MINUTES
SPECIAL WORKSESSION/ROUNDTABLE
CITY COUNCIL OF THE CITY OF YUMA, ARIZONA
CONFERENCE ROOM 190, YUMA CITY HALL
ONE CITY PLAZA, YUMA, ARIZONA
October 28, 2014
5:30 p.m.

CALL TO ORDER

Mayor Nicholls called the City Council meeting to order at 5:31 p.m.

Councilmembers Present:	Wright, Knight, Beeson (left at 7:00 p.m.), McClendon, Thomas, Craft and Mayor Nicholls
Councilmembers Absent:	none
Staffmembers Present:	City Administrator, Gregory K. Wilkinson Utilities Director, Jay Simonton Various Department Heads or their representative City Attorney, Steven W. Moore Deputy City Clerk, Janet L. Pierson

I. WATER AND SEWER RATE STUDY UPDATE

Simonton presented the following update:

Current State & Past Performance of the Water and Sewer Funds

Most Recent Rate History

- 2003 Rate Study and Financial Plan
  - Developed by Black and Vetch
  - Resulted in a Water Rate Increase of approximately 35% spread over 2004-2008
  - Sewer rates were not adjusted
- 2006 Rate Study and Financial Plan
  - Developed by Economist.com
  - Water Rate Increases in 2007 & 2008 (Total Rate Increase over 2-year period was approximately 19%)
  - Sewer Rate Increase in 2007, 2008, 2009, 2010, 2011 (total rate increase over 5-year period was approximately 41%).

Water Fund Revenue vs. Expenses (Fiscal Years 2007-2014)

	2007	2008	2009	2010	2011	2012	2013	2014 Estimated	2015 Budget
Total Sources	$20,799,172	$24,000,222	$23,212,049	$22,377,589	$22,217,424	$21,122,104	$21,700.971	$21,278,584	$21,233,084
Total Uses	$17,256,201	$25,790,053	$18,159,597	$21,654,194	$21,968,432	$21,183,675	$21,306,823	$21,795,903	$21,009,422

Wastewater Fund Revenue vs. Expenses (Fiscal Years 2007-2014)

	2007	2008	2009	2010	2011	2012	2013	2014 Estimated	2015 Budget
Total Sources	$13,730,242	$16,357,440	$13,506,560	$13,744,446	$14,935,149	$14,561,263	$14,715,503	$14,198,070	$14,200,380
Total Uses	$15,616,524	$12,002,486	$10,817,029	$10,795,146	$11,122,213	$10,916,632	$11,133,889	$12,235,187	$15,570,160

Capacity Fund Revenues

	2010	2011	2012	2013	2014
Water Capacity Fund	$1,420,380	$984,916	$796,569	$1,694,407	$2,208,533
Wastewater Capacity Fund	$1,692,971	$5,104,897	$7,734,513	$4,113,507	$2,590,631

- Wastewater revenues were higher than water revenues due to:
  - Capacity funds that were collected on the wastewater side that were not collected on the water side such as:
    - B&C Colonia project
    - A large industrial user
- Capacity revenue on the wastewater side was sufficient to cover bond debt but not on the water side.
- In the 2015 budget we are starting to exceed our revenues
  - Due to a large CIP project using revenues from the wastewater
- In 2010 and 2014 the two numbers get closer together
  - This is typical of what is expected moving forward
    - The same amount is collected when a home connects on the water side and the wastewater side.

<u>Cost Control Measures Implemented in the past 5 years</u>

- Reconfiguration of Field Customer Service Work Hours
  - Reduced overtime by approximately 10-hours per week, annual savings approximately $12,000.
- Pump/Motor Upgrades to Variable Frequency Drives (VFD's) at Main Street Water Treatment Plan (MSWTP)
  - Annual savings approximately $10,000-$15,000
  - Plant electrical and mechanical staff did all installation work; APS incentive program resulted in little to no cost to the Department to complete the upgrades.
- Solar Projects at Agua Viva Water Treatment Plant (AVWTP) & Desert Dunes Water Reclamation Facility (DDWRF).
  - First year savings approximately $20,000 to $25,000
  - Power Purchase Agreement with third party vendor resulted in no up front capital expenditure by the department.
  - Annual savings should increase over 20-year life of the contract as anticipated APS rates increase over the same time period.

