# UTILITIES DIVISION MISSION

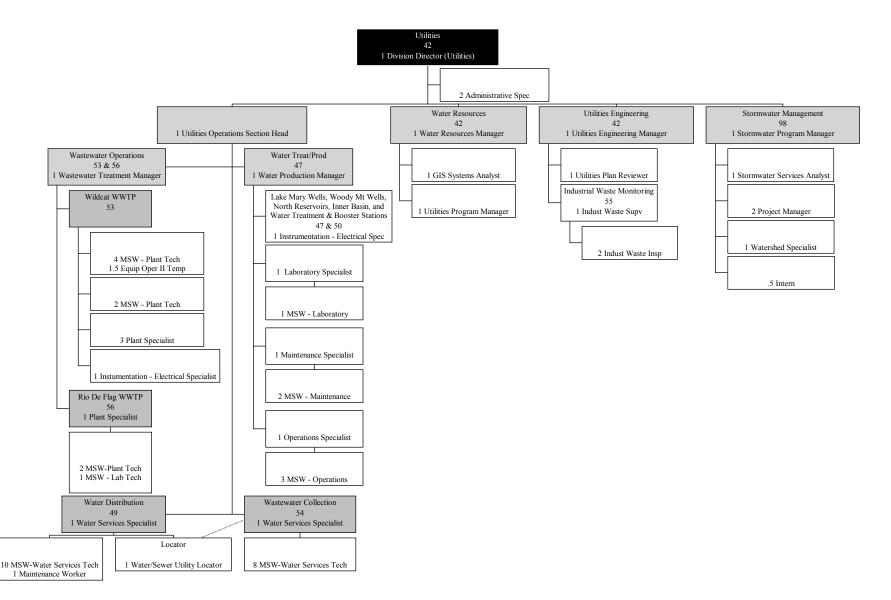
The mission of the **Utilities Section** is to professionally and cost effectively provide water, reclaimed water, and wastewater services that meet the present and future environmental, health, and safety needs of the community and our co-workers.

We are committed to a goal of 100% customer satisfaction. This will be achieved by a dedication to exceed customer expectations by continuously improving our operations.

We value our co-workers and strive to maintain high motivation by providing an environment that encourages improvement and teamwork.

The mission of the **Stormwater Management Section** is to promote the public health, safety and general welfare, to minimize public and private losses due to flood conditions, to reduce the cost of flood insurance and to comply with applicable floodplain and stormwater regulations.

## **UTILITIES**



The mission of the Utilities Division is to professionally and cost effectively provide water, stormwater, reclaimed water and wastewater services that meet the present and future environmental, health, and safety needs of the community and our co-workers. We are committed to a goal of 100% customer satisfaction. This will be achieved by a dedication to exceed customer expectations by continuously improving our operations. We value our co-workers and strive to maintain high motivation by providing an environment that encourages improvement and teamwork.

#### PROGRAM DESCRIPTION

Core functions of the Utilities Division include: Utilities Engineering and Operations, Water Resources Management, Water Conservation, Industrial Waste and Backflow, Stormwater Management, and Regulatory Compliance. Operations is a comprehensive program that includes such diverse functions as water production, water distribution, wastewater collection, wastewater treatment, reclaimed water distribution, booster stations as well as industrial waste & backflow.

The Division also administers the following programs and commissions: Division Safety Program, Water Commission and the City Change Order Committee. We are a liaison with numerous outside agencies and organizations these include: representation to Arizona Department of Environmental Quality (ADEQ), Arizona Department of Water Resources (ADWR), Northern Arizona Municipal Water Users Association, US Forest Service, Technical Advisory groups for the Coconino Plateau Water Advisory Council and the National Park Service/U.S. Forest Service Lake Mary Watershed Planning Group. In addition, staff review proposed water legislation and provide input to Council and Legislators. Utilities asset management includes using an enterprise level Geographic Information System (GIS) linked to a computerized maintenance management system to maintain up-to-date infrastructure inventory and maintenance records. Utilities engineering evaluate capital improvement needs, including prioritization, and provide project management engineering services for capital improvement projects. Utilities staff maintain hydraulic computer models of the City's water, sewer and reclaimed infrastructure and use these tools to evaluate the needs of new development and anticipated future growth in conjunction with the Regional Plan. Staff also research customer, staff, and City Council inquiries and follow up on complaints. Utilities staff provide water quality regulatory permit administration for various Federal (USEPA) and State (ADEQ) programs including: Safe Drinking Water Act, Clean Water Act, National Pollutant Discharge Elimination System (NPDES), Arizona Aquifer Protection Permit (APP), Water Reuse, Emergency Operations and Safety Programs as required.

