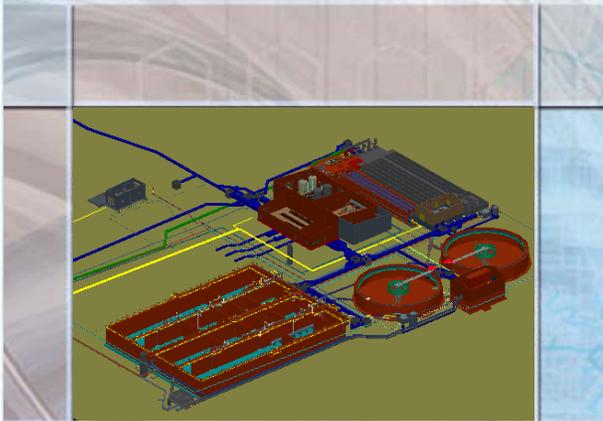


Airport Water Reclamation Facility (WRF)



Airport WRF Phase 1 Expansion

Process Upgrades and Capacity Increase to 3.75 MGD

- Design
- Milestones
- Remaining Tasks
- Major Project Components
- Construction Budget
- CMAR Cost Proposal Breakdown
- Project Budget and Financing

Final Design

Existing Facilities

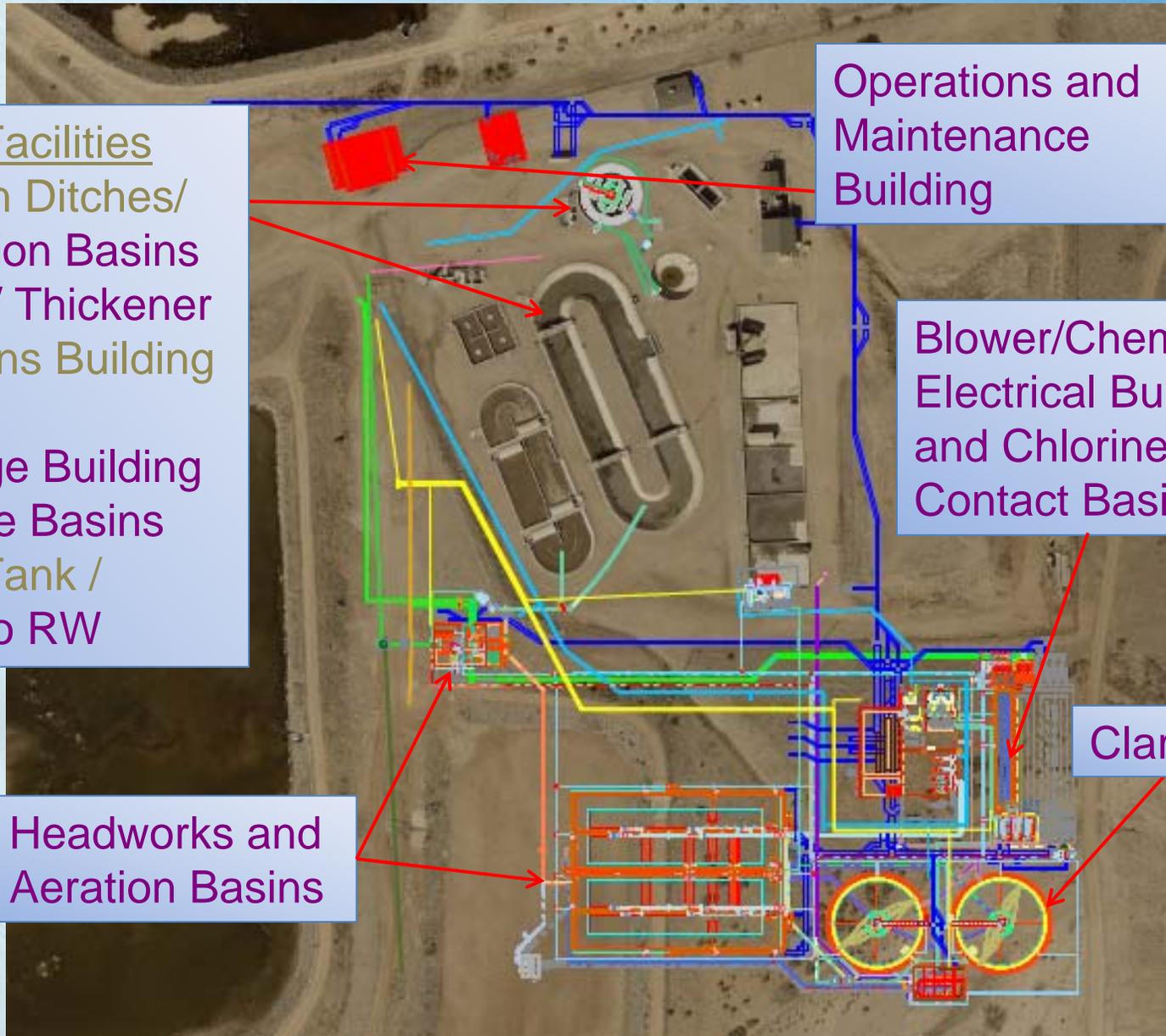
- Oxidation Ditches/
Equalization Basins
- Clarifier / Thickener
- Operations Building
/Lab
- Centrifuge Building
- Recharge Basins
- Airpark Tank /
Convert to RW

