City of Enid

April 2018

Agenda

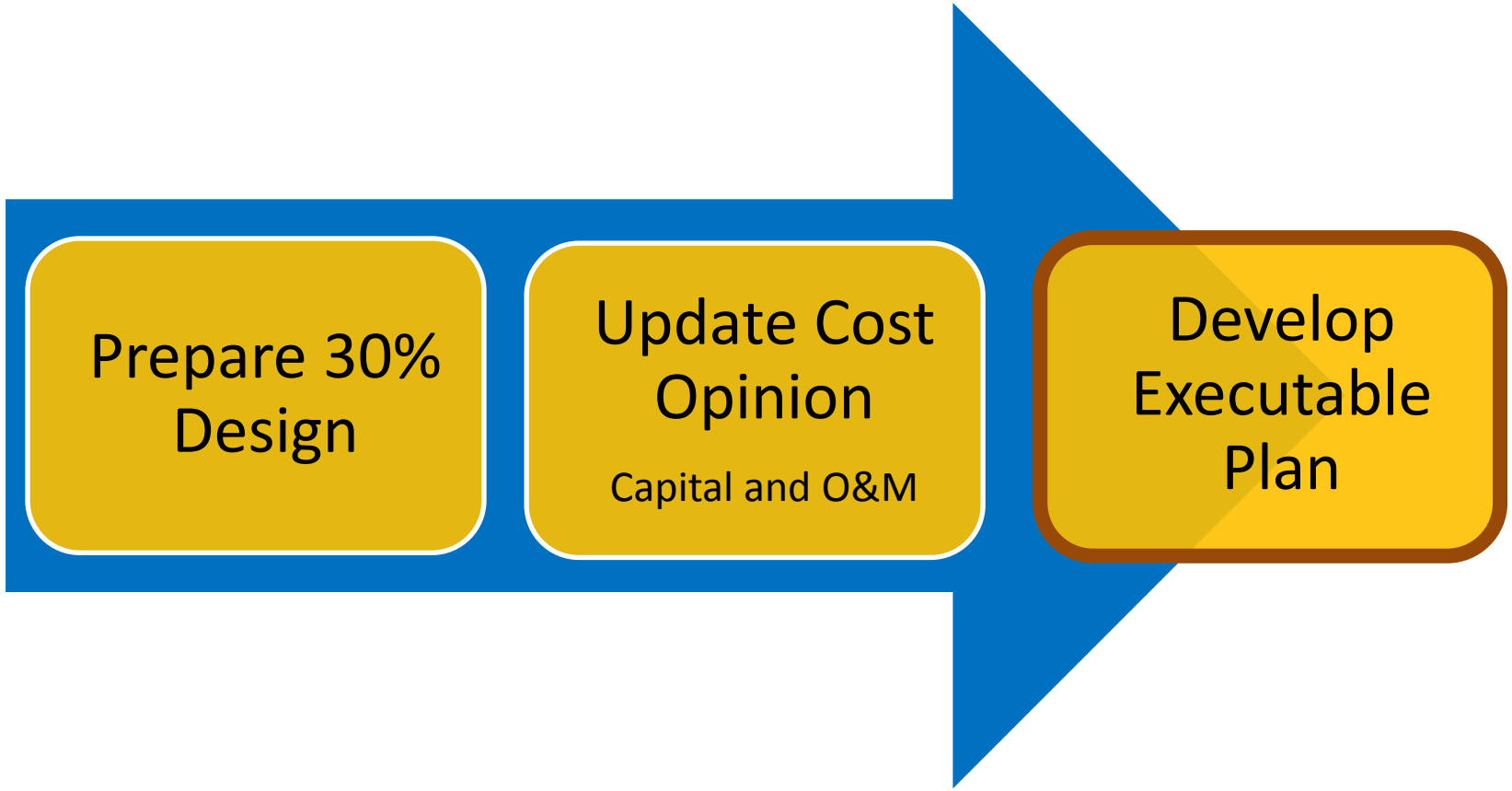
- Review Demands
- Initial Phased KLWS Program
- Growth Investment Timeline