## **FY 13 ACCOMPLISHMENTS**

- ✓ Evaluated security measures and began to implement at treatment facilities
- ✓ Continued Planning for the Future
- ✓ Continued working on the Utilities Integrated Master Plan by starting the Water Infrastructure Chapter
- ✓ Identified SCADA System upgrade opportunities
- ✓ Finalized Water Policies chapter with water commission

Annual Financial Plan Page 323 City of Flagstaff

## **FY 14 NEW INITIATIVES AND GOALS**

- Initiate the Feasibility Study with the Coconino Plateau Water Advisory Council Environment Assessment for the pumping at Red Gap Ranch
- > Continue to Plan for the Future how technology can make service delivery more efficient
- Resiliency and preparedness efforts are to be addressed in how we approach our daily operations during normal conditions and particularly how we respond during inclement weather conditions. Efforts are to include: redundancy of storage of critical data and increased plant security.
- Initiate and implement a Leak Detection program for the Water Distribution system.

#### PERFORMANCE MEASURES

## Regional Plan Priority: Community Facilities and Services (includes Public Safety)

Goal: Maintain public and employee safety while remaining committed to short response times

**Objective:** No employee accidents resulting in injury or Lost Time accidents; no damage to public or private property

Type of Measure: Outcome; no injuries or damages

Tool: Risk management tracking of recordable incidents, quarterly performance metrics report, and annual

summary report.

Frequency: Quarterly and Yearly

Scoring: 100% Trend: ←→

Measures:	CY 11 Actual	CY 12 Actual	CY 13 Estimated	CY 14 Proposed	
Number of Injury Accidents	0	2	0	0	Ī
Number of Non-injury Accidents	0	0	0	0	1

## Regional Plan Priority: Community Facilities and Services (includes Public Safety)

Goal: Infrastructure and public services will be provided in an efficient, equitable and effective manner.

**Objective:** Exceed customer's water and wastewater service expectations, and minimize water unscheduled outage hours (repairs).

Type of Measure: Outcome

**Tool:** Compliance testing, monitoring condition of infrastructure

Frequency: Quarterly and Yearly

Scoring: 100% Trend: ←→

	CY 11	CY 12	CY 13	CY 14
Measures:	Actual	Actual	Estimated	Proposed
Capital Projects Managed	5	7	16	13
Product Quality Regulatory Compliance				
Drinking water compliance rate   1	2,063/100%			
<ul> <li>Wastewater treatment effectiveness rate <sup>2</sup></li> </ul>	4,100/99%			
Notice of Violations <sup>3</sup> This is a second control of the sec	0	1	0	0
Water Distribution Pipe Replacement Rate <sup>4</sup>	0	1.6	1.212	1.91
<ul> <li>Total miles of pipe needed to be replaced <sup>5</sup></li> </ul>	26.5	26.5	26.5	
Wastewater Collection Pipe Replacement Rate 4	0	0.65	.42	.63
<ul> <li>Total miles of pipe needed to be replaced <sup>5</sup></li> </ul>	11.3	11.3	11.3	11.3
Insurance claims (\$)	\$10,000	\$408,000	\$0	\$0

## NOTES:

1 – number of SDWA compliance tests conducted / % of tests in compliance for that year

2 – number of AzPDES and APP compliance tests conducted / % of tests in compliance for that year

3 – number of Notice of Violations from ADEQ (water or wastewater)

4 – total miles of pipe > 70 years old replaced

5 – total miles of pipe in distribution/collection system that is > 70 years old

## Council Priority: Repair, replace, maintain infrastructure (streets & utilities)

**Goal:** A sustainable community through economic vitality, environmental protection and social inclusion.

**Objective:** Ensure water and sewer infrastructure is adequate for new development to occur and make the best

use of water and energy resources.

