

City of Enid



March 2018







- Review Demands
- Infrastructure Reductions
- Revised Schedule



Phase 2 Program Goals







## Previous Projected Water Demand







Updated Projected Demand











Cost Reductions for 2047 Design Horizon



Infrastructure	Full Build Out Program		% Reduction Through Phasing	Pha	ased Program
Intake	\$	30,244,000	25%	\$	22,631,000
Intermediate BPS	\$	13,585,000	100%	\$	-
Pipeline	\$	145,725,000	4%	\$	139,430,000
TSR EM	\$	22,475,000	100%	\$	-
TSR EQ	\$	21,307,000	63%	\$	7,945,000
Treatment Plant	\$	125,103,000	60%	\$	50,576,000
Distribution Interface	\$	40,159,000	40%	\$	23,928,000
Subtotal	\$	398,598,000	39%	\$	244,510,000
Remaining Program Execution & Design	\$	70,500,000	30%	\$	49,300,000
USACE Water Storage Contract	\$	6,000,000	-	\$	6,000,000
Total Estimated Cost	\$	475,098,000	37%	\$	299,810,000











#### Intermediate Booster Pump Station Phasing























### Water Treatment Plant Original Design







#### Water Treatment Plant Phased Design







### Water Treatment Plant Original Design







#### Water Treatment Plant Phased Design











#### 40% Reduction

Reduce disinfection process to 2047 Design Life



Integration of High Service Pump Station into storage tank



# Cost Reductions for 2047 Design Horizon



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- Phased KLWS meets 2047 projected demand
- Phased KLWS Program provides
  - Pipeline that can supply water for 50+ years
  - Safe, robust drinking water treatment system
  - Desperately needed improvements to existing distribution infrastructure
- Total Phased Program Cost Estimate: \$299M



#### Kaw Lake Water Supply Program Baseline Schedule



Activity Name	Start	Finish			2015		2016		2017	, 	20	18		2019		202	20	:	2021		2022
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NEPA	02-Jan-17 A	31-Dec-18								NË	A							1			
Pipeline Property Survey	01-Nov-17 A	30-Mar-18					P	ipel	ine P	rop	erty S	Surve	y					1			
Phases 3 & 4																					
Pipeline Topographical Survey	02-Apr-18	31-Aug-18						Pip	eline	Тор	ogra	ohica	il Si	urvey							
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Final Design	02-Jul-18	28-Jun-19									F	inal I	Des	ign				1			
Permitting	01-Jan-19	28-Jun-19										Pe	erm	itting				1			
Construction	01-Jul-19	31-Dec-21						1							C	ons	truct	tion			
Start Up	03-Jan-22	30-Jun-22						1										1		Sta	rt Up





- Do not have access to all properties for field work
  - Includes cultural resources and survey
- Potential delays with land acquisition negotiations
- Schedule anticipated an April 1 start for the next phase



Kaw Law Water Supply Program Re-Baselined Schedule – July



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