

SAWS Treatment Impact Fee CIP

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Wastewater Master Planning

September 26, 2013

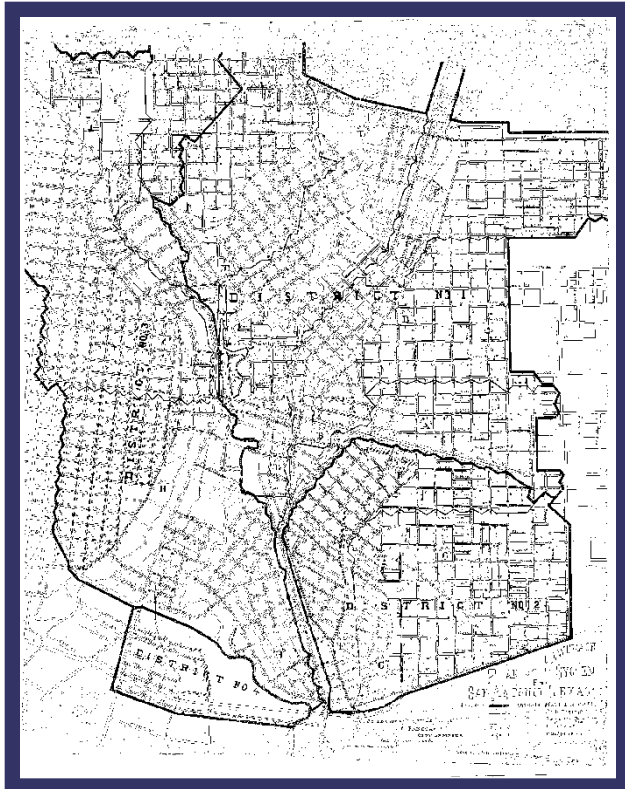
CIAC Meeting



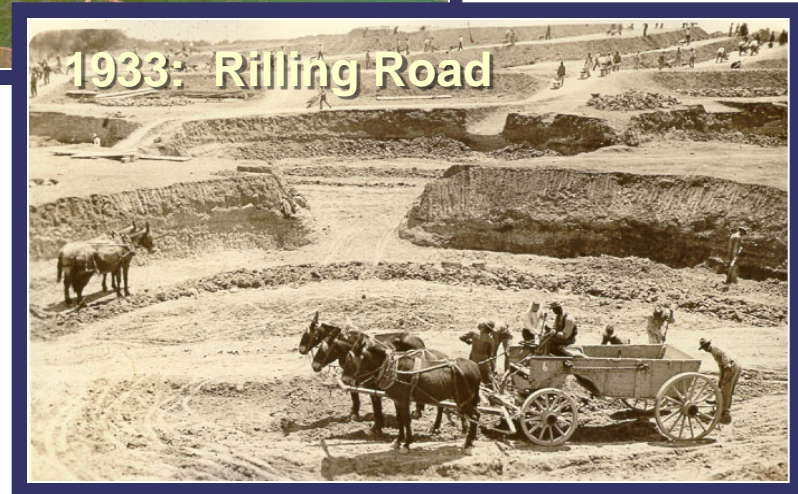
Treatment Impact Fee CIP Overview

- History of Wastewater Recycling Centers (WRC)
- Overview of Current Sewer System
- Treatment Impact Fee Service Area
- Treatment Design Flows 2014 – 2023
- WRC Projects 2014 – 2023
- WRC Existing Values
- Treatment Cost for 10 Year Growth