- Equipment Replacement Fund (ERF) Payments were stopped for all vehicles under $50,000
    - Resulted in more than a $250,000 budget reduction
    - Can't be viewed as a long-term cost savings measure
- "No-Dig" Service Line Replacement Program
    - Implemented in 2013 to replace problematic/priority water service lines
    - One crew of 3 technicians can now replace 4 services in one workday, compared to 1 service a day using traditional methods
    - Average savings per service installation is approximately $1,600 each
- Electrical Rate Changes at AVWTP
    - Staff worked with APS representatives to review the historical electrical usage at the AVWTP, and were able to reduce the fixed demand charges saving approximately $200,000 annually.

➢ In-House Projects completed to delay or eliminate CIP's

- Figueroa Avenue Water Pollution Control Facility (FAWPCF) Primary Clarifier Project
    - Original CIP cost estimate to rehab the four primaries was $7-9 million dollars. Facility staff completed significant work at a cost of approximately $150k in materials over a two-year period, to defer the need for the CIP Project for at least 5-6 years.
- FAWPCF Secondary Clarifier Project
    - Original CIP cost estimates to refurbish the four secondary clarifiers was $3-6 million dollars. Facility staff completed significant work at a cost of approximately $200k in materials over the past two years, to refurbish 2 of the 4 clarifiers to defer the need for the CIP Project for 6-8 years.
- DDWRF Sludge Thickening Upgrades
    - Plant staff designed and constructed a new dissolved air floatation system to replace ineffective and costly centrifuges used to thicken waste sludge at the DDWRF. Total cost of parts and equipment for the new system was approximately $125k. A new similar sized system, if purchased from a vendor would be in excess of $350k.

<u>Revenue Requirements Moving Forward</u>

- Inflationary & Other O&M Cost Increases
    - Electrical expenditure increases
    - Chemical and other material increases
    - Cost increase due to regulatory requirements
- Equipment Replacement
    - Almost all vehicle replacements have been suspended
    - Only vehicles $50,000 or more are included in the current ERP, but over 75% of the Department fleet is less than the $50,000 limit
- Personnel Cost Increases
    - Healthcare
    - Retirement Costs
    - Salary/Wages

- Maintain an Adequate Capital Improvement Program

Electrical Cost Past 5 years

	2010	2011	2012	2013	2014	
Water	$1,094,798	$1,172,261	$1,257,806	$1,474,491	$1,364,157	
Wastewater	$ 891,876	$ 823,392	$ 825,606	$ 857,833	$ 893,566	
Total	$1,986,674	$1,995,653	$2,083,412	$2,332,324	$2,257,723	13.64%

- Electrical costs are trending upward; a 13.64% increase from 2010-2014.
- The savings in 2014 was achieved through the above-mentioned changes at the Agua Viva Plant

Material and Supplies Cost

	2010	2011	2012	2013	2014	2015 Budget
Water Fund	1,461,774	1,491,672	1,083,407	1,097,857	1,417,951	1,633,158
Wastewater Fund	1,644,320	1,858,800	1,594,965	1,455,165	1,672,257	1,877,435
Total	3,106,094	3,350,472	2,678,372	2,553,022	3,090,208	3,510,593

- Includes chemicals, meters, pipe, fittings, concrete etc.
- The drop in 2012-2013 was due to the deferral of pump replacements and the suspension of the Automated Meter Reader (AMR) Retrofit program.