**Type of Measure:** Output **Tool**, Division reports

Frequency: Quarterly and Yearly

**Scoring:** 90 -100%%

Trend:  $\leftarrow \rightarrow$ 

Measures:	CY 11 Actual	CY 12 Actual	CY 13 Estimated	CY 14 Proposed
Number of Development Review Board plans reviewed	60	301	330	350
Number of water and sewer impact analysis performed	6	6	4	6

## Council Priority: Effective governance

Goal: Provide a rate structure to meet the financial needs of the utility, maintain efficiency.

Objective: Update rates on a regular basis. Maintain utility infrastructure necessary to adequately meet current

and future community needs.

Type of Measure: Outcome

Tool: Financial Revenue Reports

Frequency: Quarterly and Yearly

Scoring: 95% Trend: ↓

	CY 11	CY 12	CY 13	CY 14
Measures:	Actual	Actual	Estimated	Proposed
Review Rates with internal rate model	Yes	Yes	Yes	Yes
Water Revenues % Actual vs Budget	100%	100%	100%	100%
Sewer Revenues % Actual vs Budget	100%	100%	100%	100%
Debt Ratio (total liabilities / total debt)	4	N/A		
Customer accounts per employee (Water)	283	321	303	303
Customer accounts per employee (WasteWater)			293	293
Customer service complaints per 1000	55 (total)	55 (total)	.73	0
customers				

Regional Plan Priority: Community Facilities and Services (includes Public Safety)

**Goal:** Infrastructure and public services will be provided in an efficient, equitable and effective manner. **Objective:** Exceed customer's water and wastewater service expectations, and reduce number of service

complaints.

Type of Measure: Outcome

**Tool:** Customer survey, tracking of customer complaints and compliments

Frequency: Quarterly and Yearly

Scoring: 95% Trend: ↓

	CY 11	CY 12	CY 13	CY 14
Measures:	Actual	Actual	Estimated	Proposed
Total Number of customer complaints	100	55	39	0
Water	70	48	13	0
Wastewater	10	6	9	0
Stormwater	20	1	17	0
Number of complaints resolved	100	55	39	100%
Number of compliments received	50	10	9	
Customer Survey Rating	90%	N/A	N/A	100%
First call resolution	95%			100%

SECTION:	42-L	ITILITIES AD	MINI	STRATION						
EXPENDITURES BY CATEGORY:										
		Actual		Adopted	_	Estimated		Proposed		
		penditures		Budget		penditures		Budget	Bud	get-Budget
	20	011-2012	2	012-2013	2	012-2013	2	2013-2014	\	/ariance
PERSONAL SERVICES	\$	653,704	\$	636,880	\$	791,603	\$	815,620	\$	178,740
CONTRACTUAL		347,276		527,029		484,765		571,779		44,750
COMMODITIES		27,036		41,120		54,841		32,420		(8,700)
CAPITAL		-		15,000		15,000		-		(15,000)
TOTAL	\$	1,028,016	\$	1,220,029	\$	1,346,209	\$	1,419,819	\$	199,790
EXPENDITURES BY PROGRAM:										
GENERAL ADMINISTRATION	\$	661.078	\$	861.611	\$	973.021	\$	1,051,354	\$	189,743
WATER COMMISSION	Ψ	292	Ψ	180	Ψ	360	Ψ	180	Ψ	100,7 10
CITY WATER SYSTEM ANALYSIS		6,240		10.185		10,185		10,185		_
CITY WATER SYSTEM ANALYSIS		3,600		10,103		10,820		10,103		_
ENGINEERING		118.780		120.200		135,428		124,087		3,887
WATER CONSERVATION		129.097		132.993		132.613		136,667		3,674
GIS - UTILITIES		105,019		75,940		75,940		78,426		2,486
RED GAP OPER AND LAND MGMT		3,910		8,100		7,842		8,100		2,400
TOTAL	\$	1,028,016	\$	1,220,029	\$	1,346,209	\$	1,419,819	\$	199.790
		1,023,010	<u> </u>	.,==5,0=5		.,03,200	Ψ	.,	<u> </u>	100,100
SOURCE OF FUNDING:										
	WAT	TER AND WA	ASTE	<b>WATER FUN</b>	D		\$	1,419,819		
							\$	1,419,819		
							ŕ	, , , ,		
COMMENTARY:										

#### COMMENTARY:

The Utilities Administration operating budget has increased 18% there are no capital expenditures resulting in an overall net increase of 16%. Personal Services increased for market pay and benefits increases and restoring the Resource Manager position which was vacant for most of FY 2013. There was also one position that was moved from Water Distribution and Wastewater Collection as part of a reorganization change. Contractual decrease is related to prior year one-time items net of an increase for legal fees. The decrease in Commodities is due to prior year one-time items. There is no major capital (>\$10,000) for this section.