Historic Sewer Systems



1894 collection system

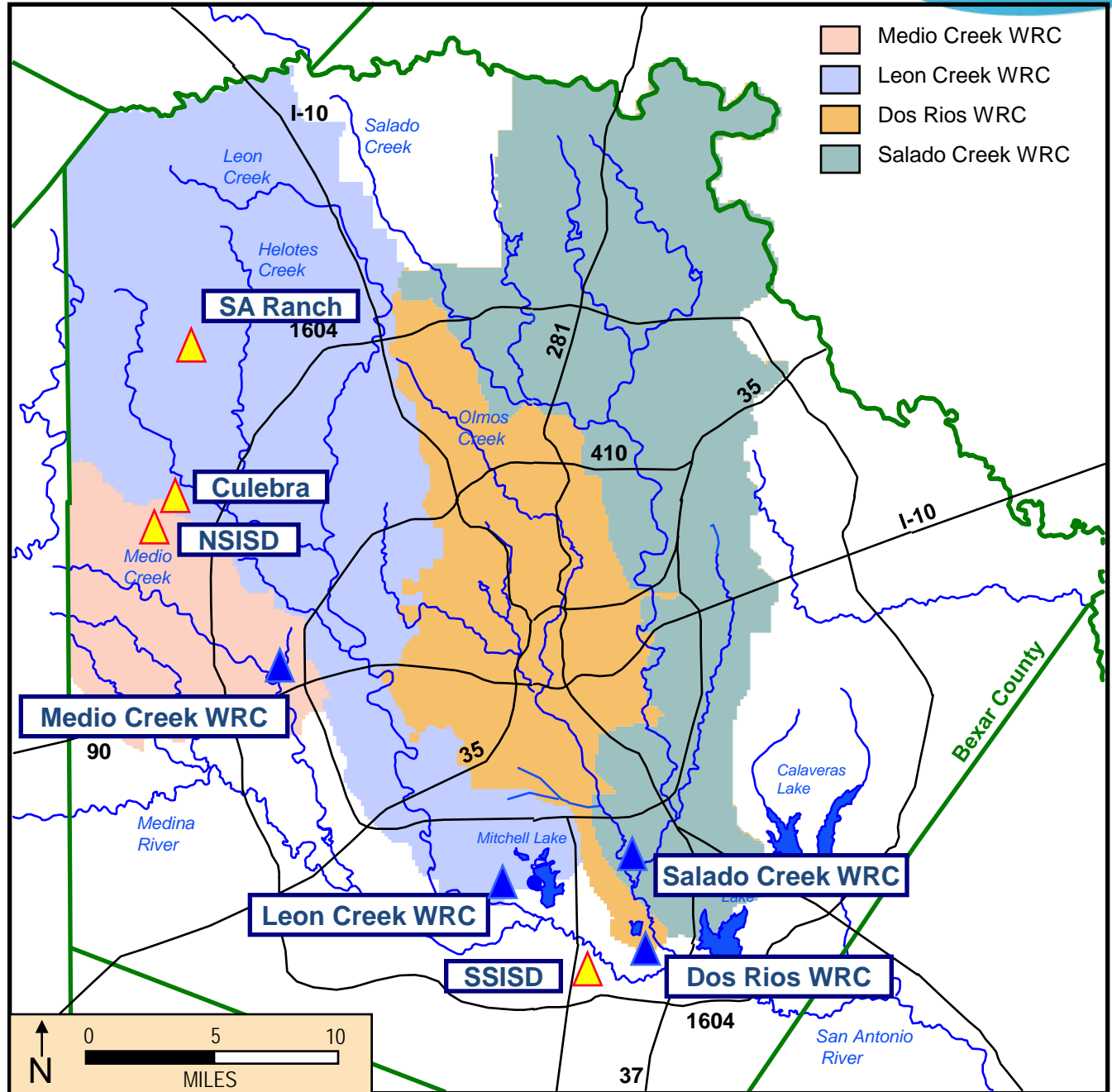