Questions for Decision Making

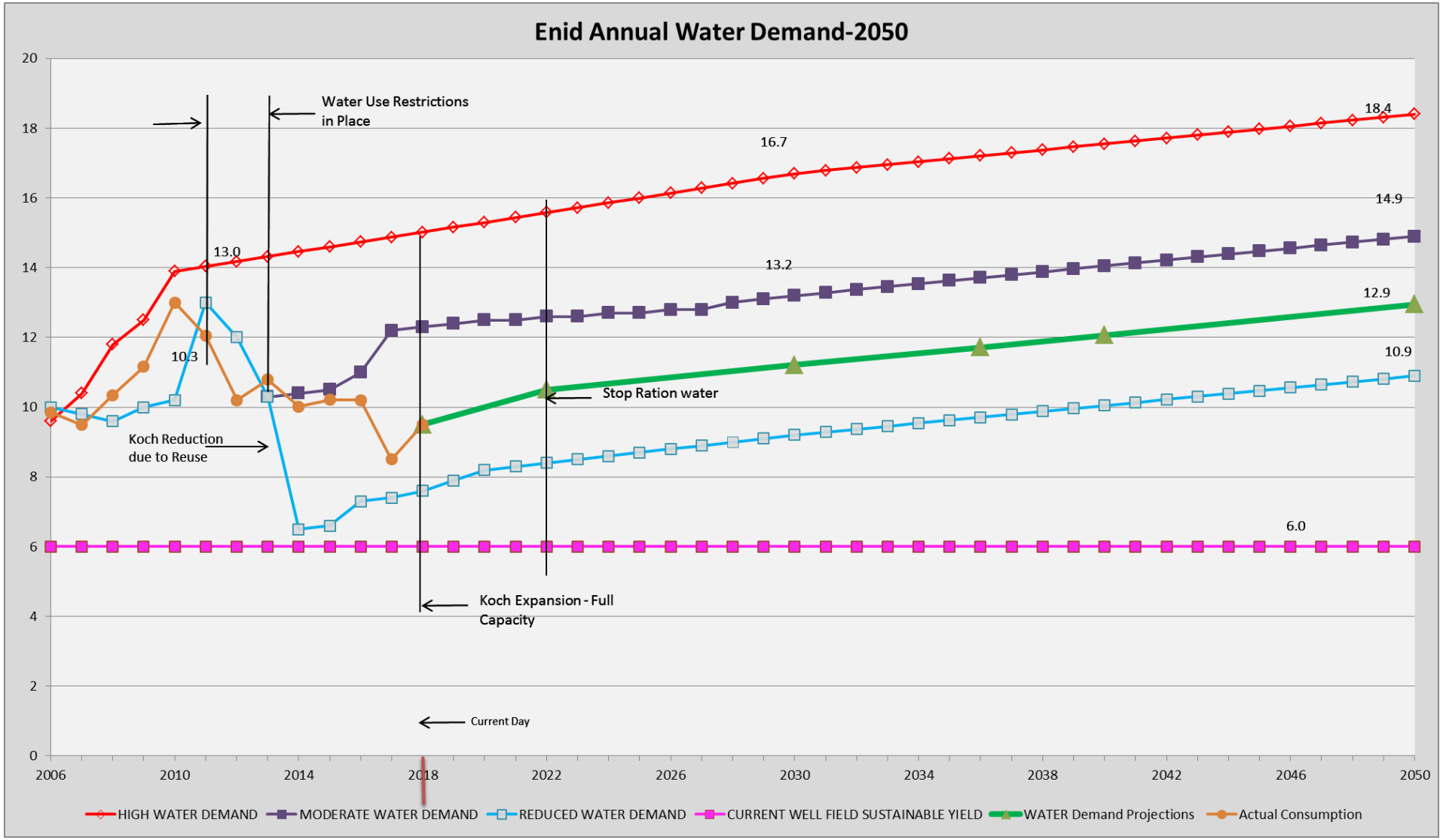
1. Can the City afford a $315 million Kaw Lake project?