Personnel Cost Increases

	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24
Water Fund	71.5	71.5	73.5	73.5	74.5	74.5	75.5	75.5	76.5	76.5
Wastewater Fund	57.5	59.5	59.5	59.5	59.5	59.5	59.5	60.5	61.5	61.5
Total Department FTE	129	131	133	133	134	134	135	136	138	138

- Projected Positions Needed
  - FY2016
    - 1 Chief Operator at Desert Dunes Water Reclamation Facility
      - Currently the Chief Operator at Figueroa is also the Chief Operator at Desert Dunes.
    - Upgrade one Collections Crew Position to Crew Supervisor (not a new Full Time Employee (FTE))
    - 1 Facility Maintenance Worker at Desert Dunes Water Reclamation Facility
  - FY2017
    - 1 Sr. Operator at Agua Viva WTP
    - 1 Jr. Operator at Agua Viva WTP

- There is a need for mechanics and operators to do preventative maintenance rather than reactive maintenance

  - FY2019
    - 1 Sr. Mechanic at Agua Viva WTP
  - FY2021
    - 1 Customer Service Field Rep
  - FY2022
    - 1 Sr. Operator at Desert Dunes WRF
  - FY2023
    - 1 Sr. Wastewater Collections Tech
    - 1 Sr. Water Distribution Tech

➢ Personnel Cost Increases Affecting Water and Wastewater Funds

- Health Insurance Increases
- Retirement System Increases
  - Increased annual adjustment each year for the past decade
- Wage Pressure
  - Difficulty recruiting higher level Certified Operators
    - Three openings for Sr. Operators on the wastewater side
  - City is competing with other Arizona Communities for limited supply of Certified Operators
  - FY15 Budgeted Pay Increase
    - Water - $175,930
    - Sewer - $142,017

➢ Regulatory Cost Increases

- In 2011 the State required ADEQ to become self-sufficient
  - Annual permit maintenance fees are in excess of $75,000 per year
- New Certified Operator fees beginning in FY2016
  - Will require approximately $12,000 in new annual expenses to maintain operator certifications.
- New water quality testing requirements
  - New or increased test requirements will result in approximately $15,000-$20,000 in new annual expenses.
- New "No Lead" Rules will result in more than a 40% increase in the cost of new brass fittings and meter bodies
  - Can no longer use existing brass meter bodies and/or fittings because all brass manufactured before January 2014 is assumed to exceed the new lead content limits.

➢ Maintaining an Adequate CIP Program

➢ The City has invested more than $150 million in water and wastewater infrastructure over the past 10+ years.

- The majority was for growth related needs
  - New Treatment facility (AVWTP, DDWRF)
  - New large water transmission mains

- New larger sanitary sewer interceptors
- Significant upgrades to aging systems at the existing treatment facilities (FAWPC & MSWTP)
- Significant Investment in the City's Future
  - Allows City to actively pursue industries and manufacturing because both the water and wastewater infrastructure are in place to meet their needs.

➢ It is critical to continue to replace aging water and wastewater infrastructure to maintain level of service –

➢ The City's Water Distribution System is comprised of approximately 550 miles of water mains
- Approximately 25% of the system is more than 60 years old
- Over 15 miles of pipe still in service today was installed in the 1930's and 1940's.
- Water main breaks do occur within the system. Some of which have caused extensive damage to private property in the past.

➢ The City's largest wastewater treatment facility is approaching 50 years old and a large percentage of the collection system is more than 50 years old.

➢ Most water and wastewater infrastructure is invisible and therefore is "out of sight out of mind"
- Water and wastewater systems are not built to last indefinitely
- American Society of Civil Engineers (ASCE) 2013 Annual Infrastructure Report Card
  - Drinking Water Grade D – over $1 trillion will be needed in the next few decades to replace aging water mains.
  - Wastewater Grade D – over $298 billion needed to invest in replacing wastewater pipelines.
  - Arizona will need to invest more than $12.6 billion in the next 20 years on water and wastewater infrastructure

➢ The water and wastewater CIP is the single largest factor in the proposed rate adjustment

