencing Batch Reactor Biosolids Management System I/I Management & Repairs

Location

Corporate Circle Behind Public Works

Construction Cost							
\$3,500,000							
\$7,800,000							
\$5,200,000							
\$17,500,000							
\$3,000,000							
\$2,000,000							
\$5,000,000							
\$16,400,000							
\$62,400,000							
\$7,600,000							
\$2,000,000							
\$72,000,000							

Financing Options

*State Revolving Fund Loan Voter approved Subsidized interest rate

*Municipal Bonds Voter approved

*Annual Appropriation Bonds

*Lease-Purchase

Recommended Payment Options

1/4¢ Sales Tax Extension & Increased User Charge will pay off loan or bonds

EPA Affordability Guide	Current Sewer User Charge	New Sewer User Charge
		San Care Care
Based on 2% of Median	Current Rate Formula	New Rate Formula
Household Income	\$4.50 base fee + \$1.35/ Ccf	\$16.00 base fee + \$3.00/Ccf
(\$40,322)		6 (m. 1) 1 (m. 1)
(+ : -;-==)	Average Residential	Average Residential
EPA Affordability Charge	Sewer Charge	Sewer Charge
\$67.20 per month	\$13.46 per month	\$36 per month
		(Increase \$23.00 per month)
Average Residential Utility Bill	Average Residential Utility Bill	Average Residential Utility Bill
w/ EPA "Affordable" Charge	currently	After increase
\$106.24 per month	\$52.50 per month	\$75.50 per month
(water, sewer & trash)	(water, sewer & trash)	(water, sewer & trash)
	Average residential water use is	If Bond Issue and 1/4¢ Sales Tax
Sewer charges would have to	6.64 Ccf	Extension Fail Rates could be as
reach this level before being	0.01001	much as 33% higher
considered a burden by EPA		much as 3370 mgner
		450

Estimated Monthly Residential User Charge

		Election Resu	Ilt Scenarios	
	Bond Yes Sales Tax Yes	Bond No Sales Tax Yes	Bond Yes Sales Tax No	Bond No Sales Tax No
SRF	<\$36.00	NA	<\$43.00	NA
Municipal Bonds	\$36.00	NA	\$43.00	NA
Annual Bonds	NA	\$38.00	NA	\$44.00
Lease/ Purchase	NA	\$38.00	NA	\$44.00

Election to Extend the 1/4¢ Sales Tax

City of Cape Girardeau, MO Tuesday April 5, 2011

PROPOSITION

Shall the City of Cape Girardeau, Missouri, extend the imposition of the City's existing sales tax of one-quarter of one percent (1/4 of 1%) for the purpose of funding capital improvements and the operation and maintenance of such improvements, including but not limited to constructing a new wastewater treatment plant and other improvements to the City's sewerage system necessary for compliance with the requirements of the Missouri Department of Natural Resources and the retirement of authorized bonded indebtedness for such purposes, such sales tax to terminate automatically on December 31, 2037?

Bond Election

City of Cape Girardeau, MO Tuesday April 5, 2011

PROPOSITION

Shall the City of Cape Girardeau, Missouri, issue its sewerage system revenue bonds in the amount of \$72,000,000 for the purpose of acquiring, constructing, extending and improving the sewerage system of the City, including but not limited to constructing a new wastewater treatment plant and other improvements necessary for compliance with the requirements of the Missouri Department of Natural Resources? The authorization of the bonds will authorize the City Council to fix, establish, maintain and collect rates and charges for the services provided by said system as will produce income and revenues sufficient to provide funds to pay the costs of operation and maintenance of the system and the principal of and interest on the bonds as they become due and to provide for the establishment of reasonable reserves therefore, any provision of the City's charter to the contrary notwithstanding.

Current User Charge	Proposed Finance Plan	Election Result Scenarios				
Current Sewer Use Charge \$4.50 + \$1.35/Ccf	New Sewer User Charge: \$16.00/mo + \$3.00/Ccf	Bond No Sales Tax Yes	2000 CENTRAL PORT - PORTER SE			
Current Average Residential \$13.46/mo Sewer charge	Average Residential \$23.00/mo Sewer Charge Increase	\$25.00/mo increase	\$29.00/mo increase	\$31.00/mo increase		
Current Average Utility Bill \$52.50/m (water, sewer & trash)	Utility Bill after increase \$75.50/mo	\$77.50/mo	\$81.50/mo	\$83.50/mo		
Affordability	Financing Options					
EPA Affordability Guide Based on 2% Median Household Income	1 1	Ва	allot Issu	es		
(\$40,322) EPA Affordability Charge \$67.20/mo	Subsidized interest rate *Municipal Bonds Voter approved *Annual Appropriation Bonds *Lease-Purchase	ed tion Bonds				
Sewer charge would have to reach this amount before being consid- ered a burden by EPA	Sewer charge would have to reach his amount before being consid-					
Average Utility Bill w/ EPA "Affordable" Charge \$106.24/mo	Extend Existing 1/4¢ Sales Tax & Increased user charge will pay off loan or bonds		Bond Iss	sue		