2. If yes, what level of sustained additional capital spending including the maintenance of the wellfields is acceptable over 30 years?

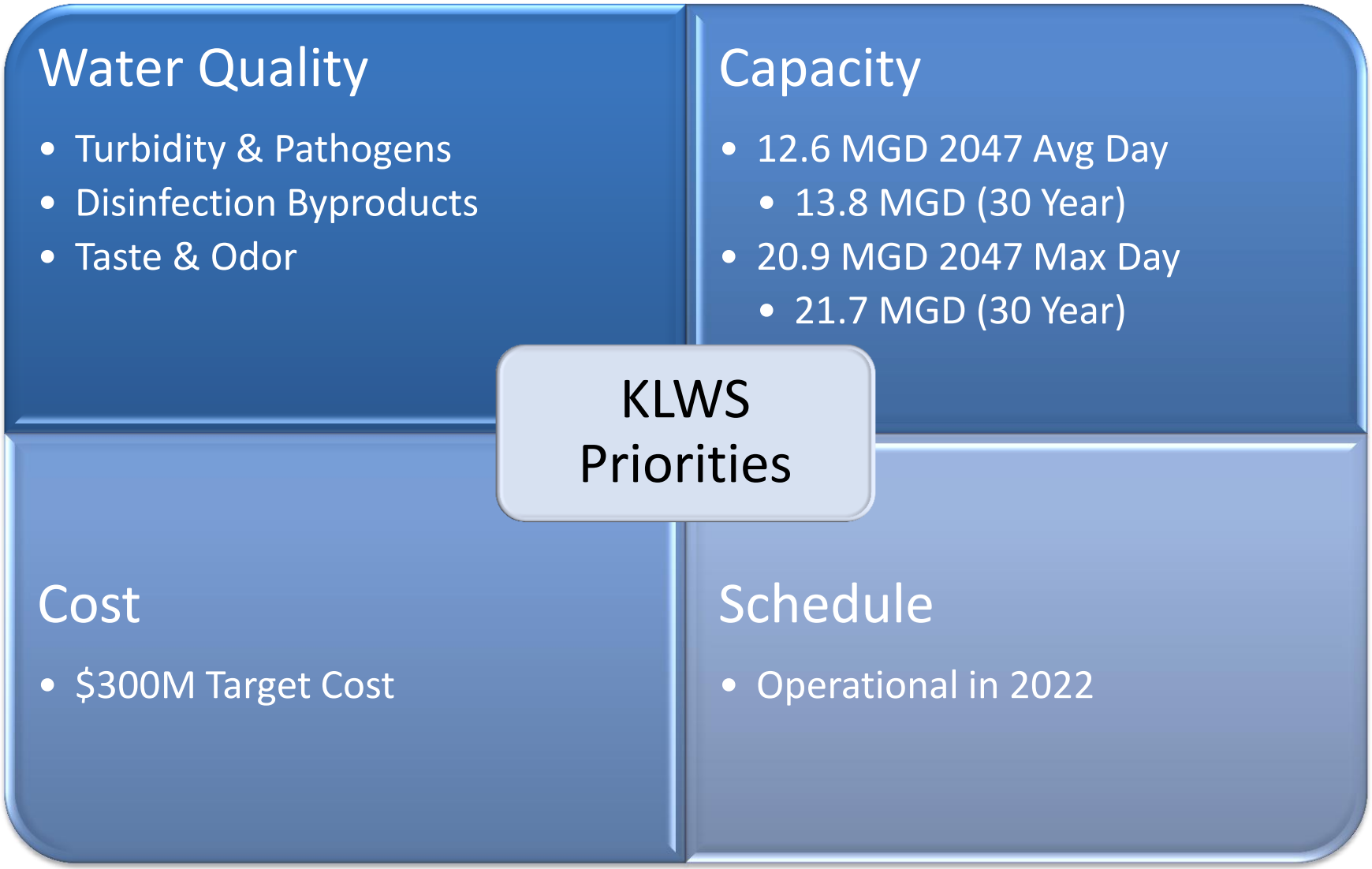
Phase 2 Program Goals



Updated Projected Demand



Key Program Priorities



Phasing Strategy Results

- KLWS Phased Options provides
  - Pipeline that can supply water for 50+ years
  - Robust Safe Drinking Water Act compliance
  - Desperately needed improvements to existing distribution infrastructure

- Total Phased Options Cost Estimate Range: $291M - $315M (2018 dollars)