CIP Project Deferrals / Adjustments

	Planning Years					
Original Proposed CIP Forecast	FY-2015 (1)	FY-2016	FY-2017	FY-2018	FY-2019	
Water Subtotal	$ 5,301,200	$ 7,645,000	$ 3,370,000	$ 10,780,000	$ 5,320,000	
Wastewater Subtotal	$ 3,470,000	$ 9,840,000	$ 5,620,000	$ 6,695,000	$ 620,000	
Original Proposed CIP Forecast	$ 8,771,200	$ 17,485,000	$ 8,990,000	$ 17,475,000	$ 5,940,000	$ 58,661,200

Revised CIP Forecast	FY-2015 (2)	FY-2016 (3)	FY-2017	FY-2018	FY-2019	
Water Subtotal	$ 4,855,200	$ 3,715,000	$ 2,135,000	$ 2,325,000	$ 3,050,000	
Wastewater Subtotal	$ 4,617,500	$ 1,460,000	$ 2,080,000	$ 2,325,000	$ 1,100,000	
Revised CIP Forecast	$ 9,472,700	$ 5,175,000	$ 4,215,000	$ 4,650,000	$ 4,150,000	$ 27,662,700

(1) Note: Agua Viva Lake Project (Construction Phasing) has been removed = $20,400,000
(2) $4,160,200 of Water Projects is funded with 2007 Bond Funds & $1,196,000 of Wastewater Projects funded with Bond Funds
(3) $1,840,000 of Water Projects is funded with 2007 Bond Funds

- Original proposed CIP Forecast was $58 million.
  - Resulting in a very costly rate increase to the customers
  - As a result, projects were deferred

- Only the most critical projects were included
- The CIP in 2015 and 2016 include 2007 bond proceeds that are still being spent
- Funding the CIP in 2017, 2018 and 2019 will be completely reliant on revenue from the water fund and wastewater fund.

Listing of Deferred CIP Projects

Water	Est Cost
22nd St Ave A to 4th Ave Waterline Replacement	$340K
1st Ave Waterline 12th to 16th Streets	$600K
AV Lake (Design)	$1.0M
AV Well No. 1 Replacement	$1.1M
Strategic Groundwater Wells	$4.8M
TTHM Air Stripping Tank Systems	$750K
Fleet Services / Systems Division Relocation	$450K
MSWTP Filter Upgrades Phase 3	$3.0M

Wastewater	Est Cost
DDWRF UV System Upgraders	$2.6M
DDWRF Solids Handling Upgrades	$1.0M
FAWPC Power Improvements	$1.0M
DDWRF Reclaimed Water Syst. Phase 1	$1.2M
Misc. Manhole Replacement Projects	$700K
FAWPCF Co-Gen Facility	$1.5M
FAWPCF Primary Clarifier Improvements	$4.0M
FAWPCF Bio-Solids Dewatering Phases 2 & 3	$6.5M

Priority CIP Projects Included in Rate Analysis

16th Tanks & Pump Station Improvements	$600K
MSWTP Filter System Upgrades (Phase 1)	$1.85M
Water Line Replacement Annual Project	$1.25M Annually
MSWTP Chlorine System Upgrades	$780K
MSWTP Filter System Upgrades (Phase 2)	$1.5M
Annual Water Line Replacement Contingency Fund	$250K Annually

Wastewater	Est Cost
Misc. Sewer Line Replacements	$675K
FAWPC Bio-Dewatering Phase 1	$300K
Interceptor Flow Monitoring Stations	$100k
Annual Lift-station Upgrade Project	$300K Annually
Misc. Manhole Replacement Projects	$650K
FAWPCF Feasibility study	$300K
Wastewater Vac Truck Dump Station Upgrades (Ph 1 & 2)	$500K each Phase
Annual Sewer Line & Manhole Replacement Contingency Fund	$200K Annually

➢ CIP Focus Moving Forward

- Replacement of Aging Infrastructure
  - Waterlines
  - Sanitary Sewer Manholes
  - Sanitary Sewer Lift Station Upgrades
  - Main Street WTP Filter Upgrades/Replacements (oldest set is 40 years old)
  - Recoating of interior of 16th Street tanks