Major and Minor Facilities of the 1990s

Major Facilities

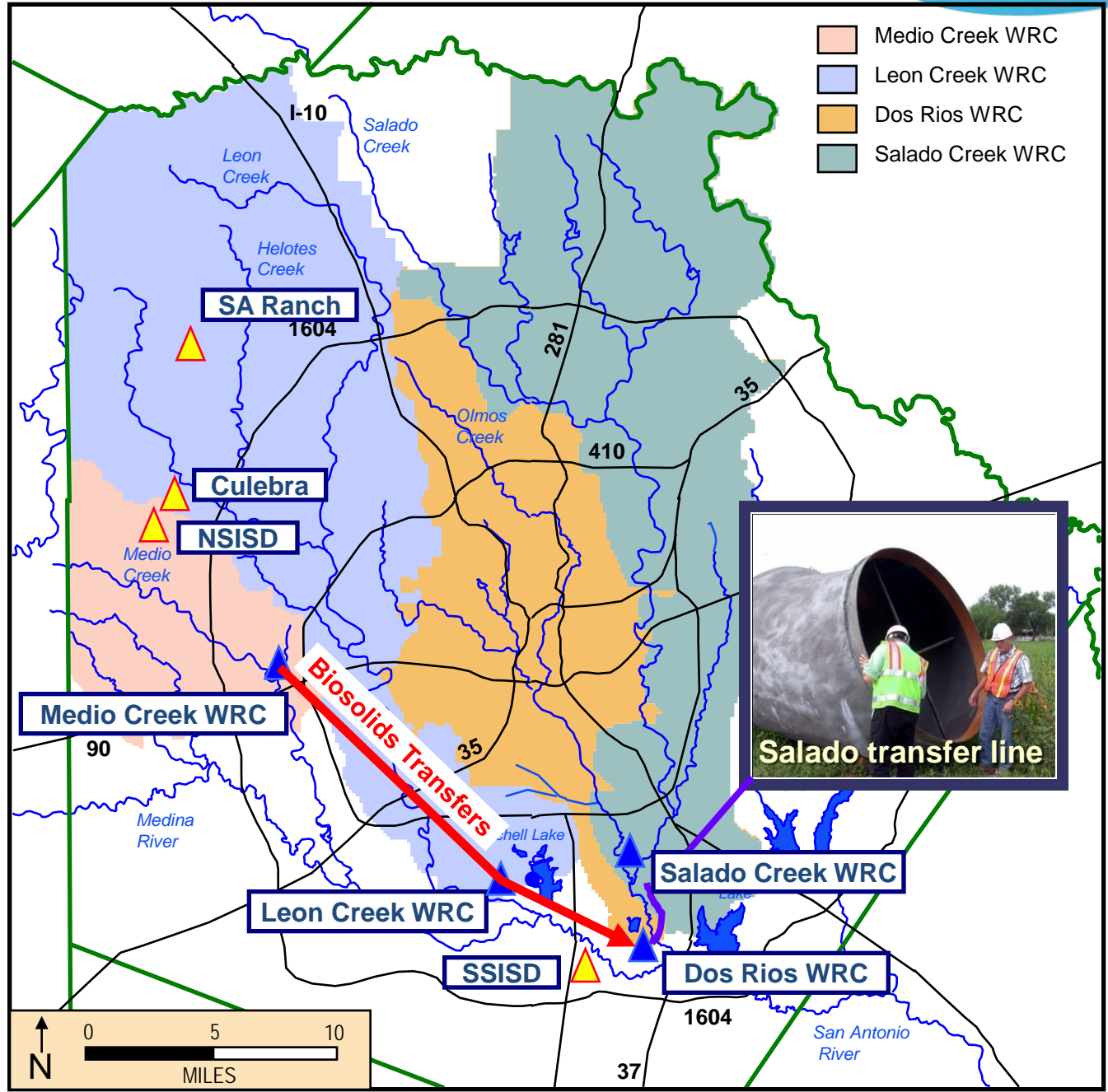


