## Effects of a Disaster on the Kenedy Water Treatment Plant

- Without a backup generator the Kenedy R/O Plant would go down and not be capable of providing water to the residents of Kenedy—the current plant would be useless.
- A
- Kenedy has two (2) elevated storage tanks with a maximum capacity of 440,000 gallons. One elevated storage tank off Bluebonnet contains 40,000 gallons and provides pressure and water for customers northernly. The other elevated storage tank adjacent to the Connolly Maximum Prison Unit contains 400,000 gallons and services the prison and rest of Kenedy.
- A
- Kenedy currently consumes approximately 1MGD of water per day.
- A
- With the plant rendered inoperable, the reserve water contained in the two (2) elevated storage tanks would deplete within approximately ten and one-half hours (10.5 hours) at maximum drawdown rate.
- A
- With zero (0) demand on the system, it would take approximately sixteen (16) to twenty (20) hours to replenish both elevated storage tanks.
- A
- Under conditions where both elevated tanks are depleted and demand is constant, neither elevated tank would be able to refill and attain proper levels.
- •
- The water pressure and distribution flow rates would decrease below the minimum thresholds as set forth in Texas Administrative Code 290.44 (d)of 35 psi and 1.5gpm per connection, respectively.
- A
- These conditions would result in over 6500 (City of Kenedy 3500, Connolly Unit 3000) people being without water in as little as 24 hours. Water would have to be trucked in to sustain the community.
- A
- There is a high likelihood that should a tropical storm or hurricane adversely impact Kenedy/Connally Unit, the same storm would adversely impact the municipalities of Beeville, Karnes City, Runge, Three Rivers, and Falls City.
- A
- The total approximate number of persons adversely impacted would be 25,213.

## Potential Disaster Benefits of New Water System

- New water system is far enough inland that even if in a storm's trajectory the impact would be minimal.
- A

- Generators would be on a different power grid than the City of Kenedy, thereby enabling the wells to continue to produce and pump water.
- A
- The new system would include generators at the Kenedy water treatment plant as well, thereby, providing a necessary power back-up to pump water that currently does not exist.
- A
- A new strategically placed 1M to 2M gallon elevated storage tank would provide enough reserve water to handle a single day of 100% demand in the event of a power outage.
- A
- This reserve supply would enable the generator to power the high service pumps and push water from the Kenedy water treatment plant to all three elevated storage tanks and refill them restoring pressure, gpm flow rate, and service.
- A
- The potential volume of water from a new water transmission line would also enable Kenedy to run service taps to the municipalities mentioned above and service them in a time of crisis. The employment of gate valves and meters would be utilized. If a municipality needed assistance, Kenedy could simply open the gate valve for that municipality's service line and divert water to the municipality in need—all without adversely impacting the water flow to Kenedy.



## BUDGET TABLE

BUDGET TABLE.		63	101	101 2	8		65		3		0.	6%	a
Project Title:			tal LM nes Ben	II LMI les %	CDBG-DR Construction	CDBG-DR Engineering	CDBG-I Acquisit	DR CDBG-DR ion Environmental	CDBG-DR Admin	Total CDBG-DR Request	Other Funds	Activity Total	+
# 1 Kenedy WWTP Project	t	3,3	40 1,74	45 52.25%	33,665,000	\$5,049,750.0	\$0.00	\$30,000.00	\$3,067,180.0	41,811,930	\$4,181,190.0	45,993,120	x
	SUMMARY	TOTALS: 3,3	40 1,74	45 52.25%	33,665,000	\$5,049,750.0	\$0.00	\$30,000.00	\$3,067,180.0	41,811,930	\$4,181,190.0	45,993,120	
				Bene	ficiary Identific	ation Method	(s) Per Proj	ject:					
# Project Title: Kenedy WWTP Project													
HUD National Objective	Benefitin	g low- and mo	derate- (	L/M) inco	me persons								•
Select One Benefit Type:		City-wide B	enefit		County-v	wide Benefit	Direct Benefit						
The required Census or Tex Provide the number of beneficiarie TxCDBG Survey: 0	as State Data es identified t HUD	Center map has hrough each of t LMISD:	been prov he follow 3,34	vided. ing methods 40 A	s for this activity Area Benefit:	/: 0		Housing Activity:	0	Limite	d Clientele:	0	
Race		Beneficiaries	B	eneficiaries	Beneficiar	ries							
White	•	377		2,012	2,389	×							
Black African American		104	_	0	104	x							
Asian	•	4		0	4	x							
American Indian/Alaskan Native	ito 🗐	15	4 29 7	25	15	X							
Other Multi-Racial		0		803	803	×							
		500		2,840	3,340								
Kenedy Mitigation App					DR-4	332 -	2017					Page 15 of	19