Operations and
Maintenance
Building

Blower/Chemical/
Electrical Building
and Chlorine
Contact Basin

Clarifiers

Headworks and
Aeration Basins



Airport WRF Phase 1 Milestones

30% Design Submittal	Sep 30, 2011
60% Design Submittal	Jan 30, 2012
90% Design Submittal	Jun 22, 2012
ADEQ Permit Submittal	Aug 2012
100% Submittal	Sept 2012
Final Design Documents	Oct 2012
Guaranteed Maximum Price	Oct 2012
Construction Begins	Nov 2012
Construction Completed	Fall 2014

Airport WRF Phase 1 Expansion Remaining Tasks

- Noise and Odor Easement Acquisition
- Permits to be Obtained
 - ADEQ (Operating) Aquifer Protection Permit
 - ADWR Underground Storage Facility Permit (USF)
 - City of Prescott
- Utility Coordination
 - Gas
 - Electric
 - (3rd party utility extension costs, e.g. electric and gas services, not included in cost model)

Phase 1 Major Project Components

The project will produce Class A+ effluent and includes the following major components:

- Influent Piping and Headworks Facilities (Screens and Grit Removal)
- EQ Basins (Ox Ditches) 1.2 Mgal
- Two Bioreactors/Aeration Basins
- Two Clarifiers
- Pumps Stations
 - RAS – 3.75 MGD, EQ – 4 MGD, Effluent - 12 MGD
- Filters

Major Project Components (cont'd)

- Disinfection
 - On-site Generation
 - Chlorine Contact Tank 235,000 gal
- Effluent Water Tank and Piping
- Yard Piping 17,885 lf
- Blower/Chemical/Electrical (BCE) Building 11,000 sf
- Solids Thickening and Dewatering
 - Convert Existing Clarifier
 - Add a Second, Larger Centrifuge
- Operations and Maintenance Buildings

Construction Manager at Risk (CMAR) Construction Budget

■ Master Plan Construction Budget	\$36,207,612
■ 30% Cost Model	\$32,939,000
■ 60% Cost Model	\$34,864,146
■ Final GMP	\$34,787,006
■ Owner's Contingency	<u>\$ 500,000</u>
■ Construction Contract Total	\$35,287,006

Standby Generator (Separate Purchase) \$544,000

CMAR Cost Proposal Breakdown

▪ Bid Packages – Twenty		
– Largest Bid – Electrical/I&C	\$6,815,500	
– Local Contractors (14)	\$2,884,244	
– Other Contractors	<u>\$2,685,079</u>	
▪ Sub Total		\$12,384,823
▪ Major Materials & Suppliers		
– Permanently Installed Equipment	\$4,056,506	
– Pipe Materials	\$3,031,007	
– Concrete and Aggregates (Local)	\$1,292,803	
– Misc. Other Materials & Supplies	<u>\$ 389,073</u>	
▪ Sub Total		\$8,769,389
▪ Installation Labor, Equipment & Minor Materials		
– General Requirements	\$ 515,187	
– Yard Pipe - 17,885 lf	\$1,203,182	
– Site Work	\$ 229,882	
– Concrete Forming and Placing – 9,670 cy	\$3,044,552	
▪ Other Work	<u>\$1,149,195</u>	
▪ Sub Total		\$6,141,998

CMAR Cost Proposal Breakdown (cont'd)

▪ Fixed and Variable Expenses		
– Projected Staff/Labor	\$1,723,549	
– Taxes	\$1,408,806	
– Insurance and Bonds	\$ 927,747	
– Temporary Facilities, Equipment Costs and Other Project Expenses	\$1,102,061	
▪ Landscaping, Odor Control and Furniture	<u>\$ 35,000</u>	
▪ Sub Total		\$ 5,197,164
▪ CMAR FEE		<u>\$ 2,293,632</u>
▪ CMAR GUARANTEED MAXIMUM PRICE		\$34,787,006
▪ OWNERS CONTINGENCY		<u>\$ 500,000</u>
▪ CONSTRUCTION CONTRACT AMOUNT		\$35,287,006