## **SECTION 47/50**

## LAKE MARY WATER TREATMENT PLANT/BOOSTER STATIONS

## **MISSION**

The mission of the Utilities Department is to professionally and cost effectively provide water and wastewater services that meet the present and future environmental, health, and safety needs of the community and our coworkers. We are committed to a goal of 100% customer satisfaction. This will be achieved by a dedication to exceed customer expectations by continuously improving our operations. We value our co-workers and strive to maintain high motivation by providing an environment that encourages improvement and teamwork.

## PROGRAM DESCRIPTION

The Lake Mary Water Treatment Plant provides conventional surface water treatment for water from upper Lake Mary. Staff is responsible for the operation of the Water Plant and all other water production facilities including: Lake Mary Wellfield, Woody Mountain Wellfield, the Inner Basin wells and springs, local wells and the Reservoir Filtration Plant. Staff also operates and maintains system water tanks and booster stations (Division 50). The State certified Compliance Lab provides analysis for process control and water sampling for compliance. This division cost effectively produces water that meets all safe Drinking Water Act requirements. It manages the quantity of stored water to provide flows to customers, with an adequate reserve for fire fighting. It teaches public awareness of the water system through educational programs and demonstrations.

#### **FY 13 ACCOMPLISHMENTS**

- ✓ Completed the reconstruction of the Inner Basin Pipeline along Forest Service Road 146 (Pipeline Road) ahead of schedule and within budget.
- ✓ Replaced the variable frequency drive units (2) at the raw water pump station.
- ✓ Cleaned and refurbished Woody Mountain Well #11
- ✓ Repaired Lake Mary Well #5 motor and pump.
- ✓ Replace Woody Mountain Well #9 pump with the spare

#### **FY 14 NEW INITIATIVES AND GOALS**

- Replace old motor control and electronic infrastructure at Woody Mountain Well #6.
- Upgrade the motor controls at the Fort Tuthill Well
- ➤ Relocate the Lake Mary Well #2 water line to allow for 12 month operation.
- Change the Lake Mary Well field pumps at the Raw Water Pump Station to smaller units that will be more energy efficient.

## PERFORMANCE MEASURES

Regional Plan Priority: Community Facilities and Services (includes Public Safety)

Goal: Reduce injury accidents.

Objective: Reduce the number of employee accidents by increasing safety awareness through training.

Type of Measure: Outcome Tool: Quarterly Reports

Frequency: Daily, Monthly, Quarterly and Yearly

Scoring: 90% = ≤ 1 injury accident, 75-90% = 2-3 injury accidents, 75% = 3-5 injury accidents

Trend: ↓

	CY 11	CY 12	CY 13	CY 14
Measures:	Actual	Actual	Estimate	Proposed
Injury Accidents	0	1	0	0
Non-Injury Accidents	0	0	0	0
Lost Work Days	0	0	0	0
Accidents per Million Gallons produced	0	0.00037	0	0
Safety Training (hr/person)	4.2	20.25	20	20

## Council Priority: Repair, replace, maintain infrastructure (streets & utilities)

Goal: Provide safe drinking water to citizens of Flagstaff

Objective: Reduce the amount of violations. Continue to provide the best quality water by meeting or exceeding

all requirements.

Type of Measure: Outcome

Tool: Monitoring and instrumentation readings, laboratory testing

Frequency: Daily, Monthly, Quarterly and Yearly

Scoring: 90% = ≤ 1 monitoring violation, 75-90% = 2 monitoring violations, 75% = > 2 monitoring violations or 1

violation requiring 30 day public notice.