Minor Facilities

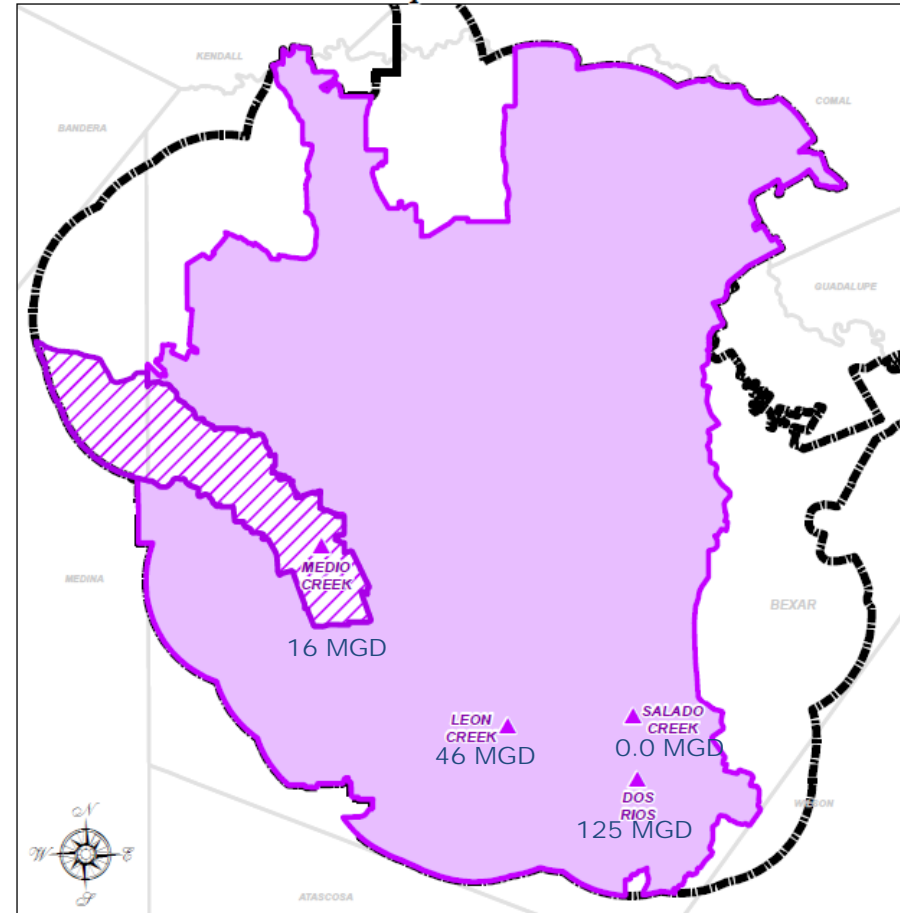
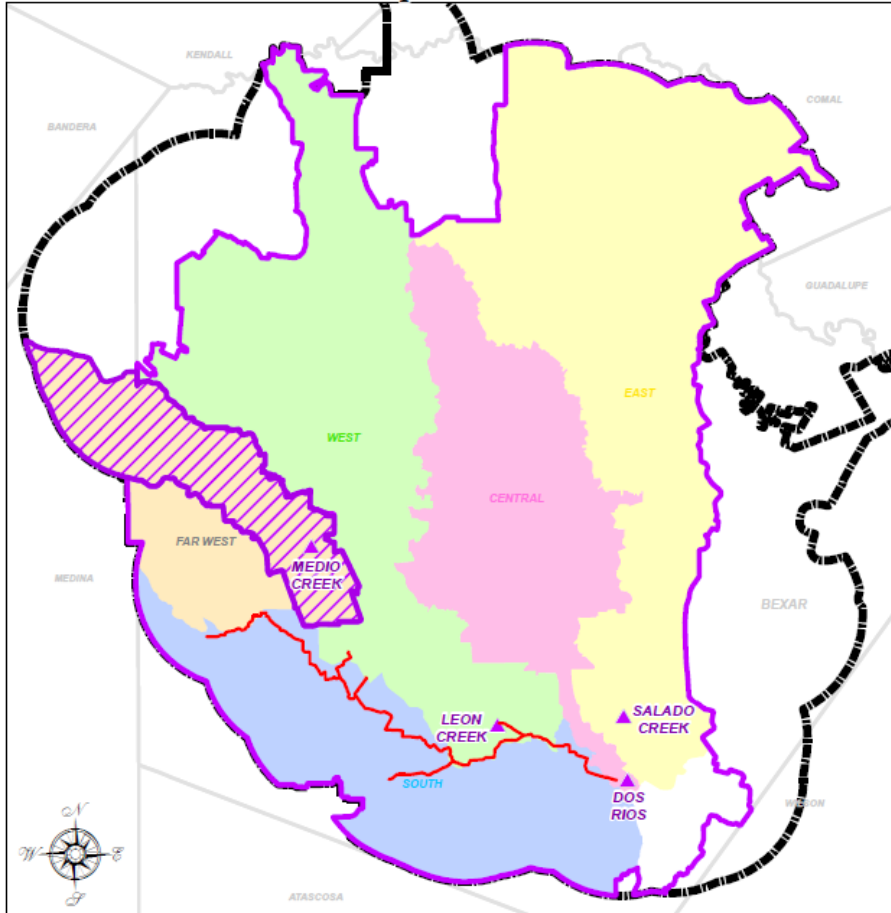