Gender	Total	Total	Total
	Males	Females	Benes
	1719	1621	3340

REQUIRED - Census Geographic Area Data									County Code			
Identify the census tract and block group(s) in which the project will take place								9				
Census Tract (6-digit)	01	02	03	04	05	06	07	08	09	10	x	
9703.00	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$							

Click here to ADD ANOTHER Table 1	Click here to REMOVE the last Table 1



## **CDBG-MIT: Budget Justification of Retail Costs** (Former Table 2)

			-	-						
Cost Verification Controls must be in pla	ace t	o assure that	t construction co	sts are reasonable	and	d consistent w	ith m	arket costs	at th	e time and
			place of const	truction.						
Applicant/Subrecipient:	City	of Kenedy, 1	Texas							
Site/Activity Title:	Infrastructure - Water facilities									
Eligible Activity:	Water Supply & Transmission Line Project									
Materials/Facilities/Services		\$/Unit	Unit	Quantity	C	Construction	A	cquisition		Total
Easement Acquisition	\$	-		0	\$	-	\$	-	\$	-
Contractor Mobilization	\$	1,800,000	LS	1	\$	1,800,000	\$	-	\$	1,800,000
Traffic Control	\$	750,000	LS	1	\$	750,000	\$	-	\$	750,000
Site Preparation	\$	640,000	LS	1	\$	640,000	\$	-	\$	640,000
Site Dewatering	\$	450,000	LS	1	\$	450,000	\$	-	\$	450,000
Culvert Removal	\$	6,000	EA	80	\$	480,000	\$	-	\$	480,000
Street Excavation	\$	50	CY	15000	\$	750,000	\$	-	\$	750,000
Utility Relocations	\$	35,000	EA	45	\$	1,575,000	\$	-	\$	1,575,000
24" PVC or HDPE Pipe	\$	80	LF	160000	\$	12,800,000	\$	-	\$	12,800,000
Valves, Fittings & Appurtenances	\$	6,000	EA	1200	\$	7,200,000	\$	-	\$	7,200,000
Cooling Towers & Ground Storage Tanks	\$	2,800,000	LS	0	\$	-	\$	-	\$	2,000,000
Decommission Existing WTP	\$	1,800,000	LS	1	\$	1,800,000	\$	-	\$	1,800,000
Elevated Raw Water Tank	\$	2,800,000	LS	1	\$	2,800,000	\$	-	\$	2,800,000
Street/Driveway Reconstruction	\$	75	SY	24000	\$	1,800,000	\$	-	\$	1,800,000
Temporary Erosion Controls	\$	640,000	LS	1	\$	640,000	\$	-	\$	640,000
Permanent Erosion Controls	\$	180,000	LS	1	\$	180,000	\$	-	\$	180,000
	\$	-		0	\$	-	\$	-	\$	-
	\$	-		0	\$	-	\$	-	\$	-
	\$	-		0	\$	-	\$	-	\$	-
TOTAL	\$	11,907,205			\$	33,665,000	\$	-	\$	35,665,000
	-									
1. Identify and explain the annual projec	ted (	operation an	d maintenance o	costs associated w	vith '	the proposed	activ	ities.		
n/a										
2. Identify and explain any special engine	eerin	ng activities.								
n/a										
COLIN A. SLAGLE					Dat Pho	te: one Number:	9, 512-	/17/2020 632-4517		
LICENSED	/					Signature of F			۲ ieer/	Architect

Seal

Responsible For Budget Justification:



MAR 07, 2019 2:50 PM PARRA01790 I:\17JOBS\17L0017\1004 MISCDRAINAGE\CAD\SITE\SHEET\NOTTINGHAM DRAINAGE\17L0017-DRAINAGEMAP.DWG



MAR 07, 2019 2:50 PM PARRA01790 I:/17J0085/17L0017/1004 MISCDRAINAGE/CAD/SITE/SHEET/NOTTINGHAM DRAINAGE/17L0017/1006