Trend: 个

Measures:	CY 11	CY 12	CY 13	CY 14
	Actual	Actual	Estimate	Proposed
Number of Safe Drinking Water Act Violations	1	1	0	0

## **UTILITIES**

## SECTION 47/50

## LAKE MARY WATER TREATMENT PLANT/BOOSTER STATIONS

## Regional Plan Priority: Community Facilities and Services (includes Public Safety)

Goal: Provide uninterrupted water service to the citizens of Flagstaff.

**Objective:** Provide FY 09 service level (minimum to meet demand) at a minimum budget with two new deep wells, increased power and chemical costs, and increased sampling and testing requirements. Production demand divided by production capacity will be measured daily. The highest daily percentage is given.

Type of Measure: Outcome Tool: Section Reports Frequency: Monthly

**Scoring:** Cost per 1000 gals to produce 90% = \$1.50/1000 gals, 75-90% = \$1.58/1000 gals, 75% = \$1.65/1000

gals.

Trend:  $\leftarrow \rightarrow$ 

Scoring: Production demand as a percent of production capacity Green= ≤ 90%, Yellow = 90 - 95%, Red =

>95%. **Trend:** ←→

	CY 11	CY 12	CY 13	CY 14
Measures:	Actual	Actual	Estimate	Proposed
Gallons produced in MG	2,703MG	2,706 MG	2,750 MG	2750 MG
Cost per 1000 gallons to produce*	\$1.41	\$1.22	\$1.25	\$1.30
Actual vs. Projected Power Costs to Produce	\$0.58/0.75	\$0.67/0.75	\$0.78/0.78	\$0.78/0.78
1000 gallons				
Production vs Total Capacity – Peak Day*	57%	51%	60%	60%

<sup>\*</sup>Note: Cost to produce 1000 gallons is based on total expenses compared to total gallons produced for 2011

## Council Priority: Repair, replace, maintain infrastructure (streets & utilities)

Goal: Reduce the number of complaints in the highest water production related category.

**Objective:** Minimize complaints for taste and odor by 1. Diligently monitor lake indicating parameters and begin using a combination of chlorine dioxide and powdered activated carbon for taste & odor control before the problem develops in the distribution system. 2. Blending well water with lake water if taste and odor conditions persist. 3. If production needs warrant; suspend the use of lake water and use 100% well water should T & O problems cannot be controlled by established methods.

**Tool:** Customer Complaint Forms

Frequency: Daily

**Scoring:**  $90\% = \le 22$  complaints, 75-90% = 37 complaints, 75% = 55 complaints

Trend: \* ↑

	CY 11	CY 12	CY 13	CY 14
Measures:	Actual	Actual	Estimate	Proposed
Number of customer complaints	27	15	30*	30*
Number of complaints per 1000 customers	1.4	0.78	1.6	1.6
Number of compliments received	1	0	12	12

<sup>\*</sup> Note — Water quality complaints are those regarding a treatment or a production issue. Water Distribution handles water quality issues pursuant to the City distribution system. We try to consistently keep what appears to be a historical average of 30. Zero is the preferred goal but can be unrealistic to achieve as a proportion of WQ complaints are more due to changes in the ratio of proportion of lake water and well water. Each source has a distinctive "taste" and mineral content. We strive to blend appropriately to achieve a reasonable compromise as surface water costs much less to produce that well water.

<sup>\*</sup>Note: Total capacity includes all wells, North Reservoir Plant and Lake Mary Plant Note: Costs to produce do not include Water Distribution or Utilities overhead.