Facility Consolidations and Eliminations

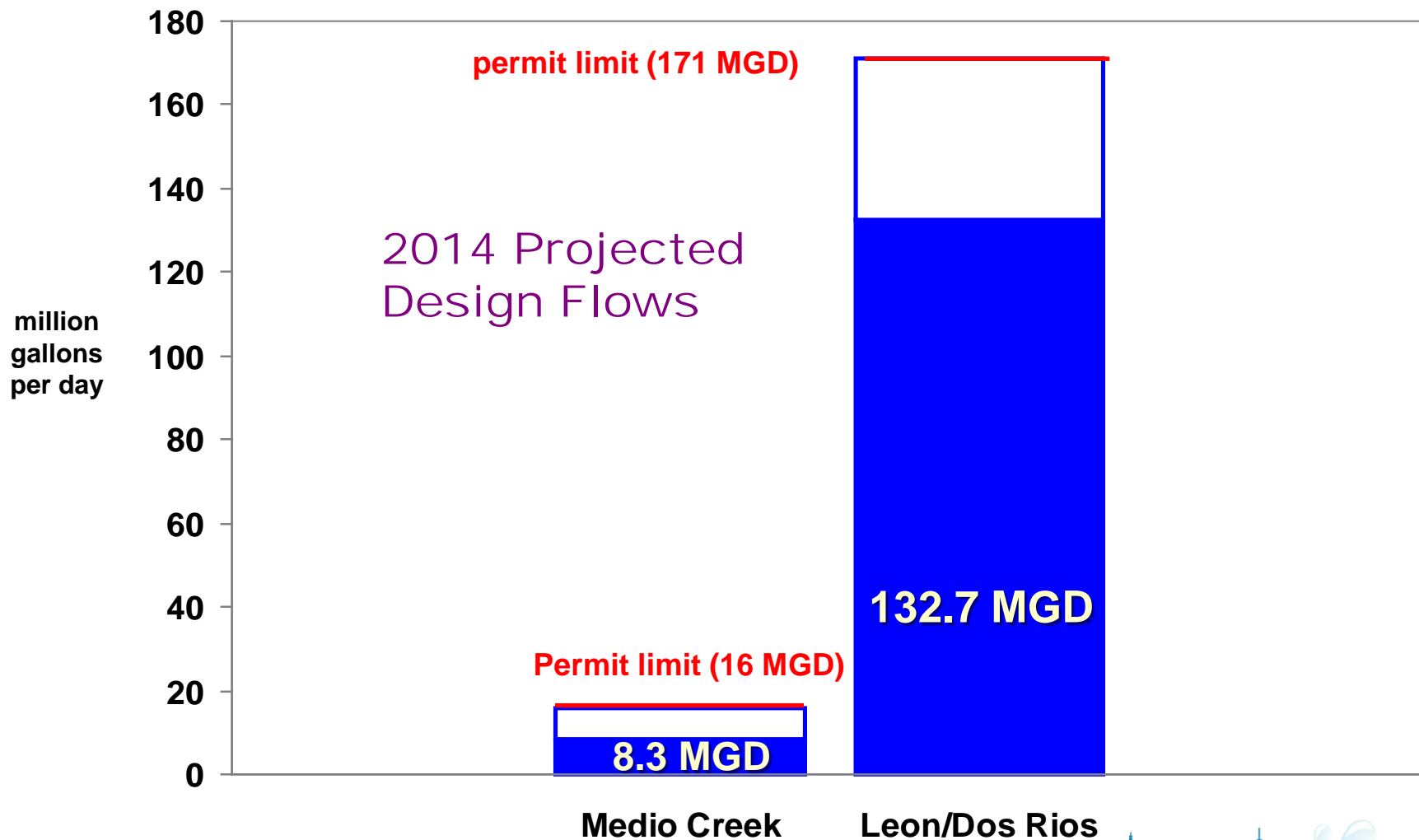
- All minor facilities eliminated
- Salado/Dos Rios sewersheds consolidated and Salado facility eliminated
- Biosolids transfers from Medio/Leon consolidate all solids processing at Dos Rios