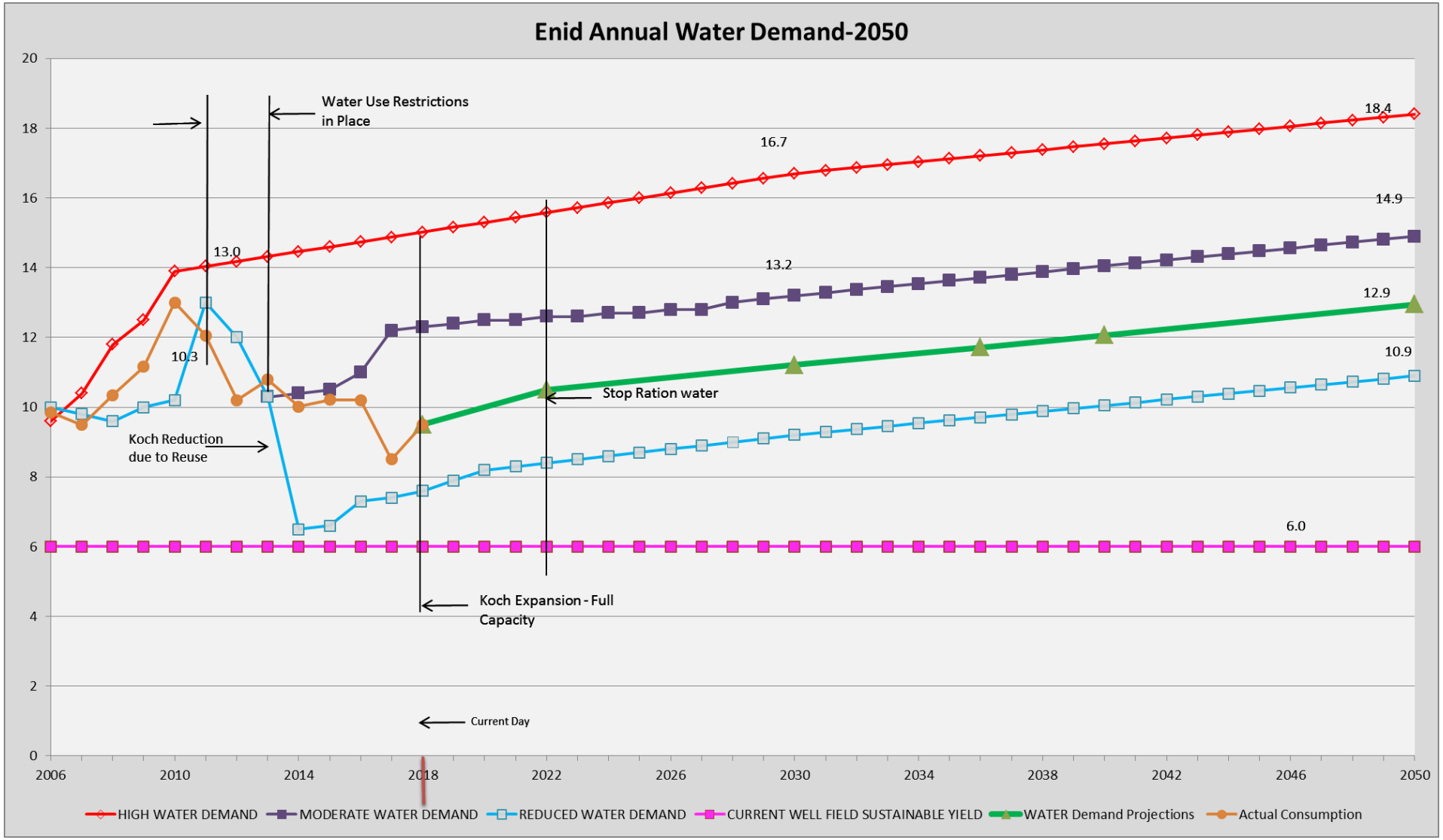
Alternate Phasing Options

Option	Configuration	Program Cost	Initial Capacity	Growth Investment Year
1	30” Pipeline, No BPS 7 MGD WTP O3+GAC	$291M	7 MGD	2038
2	30” Pipeline, No BPS 10.5 MGD WTP O3+GAC	$299M	7 MGD	2038
3	36” Pipeline, No BPS 10.5 MGD WTP + GAC	$299M	9.2 MGD	2053
4	30” Pipeline, One BPS 10.5 MGD WTP O3+GAC	$305M	10.5 MGD	2063
5	36” Pipeline, No BPS 7 MGD WTP O3+GAC	$307M	7 MGD	2038
6	36” Pipeline, No BPS 10.5 MGD WTP O3+GAC	$315M	9.2 MGD	2053

