

Community:

# AFFORDABILITY ANALYSIS For Communities

Authorized Representative:	Analysis Prepared By:					
Telephone:	E-m	ail Addre	ess:	,		
Alternative Description:						
WHAT IS IN THE FACILITY P	AN SCOPE OF STUD	V2				
The proposed facilities will be			Пи	ew	oansion	An Upgrade
The facilities will serve:	Existing Populati	_	Existing Are Served by (	a Exi	sting dustries	Anticipated Growth
Indicate the approximate			Systems			
percentage of the plant's capacity that will be allocated to each:	%				%	%
Entities to be served:	County	Munici	pality	Sewer Distric	t 🗌 lı	ndustry
Design population:	(Y	ear	)			
MULAT DOLEC AND DECDON	CIDILITIES WILL LOCA	VI COVE	DAIRAENITC I	141/52		
WHAT ROLES AND RESPON Cooperative arrangements be wastewater treatment facilitie	tween various entities				ial and man	agement needs of
What agency will: Ov	wn the facilities:					
	perate:					
Will there be financial contrib	utions by:	ther age	ncies	Industry		
Have participating agencies re	viewed the:	P scope o	of study	Population		ce area
Have agreements been sought operating agency and:	t between the P	articipati	ng agencies	projections	_	ndaries Industry
HOW MUCH WILL THE ALTE The following figures are estim amounts reflect today's prices Base year for the following est	nated costs for constru	ction, op		maintenance of	the propose	d facilities. Dollar
A. Construction costs estimate		B. Estimated annual operation, maintenance, and maintenance replacement (O, M+R)				
Treatment plant	\$	_	Labor		\$	
Pump stations	\$		Utilities		\$	
Interceptor sewers	\$		Materials		\$	
Collection sewers	\$		Outside serv	rices	\$	
On-site systems	\$	_	Miscellaneo	us expenses	\$	
Land acquisition	\$	_	Equipment r	eplacement	\$	
Other	\$	_	Other		\$	
Total construction costs	\$	_		Total O, M+R	\$	

4/28/2010 DNR Form 542-0107

### **HOW WILL THE ALTERNATIVE BE FINANCED?**

#### A. Amount to be borrowed

Total project costs \$
Less grant amount \$
Less contributions by the community \$
Less contributions by other agencies and/or industry \$
Amount to be borrowed \$

B. Methods of financing existing facilities and wastewater improvements alternative

Financing	Amount	Amount to be	Interest Rate		Term of Ma	aturity	Annual Debt Service
Method	Borrowed	Borrowed					Payment
G.O.	1. \$		1	%	1	Years	1. \$
Bond(s)*	2.\$		2	%	2	Years	2.\$
	3. \$		3	%	3	Years	3. \$
		4.\$	4	%	4	Years	4.\$
Revenue	1.\$		1.	%	1.	Years	1.\$
Bond(s)*	2. \$		2	%	2.	Years	2. \$
	3. \$		3	%	3.	Years	3. \$
		4. \$	4	%	4	Years	4.\$
Other	1. \$		1.	%	1.	Years	1. \$
Loan(s)*	2. \$		2	%	2.	Years	2.\$
	3. \$		3	%	3.	Years	3. \$
		4.\$	4	%	4	years	4.\$
Total	\$	\$					\$

<sup>\*</sup>List each bond and loan separately

# C. What are the existing annual debt service payments for wastewater if any in each year for the next 10 years?

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D. Total estimated annual wastewater facilities costs (USD)

	Existing Facilities	Increase for Alternative	Alternative
Annual O, M&R			
	\$	\$	\$
Annual debt service payment	\$	\$	\$
Total estimated annual			
wastewater costs	\$	\$	\$

E. Sources of funding for total annual wastewater facilities costs (USD)

<u> </u>	
Service charges	\$
Surcharge	\$
Special assessments and fees	\$
Betterment assessments	\$
Connection fee	\$
Other	\$
Transfers from other funds	\$
Other	\$
Total funding	\$

# WHAT ARE THE ANNUAL COSTS PER HOUSEHOLD?

Cost Item (USD)

Total estimated annual wastewater facility charges	\$
Less nonresidential share of annual charges	\$
Residential share of total annual charges	\$
Number of households	-
Annual costs per household for	
Wastewater collection and treatment	\$
Other	\$
Total annual costs per household	\$

## ARE THE RESIDENTIAL COSTS HIGH IN COMPARISON TO MEDIAN HOUSEHOLD INCOME?

Median Household Income = Median Family Income X 0.854

The median household income must be updated from the last census (either 1999 or 2009 income):

- 1. Obtain the consumer price index for the year in which the most recent income information is available. For urban communities in the Midwest, the Consumer Price Index (CPI) was 162.7 in the year 1999.
- 2. Obtain the current CPI and adjust for inflation to the base year for which the total annual cost per household was estimated.
- 3. Divide #2 by #1 or use the inflation calculator at the following web site to obtain a CPI ratio. http://www.bls.gov/data/inflation\_calculator.htm

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4. Adjust the median household income census or survey figure by multiplying that value by the CPI ratio found in #3.

Compare the total annual cost per household to the community's median household income (express the cost per household as percentage of the median household income).

Generally, if the total annual cost per household is less than 1.0 percent of the median household income, it is assumed that the project is not expected to impose a substantial economic hardship on households.

#### **ANALYSIS OF ABILITY TO PAY**

The answers to the preceding questions will provide useful information regarding the cost of the proposed facility, how it will be financed, and what this means in terms of costs to the typical household user. In order to evaluate effectively the true impact of the proposed wastewater disposal system, however, this information must be viewed within the overall context of the community's financial condition, financial resources, legal constraints, and local public policy.

The guidance document entitled, "Interim Economic Guidance for Water Quality Standards," EPA-823-B-95-002 presents one public sector a approach.

Listed below are additional elements relating to a community's overall financial condition and its ability to pay the local costs of constructing and operating the treatment system:

- Reasonableness of population projections relative to historic trends (if new population growth is needed to help finance the proposed system).
- State finance laws and legal debt limits.
- Historical trends in your community's revenue sources (e.g., changes in taxable assessed property valuation with respect to population).
- Current bond rating and its historical trend.
- Median household income in the community as a percentage of statewide household income.
- Families below the poverty level in the community as a percentage of the statewide number of families below the poverty level.
- Per capita outstanding debt of the system as a percentage of median household income.
- Cost effectiveness calculated by determining construction costs per user.

In most cases, total annual per household costs that exceed 2% of the MHI are considered unaffordable. However, the analysis of the other factors listed above must also be considered before a final determination can be made. The factors listed above could make costs above 2% of the MHI affordable and costs below 2% of the MHI unaffordable. For example, if the majority of the factors listed above are positive indicating a stronger financial condition costs above 2% of the MHI could be affordable. Also, if the majority of the factors listed above indicate a weaker financial condition, costs below 2% of the MHI could be considered unaffordable.

The guidance document entitled, "Interim Economic Guidance for Water Quality Standards," EPA-823-B-95-002 presents one approach for private sector facilities to determine the affordability of less degrading options.

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