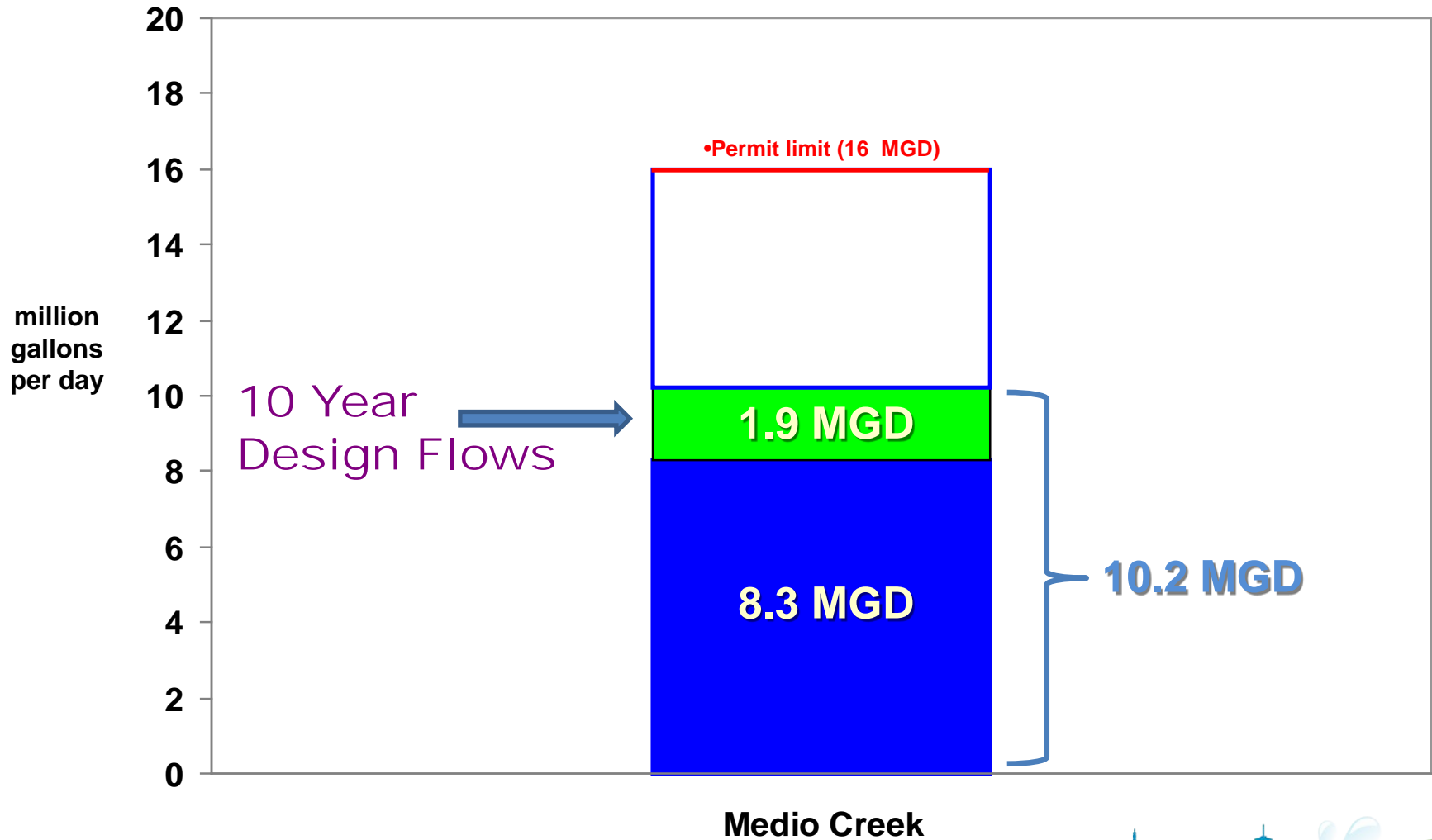
2014 Wastewater Treatment Service Areas



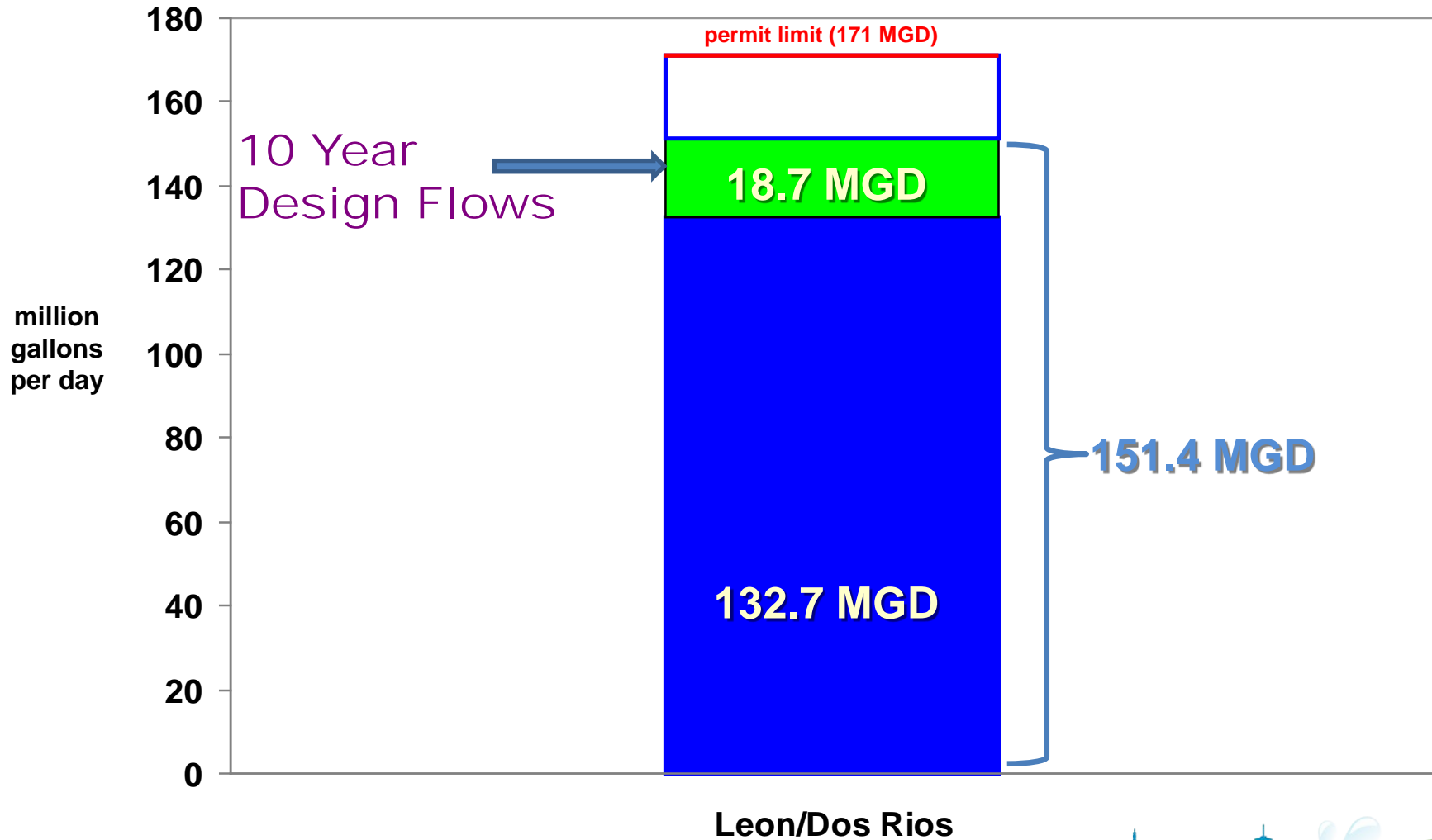
WRC Rated Capacities and Flows - 2014



WRC Rated Capacities and Flows - 2023



WRC Rated Capacities and Flows - 2023



WRC Projects -2011 Impact Fee Study

Impact Fee Report May 2011 (mid 2010)