	<u>Timeline</u>
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NEW TREATMENT FACILITY	Construction Cost	
\$1000 100 1000 1000 1000 1000 1000 1000	Site Work	\$3,500,000
	Pipelines	\$7,800,000
Design Capacity	Headworks	\$5,200,000
11 mgd daily average	SBR Tanks	\$17,500,000
50 mgd peak	UV Disinfection	\$3,000,000
	Administration Bldg.	\$2,000,000
	Electrical &	
<u>Location</u>	Instrumentation/Controls	\$5,000,000
Corporate Circle - Behind Public Works	Biosolids Facilities	<u>\$16,400,000</u>
	Total Construction Cost	\$62,400,000
Sequencing Batch Reactor	System Improvements (I/I) Cost	\$7,600,000
Biosolids Management System	Bond Issuance Cost	\$2,000,000
I/I Management & Repairs	Total Needed	\$72,000,000

	Wastewater Treatment Plan Election, April 5, 2011											
Contaced	Organization	Date	Time	Location	Contact Person	Contact #	Computer	Projector	Screen	# attending	Length	Presenters
Susan	Senior Center	02/24/11	10:45	Cape Senior Center	Susan McClanahan	335-1352	HAN	IDOUTS O	NLY	30	30 min	Tim & Scott
Danny Essner	Rotary Club	03/02/11	6:30 a.m.	My Daddy's Cheesecake	Danny Essner	331-7419	Take Ours	Provided	Provided	20	20 min	Tim & Scott
Heather	Old Town Cape	03/03/11	5:00 p.m.	OTC Office Broadway	Heather		Take Ours	Take Ours	ake Our	20	10 min	Scott & Steve
Tracey Glenn	First Friday Coffee	03/04/11	7:40	Show Me Center	Tracey Glenn	335-3312	Provided	Provided	Provided	150	?	Scott
Marcia	Park Employees	03/07/11	11:00 a.m	Arena Building	Dan Muser	335-5421	Take Ours	Take Ours	Ours	50	1 Hour	Tim & Scott
Bruce	Airport Board	03/08/11	5:00 PM	Cape Aviation Conf Room	Bruce Loy	339-6230	Take Ours	Take Ours	Ours	12	30 min	Tim & Scott
Nitch Robinso	r Lion's Club	03/09/11	Noon	Elks Cape County park	Mitch Robinson	334-5000	Take Ours	Provided	Provided	50	20 min	Tim & Scott
Pam	Public Works Employees			PW Big Breakroom	Tim Gramling	335-5421	Take Ours			50		Tim & Scott
Pam	Public Works Employees	03/11/11	9:00 AM	PW Big Breakroom			Take Ours	Take Ours	Ours	50	1Hour	Tim & Scott
Marcia	Parks & Rec Board	03/14/11	5:30 PM	Osage	Marcia Stone	339-6732	Take Ours	Take Ours	Provided	20	20 Min	Tim & Scott
Gayle	City Hall Employees	03/16/11	8:30 a.m	City Hall	Gayle Conrad	339-6704	Take Ours	Take Ours	Provided	30	1 Hour	Tim & Scott
Rhonda	Fire Employees	03/16/11	13:30	Fire Station #1	Rick Ennis	339-6790				25	30 min	Tim & Scott
Rhonda	Fire Employees			Fire Station #1	Rick Ennis	339-6790				25	30 min	Tim & Scott
	Note: Crew C Fire Dept to attend	P.W. March	11 Preser	ntation at 9:00 a.m.								
Stan Irwin	Rotary Club-Cape Girardeau	03/21/11	Noon	Show Me Center	Stan Irwin	335-8274	Take Ours	Provided	Provided	60	30 min	Tim & Scott
Linda Irvin	Cape County Board of Realtors	03/24/11	8:30 a.m.	Artful Rose 631 S Sprigg	Linda Irvin	335-7969	Take Ours	Take Ours	ake Our	50	15 min	Tim & Scott
Marcia	Golf Board	03/24/11		Osage	Dan Muser	335-5421	Take Ours	Take Ours	Provided	15	20 min	Tim & Scott









Questions?

City Manager
Scott Meyer
City of Cape Girardeau
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