Overall Project Budget

Fee Description	Fee
CMAR GMP	\$34,787,006
Standby Generator (Purchased by City directly and Installed by CMAR)	\$544,000
Owner's Contingency	\$500,000
Engineering Design and Construction Management	\$5,300,000
Land Acquisition Including Easements	\$500,000
CMAR Pre Construction Contract	\$382,000
APS Electric Construction	\$30,000
UniSource Gas Construction	\$96,743
ADEQ Permitting	\$75,000
City of Prescott Permitting	\$172,675
3 rd Party CMAR Cost Model Audit	\$19,900
City Personnel Costs	\$200,000
Total Cost Estimate	\$42,607,324

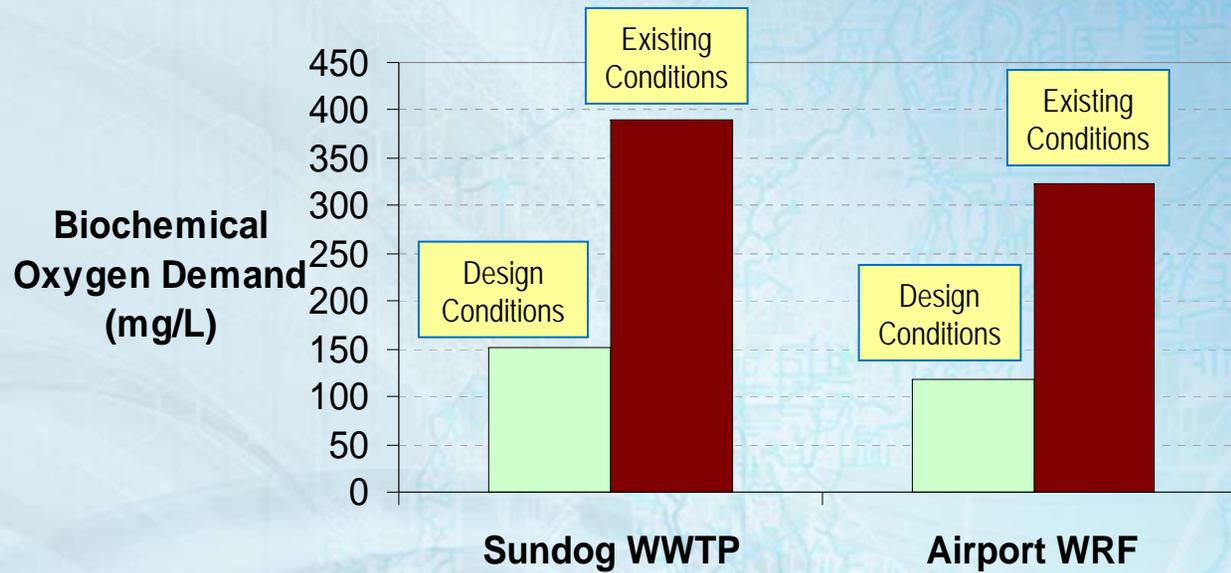
Financing of Phase 1 Expansion

- August 31, 2010
 - City Council adopted Resolution No. 4041-1111 authorizing an application to the Arizona Water Infrastructure Financing Authority (WIFA) for project financing
- April 26, 2011
 - City Council adopted Ordinance No. 4784-1135 authoring a WIFA loan for a 20 year term at an interest rate of 3%