- Safety and/or Regulatory Driven
  - Removal of the use of Chlorine Gas as Main Street WTP
  - Figueroa WPCF Feasibility Plan (Discharge limits)
  - Figueroa Ave Bar-Screen Replacements
- No New Plant Expansions or New Systems are included in the CIP over the next 5 years

➢ Proposed Rate Change Customer Example
- 1st year increase of slightly less than $2.00 a month
- 2nd year increase of slightly less than $2.00 a month
- Years 3-5 an increase of just under $1.00

Discussion with **Councilmember's Knight, Craft, Wright, Thomas, Mayor Nicholls, Wilkinson, Moore** and **Simonton**:
- The brass fittings only need replacement once they are removed from the distribution system.
- There are over 23,000 meters in the system. The meters get replaced every 10 years. A majority of the meters were replaced in early 2000.
- The projected 9 additional personnel positions over the next 7 years include positions at the treatment facilities, distribution system and customer service.
- Projecting personnel increases is based, in part, on new water accounts.
- Work on the "no-dig" service line replacement program is done approximately 3-4 days a week.
- The concrete structures not the mechanical components on the in-house projects will dictate whether the projects can continue to be deferred.
- The 16th Street Tank recoating project is a critical project.
- The revenue from collected from delinquent fees is not enough to off-set a rate increase.
- Taking over customers in a private utility would require the purchase of the infrastructure which would result in substantial up-front cost.
- Annexation into the City does not change the provider for water and sewer.
- A rate increase is inevitable. Infrastructure is not built to last forever and there is infrastructure under the ground that is 70-80 years old that needs to be replaced.
- Water breaks can not be predicted and could have the potential to cost a lot of money.
- The revenues received are not enough to cover the expenses.
- 200 homes was the number forecast in the rate calculation.
- The American Society of Civil Engineers 2013 Annual Infrastructure Report Card grade of a "D" was a National grade.
- There are very few grants for a utility of the City's size. Water Infrastructure Finance Authority (WIFA) money is available but it is low interest loans. In fact, WIFA monies were used to construct Desert Dunes and a portion of the Agua Viva Plant.
- 2007 bond proceeds collected but not yet used do not impact the rate.
- The bonds have not been re-financed and are in the original form.
- Leftover bond proceeds have been used for replacing aging systems in Figueroa, extending sewer lines to the new plant at Desert Dunes, extending large diameter waterlines from Agua Viva to MCAS and other transmission lines on Avenue A and

Avenue B. Future spending of bond proceeds will include the recoating of the 16th Street tanks.

Rate Study Presentation (Economist.Com)

Dan Jackson, Managing Director and Chief Executive of economists.com, further discussed the Rate Study and Long Term Financial Plan that was presented at the September 4, 2014, Special Worksession/Roundtable. Jackson brought forward the following:

Water and Wastewater Rate Alternatives:

- Alternative 1 – Status Quo
  - Maintains same rate design with annual adjustments
- Alternative 2 – Conservation
  - Implements more significant block rates for residential customers; no change in commercial or wastewater from Scenario 1

Alternative 1 – Status Quo
Residential Water/WW Rates

	Current	Effective Jan-15	Effective Jan-16	Effective Jan-17	Effective Jan-18	Effective Jan-19
WATER -- Residential/Multi-Family -- Inside City						
Base Charge-5/8"	$ 15.68	**$ 16.31**	$ 16.96	$ 17.30	$ 17.64	$ 18.00
Usage Charge						
0 10 hcf	1.42	**1.48**	1.54	1.57	1.60	1.63
11 hcf 30 hcf	1.52	**1.58**	1.64	1.68	1.71	1.74
31 hcf Above	1.75	**1.82**	1.89	1.93	1.97	2.01
WASTEWATER -- Residential -- Inside City						
Monthly Charge	$ 32.48	**$ 33.78**	$ 35.13	$ 35.83	$ 36.55	$ 37.28