SECTION:	47-L	AKE MARY	WAT	ER TREATME	ENT F	PLANT			
EXPENDITURES BY CATEGORY:									
		Actual		Adopted	E	Estimated		Proposed	
		penditures		Budget		penditures		Budget	get-Budge
	2	011-2012		2012-2013		2012-2013	2	2013-2014	/ariance
PERSONAL SERVICES	\$	671,093	\$	729,494	\$	722,567	\$	763,662	\$ 34,16
CONTRACTUAL		2,316,394		2,687,768		2,817,373		2,822,562	134,794
COMMODITIES		206,530		465,820		342,208		497,320	31,500
CAPITAL		16,022		366,297		102,967		313,300	 (52,99
TOTAL	\$	3,210,039	\$	4,249,379	\$	3,985,115	\$	4,396,844	\$ 147,465
EXPENDITURES BY PROGRAM:									
GENERAL ADMINISTRATION	\$	448,652	\$	858,006	\$	430,931	\$	802,843	\$ (55,163
WATER TREATMENT OPERATION		349,166		418,571		328,150		454,065	35,49
CHEMICAL ANALYSIS		188,971		293,864		249,963		252,354	(41,51
BLDGS AND GROUNDS MAINTENANCE		46,131		71,373		51,932		84,391	13,01
EQUIPMENT MAINTENANCE		100,999		334,518		200,527		316,628	(17,89
USFS LAKE MARY CONTRACT		-		8,860		8,860		8,860	-
UPPER LAKE MARY DAM IMPROVE		-		-		32,197		12,000	12,00
SCADA TRACKING		21,866		120,947		70,126		117,386	(3,56
LOCAL WELLS		844,027		825,701		1,039,326		1,028,574	202,87
LAKE MARY WELLFIELDS		351,577		376,281		307,625		335,823	(40,45
WOODY MOUNTAIN WELLFIELD		777,733		804,334		1,120,933		797,876	(6,45
NORTH RESERVOIRS		31,489		45,416		42,310		45,769	35
INNER BASIN DEVELOPMENT		22,958		63,158		71,588		110,865	47,70
INNER BASIN PIPELINE		26,470		28,350		30,647		29,410	1,06
TOTAL	\$	3,210,039	\$	4,249,379	\$	3,985,115	\$	4,396,844	\$ 147,46
SOURCE OF FUNDING:	١٨/ ٨	TED AND W/	\ CTF	WATER FUN	n		¢	4 206 944	
	WA	IEK AND WA	401E	WAIERFUN	ט		\$ <b>\$</b>	4,396,844 <b>4,396,844</b>	

The Lake Mary Water Treatment Plant operating budget increased 5% and capital expenditures total \$313,300 resulting in an overall net increase of 3%. Personal Services increases are due to a market increase and increases in benefits. Contractual increases are due to utilities, maintenance, and Lake Mary dam inspection. There is \$141,000 budgeted as one-time related to the expectation to use more well water due to the lower lake levels. Commodities increase is related to fuel for the Inner Basin wells. Major capital (>\$10,000) is for facility repairs (\$20,000), communication system upgrades (\$30,000) fixed drive replacement (\$125,000), water pump station (\$35,000) and Scada improvements (\$25,700).

SECTION:	50-B	50-BOOSTER STATIONS								
EXPENDITURES BY CATEGORY:										
		Actual	А	dopted	Es	stimated	Pr	oposed		
	Exp	enditures	E	Budget	Exp	enditures	Е	Budget		get-Budge
	20	11-2012	20	12-2013	20	12-2013	20	13-2014		'ariance
PERSONAL SERVICES	\$	33,866	\$	39,376	\$	27,911	\$	27,498	\$	(11,878
CONTRACTUAL		28,585		42,062		41,373		42,062		-
COMMODITIES		1,580		2,400		1,200		2,400		-
TOTAL	\$	64,031	\$	83,838	\$	70,484	\$	71,960	\$	(11,878
				_					ļ	
EXPENDITURES BY PROGRAM:										
GENERAL ADMINISTRATION	\$	33,820	\$	46,376	\$	34,911	\$	34,498	\$	(11,878
ZONE A		-		250		-		250		-
KINLANI		1,454		1,911		1,638		1,911		-
UNIVERSITY HIGHLANDS #1		2,908		1,600		3,288		1,600		-
AIRPORT BOOSTER		2,583		1,700		2,217		1,700		-
AMBERWOOD BOOSTER		4,433		6,351		7,230		6,351		-
RAILROAD SPRINGS BOOSTER		18,833		25,650		21,200		25,650		-
TOTAL	\$	64,031	\$	83,838	\$	70,484	\$	71,960	\$	(11,878
	·									
SOURCE OF FUNDING:	\A/ - <del>-</del>	ED AND W		/ATED E/ **	_			74.000		
	WAT	ER AND WA	ASTEM	ATER FUN	ט		\$	71,960		
							\$	71,960		

The Booster Station operating budget has decreased 14% and there are no capital expenditures. Personal Services decrease is related to a reduction of hours charged to this section. Contractuals and commodities are unchanged. There is no major capital (>\$10,000) for this section.