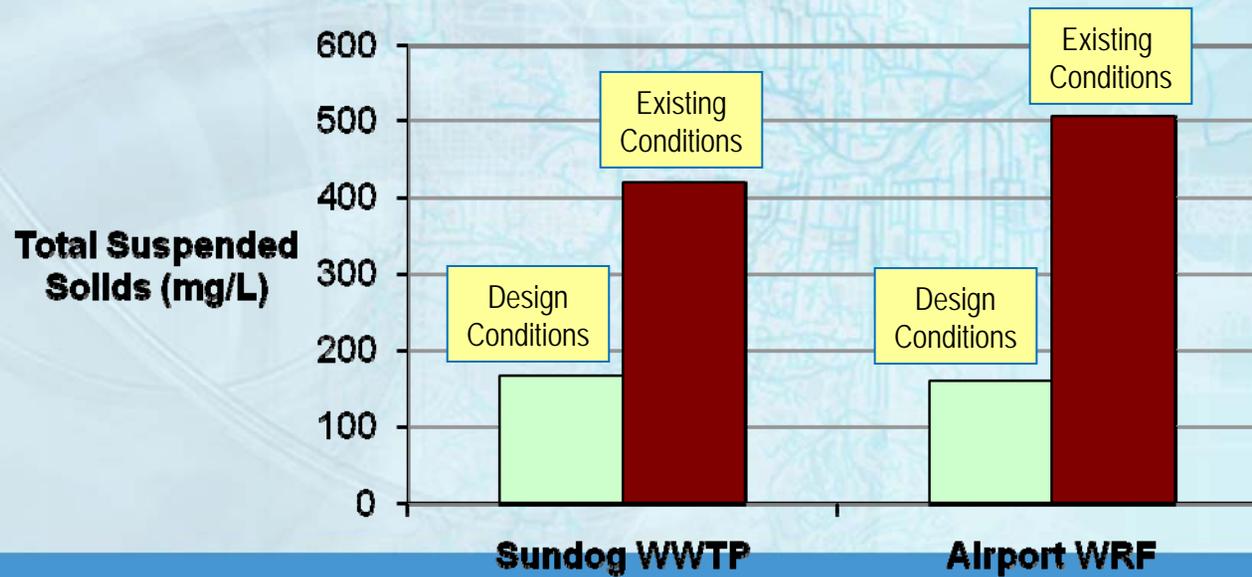
Airport WRF Phase 1

City Council Comments/Questions

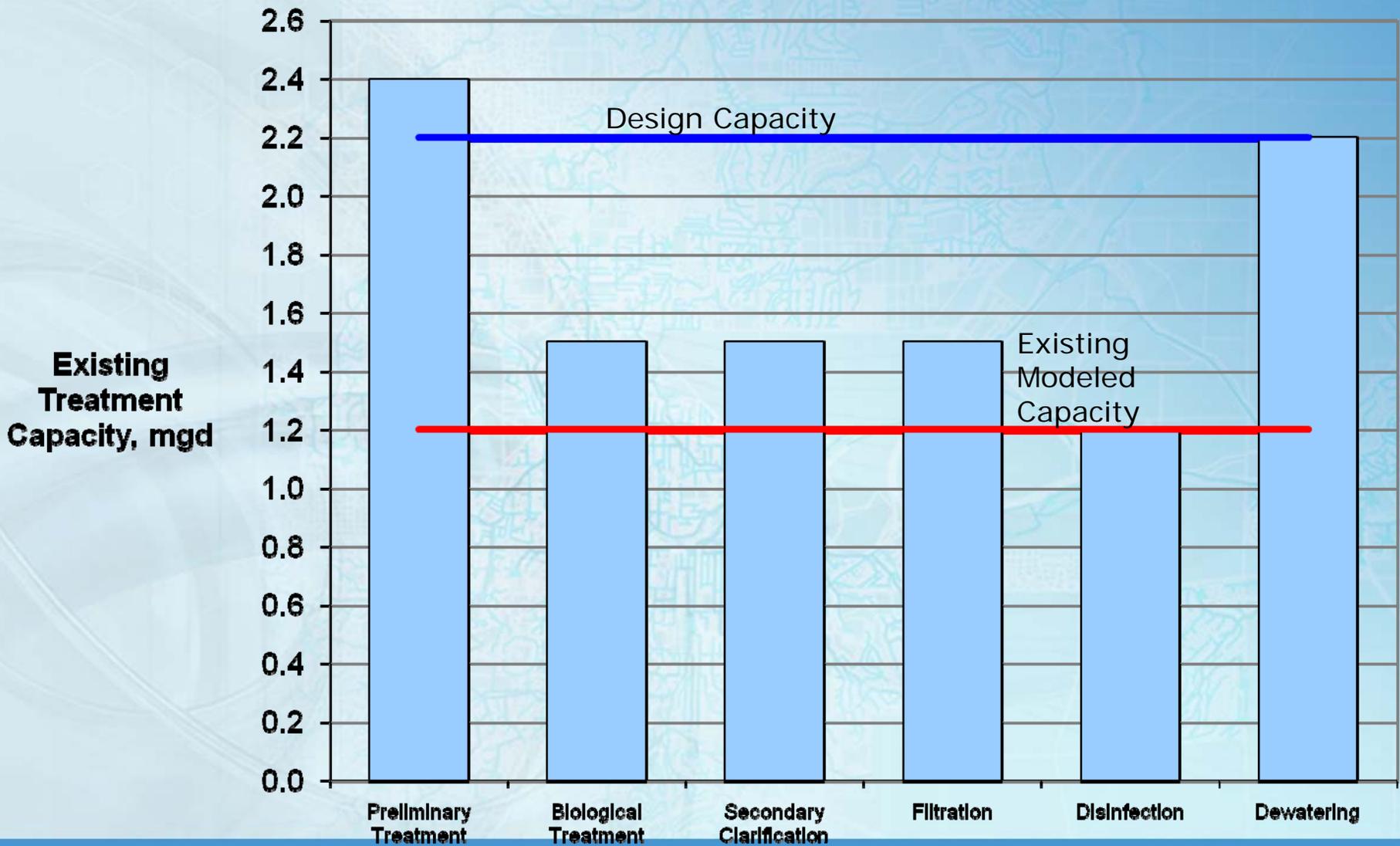
Increased WW Strength Impacts Existing Plant Capacity



Waste Concentration has Nearly Tripled



Current Airport WRF Capacity



Current Sundog WWTP Capacity