Alternative 2 – Conservation Residential Water/WW Rate Plan

	Current	Effective Jan-15	Effective Jan-16	Effective Jan-17	Effective Jan-18	Effective Jan-19
WATER -- Residential/Multi-Family -- Inside City						
Base Charge-5/8"	$ 15.68	**$ 16.31**	$ 16.96	$ 17.30	$ 17.64	$ 18.00
Usage Charge						
0 10 hcf	1.42	**1.42**	1.48	1.51	1.54	1.57
11 hcf 30 hcf	1.52	**1.72**	1.79	1.82	1.86	1.90
31 hcf Above	1.75	**2.02**	2.10	2.14	2.19	2.23
WASTEWATER -- Residential -- Inside City						
Monthly Charge	$ 32.48	**$ 33.78**	$ 35.13	$ 35.83	$ 36.55	$ 37.28

Comparison of Alternatives Residential Inside Monthly Charges

Usage (hcf)	Scen 1	Scen 2	Difference
-	$ 50.09	$ 50.09	$ (0.00)
5	57.49	57.19	(0.30)
10	64.89	64.29	(0.60)
15	72.69	72.59	(0.10)
20	80.59	81.19	0.60
25	88.49	89.79	1.30
30	96.39	98.39	2.00
35	105.49	108.49	3.00
40	114.59	118.59	4.00

Comparison of Alternative 1 to Alternative 2

- Using 1500 cubic feet or less you pay slightly less under alternative 2.
- Using 500 cubit feet you pay 30 cents less under alternative 2 than you do under alternative 1.
- Using 1,000 cubic feet you pay about 60 cents less under alternative 2 than under alternative 1
- The break even amount is about 1500 cubic feet.
- High Volume Users (say 3,000 cubic feet a month) pay $2.00 more under scenario 2 than under scenario 1.
- 4,000 cubic feet users pay $4.00 more under scenario 2 than scenario 1.
- It is designed to be a disincentive for people to use higher volumes of water.
- Similar increases are scheduled each of the next 5 years under this rate plan.

Discussion with **Mayor Nicholls, Councilmember's Thomas, Craft, Knight, Wright, Wilkinson, Simonton** and **Jackson**:

- Apartments are classified as commercial and are not on the tiered system.
- Condos that are master metered are commercial.
- There is a 2-3% contingency margin to insulate the City from adverse conditions that would cause people to use less water therefore decreasing revenues.
- From a financial statement perspective the City is breaking even. From a cost of service perspective the City is under recovering a little bit because we are unable to fully fund some of the capital outlays and some of the contribution to the capital improvement fund which is not captured on a financial statement.
- The Biological Oxygen Demand and TSS rates are currently .26 cents per pound with a recommendation to increase to .28 cents per pound and only large industrial customers fall into that category.
- The City charges a flat rate to industrial customers rather than block rates which encourage industrial customers to locate here.
- The plan can always be re-visited in 2-3 years and adjustments made as necessary.
- There has not been a water rate increase in 6 years; a wastewater increase in 3 years. There is only so long you can go and absorb increasing costs and risks without having to do something about it.
- The City is only asking the rate payers to pay what it is costing the City. You can not sell something for less than what it costs you forever.
- The City will continue to have rates below the state average for the foreseeable future.
- Costs will continue to increase whether we adjust the rates or not.
- A 4% increase two consecutive years in a row is too much.
- 70% of monthly bills are going to be 1600 cubic feet or less for most of the year.
- There was a zero increase in monthly service charges to go from a 60-day billing cycle to a 30-day billing cycle.
- Water Consumption going down is not unique to Yuma.
- Most utility companies implement rate adjustments in winter months because usage is at its lowest. It is not the best idea to implement a rate increase on July 1st as people already use more water in summer months.

Mayor Nicholls made the following suggestions:

- An analysis on a 2% option. A structure where our lower income people have the opportunity to control some of the costs.
- A benchmark type performance where we could back off on future increases if we are bringing in greater revenue.
- Detailed information on the bottom 2-3 priority projects.

The meeting adjourned at 8:51 p.m.

Lynda L. Bushong, City Clerk

APPROVED:

Douglas J. Nicholls, Mayor

Approved at the City Council Meeting of:
May 6, 2015
Deputy City Clerk: Janet L. Pierson