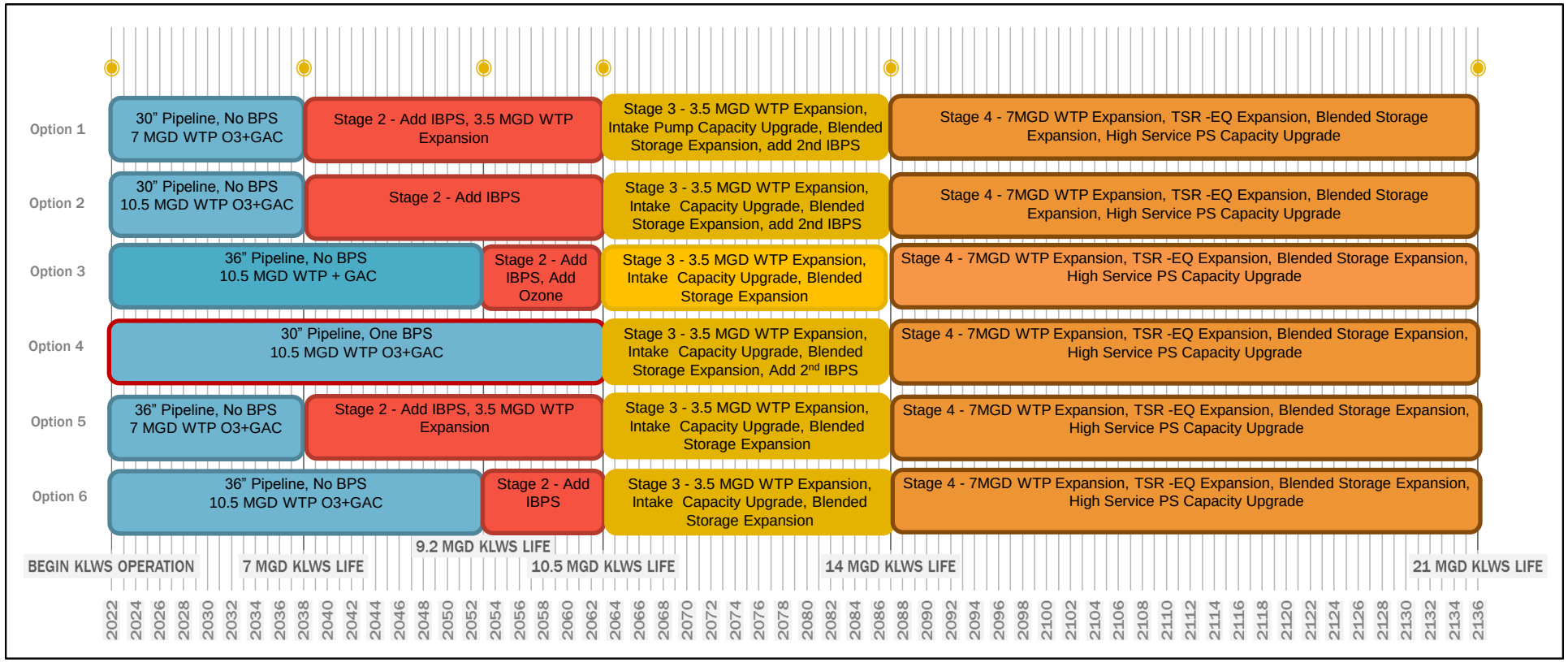
Alternate Phasing Options

Option	Configuration	Program Cost	Priority	Sacrifices
1	30” Pipeline, No BPS 7 MGD WTP O3+GAC	$291M	Water Quality & Cost	Pipeline Capacity & Treatment Capacity
2	30” Pipeline, No BPS 10.5 MGD WTP O3+GAC	$299M	Water Quality, Cost, & Treatment Capacity	Pipeline Capacity
3	36” Pipeline, No BPS 10.5 MGD WTP + GAC	$299M	Capacity & Cost	Water Quality
4	30” Pipeline, One BPS 10.5 MGD WTP O3+GAC	$305M	Water Quality & Capacity	Pipeline Capacity & Cost
5	36” Pipeline, No BPS 7 MGD WTP O3+GAC	$307M	Water Quality & Pipeline Capacity	Treatment Capacity & Cost
6	36” Pipeline, No BPS 10.5 MGD WTP O3+GAC	$315M	Water Quality & Capacity	Cost