	Treatment Projects	2010 Cost Est	2013 Cost Est	2013 Equity Est	Impact Fee Status	Project Status
	WRCs Disinfection System Evaluation and Performance Upgrade	\$ 2,660,000	\$ -	\$ 7,711,004	Same	Completed
	Dos Rios WRC Sludge Thickening and Aeration System Improvements	\$ 6,134,000	\$ -	\$ 8,115,321	Same	Completed
	Dos Rios WRC Digester Improvements and Mixing System Enhancements - Phase I	\$ 11,255,000	\$ -	\$ 11,004,816	Same	Construction
	Dos Rios WRC Digester Improvements and Mixing System Enhancements - Phase II	\$ 9,595,000	\$ 11,000,000		Same	Design
	Dos Rios WRC Digester Improvements and Mixing System Enhancements - Phase III	\$ 8,506,000	\$ 13,200,000		Revised	Planning
	Dos Rios WRC Dewatering Facility Improvements	\$ 13,988,000	\$ 13,988,000		Same	Planning
	Dos Rios WRC Re-rating Phase I - Headworks Improvements and Process Enhancements Phase I GROWTH	\$ 16,759,000	\$ -	\$ 18,513,710	Same	Construction
	Dos Rios WRC Re-rating Phase II - Primary Settling Tanks Improvements	\$ 33,126,000	\$ 30,100,000		Revised	Planning
A	Dos Rios WRC Re-rating Phase III - Aeration Tanks and Secondary Settling Tanks Improvements Phase I	\$ 24,758,000	\$ 43,150,000		Revised	Planning
	Dos Rios WRC Re-rating Phase IV - Aeration Tanks and Secondary Settling Tanks Improvements Phase II	\$ 27,317,000				
	Dos Rios WRC Re-rating Phase V - Solids Handling Improvements	\$ 20,212,000			Deleted	NA
B	Dos Rios WRC Re-rating Phase VI - Effluent Pump Station	\$ 23,575,000	\$ 39,900,000		Revised	Planning
	Dos Rios WRC Re-rating Phase VIII - Disinfection System Improvements	\$ 17,968,000				
C	Dos Rios WRC Re-rating Phase VII - Tertiary Filters Phase II Data Sheet	\$ 16,575,000	\$ 16,575,000		Same	Planning
D	Medio Creek - Nutrient Removal	\$ 7,307,000	\$ 7,307,000		Same	Planning
	Leon Creek to Dos Rios Raw Wastewater Transfer Phase I	\$ 13,597,395	\$ -	\$ 10,072,795	Same	Construction
	MRSO Segment 1	\$ 8,980,415	\$ -	\$ 9,028,648	Same	Completed
	MRSO Land Acquisition	\$ 706,325	\$ -	\$ 806,477	Same	Completed
	SUM=	\$ 263,019,135	\$ 175,220,000	\$ 65,252,771		

WRC Projects 2014 Impact Fee Study

COMBINED LIST				
DOS RIOS, LEON CREEK, SALADO CREEK WRC:		Impact Fee Status	Project Status	Cost
	WRCS DISINFECTION SYSTEM EVALUATION AND PERFORMANCE UPGRADE	Same	Completed	\$ -
	DR WRC SLUDGE THICKENING AND AERATION SYSTEM IMPROVEMENTS	Same	Completed	\$ -
	DR WRC DIGESTER IMPROVEMENTS AND MIXING SYSTEM ENHANCEMENTS - PHASE I	Same	Construction	\$ -
	DR DIGESTER MIXING AND SYSTEM ENHANCEMENTS - PHASE II	Same	Design	\$ 11,000,000
	DR DIGESTER MIXING AND SYSTEM ENHANCEMENTS - PHASE III	Revised	Planning	\$ 13,200,000
	DOS RIOS WRC DEWATERING FACILITY IMPROVEMENTS	Same	Planning	\$ 13,988,000
	Dos Rios WRC Re-rating Phase I - Headworks Improvements and Process Enhancements Phase I	Same	Construction	\$ -
	DR RE-RATING PHASE 2: PRIMARY SETTLING TANK IMPROVEMENTS	Revised	Planning	\$ 30,100,000
A	DR RE-RATING PHASE 3: AERATION SYSTEM IMPROVEMENTS (BNR)	Revised	Planning	\$ 43,150,000
	Dos Rios WRC Re-rating Phase V - Solids Handling Improvements	Deleted	NA	\$ -
B	DR RE-RATING PHASE 5: EFFLUENT PUMP STATION / DISINFECTION SYSTEM IMPROVEMENTS	Revised	Planning	\$ 39,900,000
C	DR RE-RATING PHASE 6: TERTIARY FILTERS EXPANSION	Same	Planning	\$ 16,575,000
	LEON CREEK TO DOS RIOS RAW WASTEWATER TRANSFER PHASE I	Same	Construction	\$ -
	MRSO Segment 1	Same	Completed	\$ -
	MRSO Land Acquisition	Same	Completed	\$ -
	DR NON-POTABLE WATER SYSTEM UPGRADES	New	Design	\$ 900,000
	DR WRC CONTROL SYSTEM UPGRADE	New	Planning	\$ 4,255,000
	DR ELECTRICAL SYSTEM IMPROVEMENTS - PHASE I	New	Planning	\$ 12,100,000
	DR ELECTRICAL SYSTEM IMPROVEMENTS - PHASE II	New	Planning	\$ 8,900,000
	LC WRC CONTROL SYSTEM UPGRADE	New	Planning	\$ 1,392,000
	SC WRC HEADWORKS	New	Planning	\$ 3,433,210
MEDIO CREEK WRC:				
D	MC BNR	Same	Planning	\$ 7,307,000
	MC PROCESS PIPING IMPROVEMENTS	New	Planning	\$ 100,000
	MC PLANT I IMPROVEMENTS	New	Planning	\$ 16,000,000
	MC WRC CONTROL SYSTEM UPGRADE	New	Planning	\$ 2,123,000
				SUM= \$ 224,423,210
				New Projects \$ 49,203,210
				Previous Projects \$ 175,220,000