Updated Projected Demand

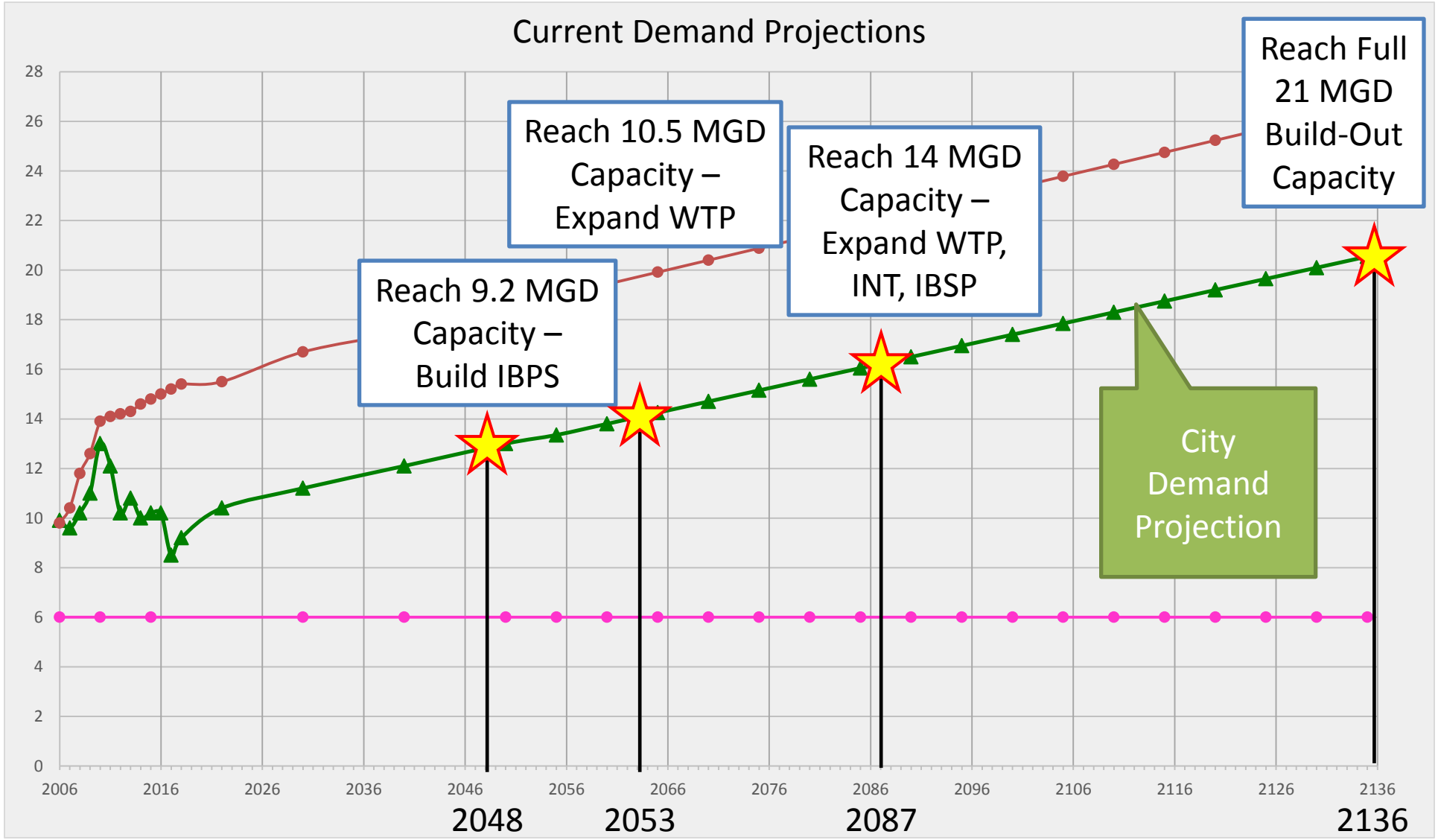


Alternate Phasing Plans Timeline



Valid for Current Demand Projection Curve

Option 6
Growth Investment Timeline



Phasing Strategy Results

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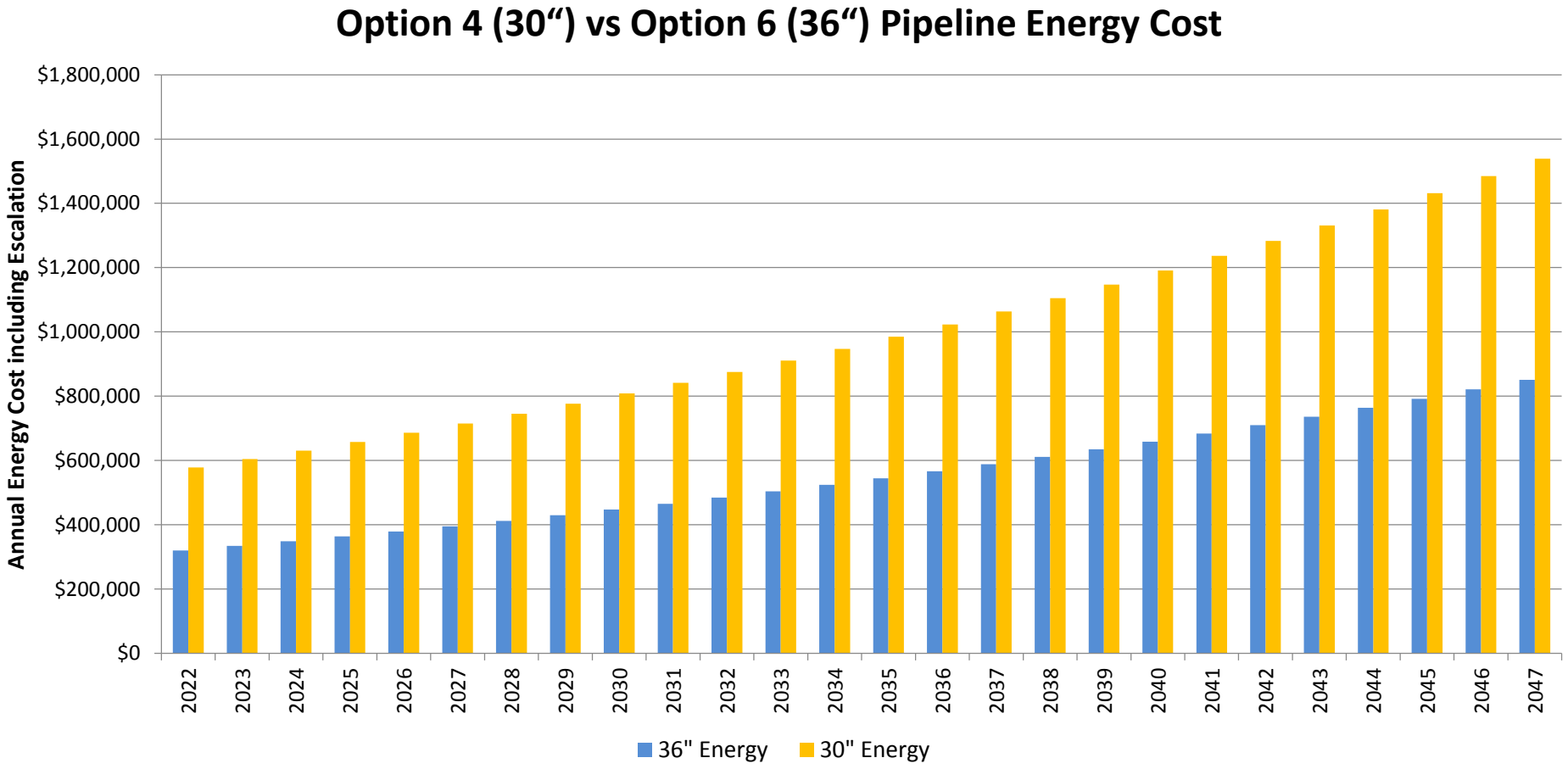
Option 4 Results in Greater Energy Usage



30” Pipeline has $6.8M greater 25 yr NPV based on current demand projection

RO Talking Points

- No Capital Savings
  - More than $15M higher WTP costs than current alternative
  - May require larger pipe size depending on RO rejection rates
- Higher Operation and Maintenance Costs
  - Twice the energy requirement of current process
  - Life Cycle Cost is approximately $100M more than current design
  - Reject Disposal
    - Can’t dispose at conventional wastewater treatment plant.
    - High in salts, Deep well injection ~$20M
- Water Stability/Compatibility Issues
  - Lead/Copper Corrosion potential without additional costs
  - Difficult to match existing groundwater quality without additional costs

- Funding\Financing Options - $315 Million
  - OWRB Financing Program (Both Bond Loan and DWSRF Loans)
    - Bond Loan Program (Rated AAA) - Estimated Interest Rate @ 3.86% Fixed for 30 Years (Rate based on current interest rate market)
    - DWSRF Loan Program (Rated AAA) - Estimated Interest Rate @ approximately 80% of FAP Interest Rate which would be 3.10% today based on current interest rate market
  - Multiple Loans Over Next 3 to 4 Years via both OWRB Programs with current estimated total annual debt service payment at approximately $17.9 Million (based on $315 Million borrowed)
  - Federal Funding (Grants, Appropriations, etc.)
- Revenue Assumptions
  - Sales Tax Collections to grow 1% Annually
  - Water Consumption (Residential, Commercial & Industrial Customers) – 1.86 Billion gallons Annually
- Expense Assumptions
  - Approximately $7.5 Million Annually for Citywide Capital Needs
  - Operational Costs of City Adequately Addressed
  - Existing Debt funded

City of Enid

April 2018