WRC Projects

Service Area	Ten Year Treatment Projects					
	2011-2020			2014-2023		
	Value of Capacity (\$ mil)	Value of Eligible Capacity (\$ mil)	*Eligible Financing Costs (\$ mil)	Value of Capacity (\$ mil)	Value of Eligible Capacity (\$ mil)	*Eligible Financing Costs (\$ mil)*
Dos Rios/Leon Creek	\$ 255.7	\$ 27.9	\$ -	\$ 198.9	\$ 20.7	\$ -
Medio Creek	\$ 7.3	\$ 1.9	\$ -	\$ 25.5	\$ 3.0	\$ -
Total	\$ 263.0	\$ 29.8	\$ -	\$ 224.4	\$ 23.7	\$ -

* Costs for growth are expected to be paid with cash during the 10 years and results in a null amount

Existing Infrastructure (Equity)

Dos Rios / Leon Creek WRC

Draft

Dos Rios/Leon Creek WRC	
Book Value	\$ 338,086,248
Construction Work In Progress	\$ 74,896,574
Contributed Capital	\$ (6,403,904)
Grants	\$ (89,022,025)
Impact Fee Eligible Existing Value	\$ 317,556,893

Existing Infrastructure (Equity)

Medio Creek WRC

Draft

Medio Creek WRC	
Book Value	\$ 63,094,212
Construction Work In Progress	\$ 312,949
Contributed Capital	\$ (1,195,107)
Grants	\$ -
Impact Fee Eligible Existing Value	\$ 62,212,054

Existing Infrastructure (Equity)

Draft

Service Area	Existing Treatment Value of Infrastructure					
	2010 Values			2014 Values		
	Value of Capacity (\$ mil)	Value of Eligible Capacity (\$ mil)	Eligible Financing Costs (\$ mil)	Value of Capacity (\$ mil)	Value of Eligible Capacity (\$ mil)	*Eligible Financing Costs (\$ mil)
Dos Rios/Leon Creek	\$ 278.8	\$ 16.7	\$ 7.6	\$ 317.6	\$ 34.9	\$ 7.6
Medio Creek	\$ 62.8	\$ 16.2	\$ 7.5	\$ 62.2	\$ 7.5	\$ 7.5
Total	\$ 341.6	\$ 32.9	\$ 15.1	\$ 379.8	\$ 42.4	\$ 15.1

* Numbers are estimated from Previous years, will be revised, but should be similar

Eligible Wastewater Treatment CIP

Draft

	2014-2023 Eligible Wastewater Treatment CIP Costs							
	Existing Capacity (Existing Treatment Value)			New CIP Capacity (2014-2023 Treatment Projects)			Total Capacity	
Service Area	Value of Capacity (\$ mil)	Value of Eligible Capacity (\$ mil)	*Eligible Financing Costs (\$ mil)	Value of Capacity (\$ mil)	Value of Eligible Capacity (\$ mil)	Eligible Financing Costs (\$ mil)	Total Value of Capacity (\$ mil)	Total Value of Eligible Capacity (\$ mil)
Dos Rios/Leon Creek	\$ 317.6	\$ 34.9	\$ 7.6	\$ 198.9	\$ 20.7	\$ -	\$ 516.5	\$ 63.2
Medio Creek	\$ 62.2	\$ 7.5	\$ 7.5	\$ 25.5	\$ 3.0	\$ -	\$ 87.7	\$ 18.0
Total	\$ 379.8	\$ 42.4	\$ 15.1	\$ 224.4	\$ 23.7	\$ -	\$ 604.2	\$ 81.2

* Numbers are estimated from Previous years, will be revised, but should be similar

Eligible Wastewater Treatment CIP

Draft

Service Area	Eligible Wastewater Treatment CIP Costs			
	2011-2020		2014-2023	
	Total Value of Capacity (\$ mil)	Total Value of Eligible Capacity (\$ mil)	Total Value of Capacity (\$ mil)	Total Value of Eligible Capacity (\$ mil)
Dos Rios/Leon Creek	\$ 534.5	\$ 52.2	\$ 516.5	\$ 63.2
Medio Creek	\$ 70.1	\$ 25.5	\$ 87.7	\$ 18.0
Total	\$ 604.6	\$ 77.7	\$ 604.2	\$ 81.2

QUESTIONS ?

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