The mission of the Utilities Department / Water Distribution Section is to professionally and cost effectively provide water services that meet the present and future environmental, health and safety needs of the community and our co-workers.

#### PROGRAM DESCRIPTION

The Water Distribution system operators safely and efficiently operate, maintain and repair all water distribution lines, fire hydrants, pressure reducing stations and meters, supplying each customer with a sufficient volume of water at adequate pressures, throughout our varying elevations and pressure zones.

## **FY 13 ACCOMPLISHMENTS**

- ✓ Crewmembers located, cleaned and operated all valves throughout the city, adjusted as deemed necessary.
- Crewmembers isolated lines, flushed fire hydrants, cleaning our main lines in the commercial areas, such as in the areas of north downtown, south downtown, south Milton, W. Rt. 66, E. Butler Ave., Woodlands Blvd. These are areas that have a high amount of restaurants and hotels that may be financially and physically affected by dirty water when the Fire Department does their annual fire hydrant check program.
- Crewmembers flushed dead end lines and areas of low chlorine and low demand and or flow to prevent the possibility of low quality water.
- ✓ Crewmembers worked mostly at night on the Asphalt Overlay Projects throughout the City to perform inspections of the valves and manholes ensuring proper standards. There was approximately 13,392 linear feet of asphalt overlay that was inspected for utilities.
- ✓ Our bluestake locator completed 3,064 tickets (7-1-12 to 1-10-13)
- ✓ Crewmembers worked side-by-side with contractors for the following CIP/Bond Projects: West St., Skunk Canyon Drainage, Cherry Ave., Dodge Ave., Coconino Ave., Humphreys St., Elden Rd., Thorpe Bridge, Shadow Mountain DrainageCrewmembers completed the abandonment of the O'Neil Spring's 4"-6" waterline from Ft. Tuthill to University Heights Dr. South.
- ✓ Crewmembers installed a new fire hydrant off our 12" AC main near Buffalo Park for an air release and flushing point due to numerous breaks on this line and no place to flush.
- ✓ Our Section helped train the FFD in proper fire hydrant operation drastically cutting back on the number of complaints we have received.

#### **FY 14 NEW INITIATIVES AND GOALS**

- Locate, clean and operate valves throughout the City of Flagstaff, adjust and repair as needed.
- > Isolate lines, flush fire hydrants, clean our main line areas that may be financially and physically affected by dirty water.
- Locate, adjust/repair and flush dead end lines.
- Flush areas of low demand and or flow to prevent poor water quality issues.
- Increased involvement in the fire hydrant check program that the Fire Department is currently performing.
- Continue to work on getting the CMMS system to a more workable state.
- Install temporary reflective marking whips/antennas on fire hydrants in certain areas where the hydrant has a higher possibility of being buried or damaged during the snow removal season.
- > Reduce the amount of unaccounted water loss through meter replacement.
- Field Services to assist other Sections within Utilities as needed.
- > Establish a fire hydrant replacement program
- Establish a valve maintenance program

#### PERFORMANCE MEASURES

Council Priority: Repair, replace, maintain infrastructure (Water Quality Issues / Complaints / Outage time)

**Goal:** Provide good safe and reliable drinking water to citizens of Flagstaff / Reduce water outage time hrs.

Objective: Reduce infrastructure problems that result in water quality issues by properly operating (fire

department) and maintaining water distribution system, return ample water pressure to public A.S.A.P.

Type of Measure: Outcome

Tool: Monitoring and instrumentation readings, laboratory testing

Frequency: Daily, Monthly, Quarterly and Yearly

**Scoring:** (5.1%) Acceptable Water loss (-7% /acceptable, -8% /high risk, greater then 8% is unacceptable.)

Trend: average

	CY 11	CY12	CY13	CY 14
Measures:	Actual	Actual	Estimate	Proposed
Number of Complaints		16	12	12
Number of Complaints per 1000 Customers		0.83	0.62	0.62
Number of Compliments		4	12	12
Number of Water Breaks		15	12	12
Number of Water Breaks per 100 Mile of Pipe		3.46	2.77	2.77
Total Water Outage Time in hours		1,709	1250	1250
a. Scheduled		947	750	750
b. Un-Scheduled		762	500	500
c. Isolation time (estimate)	30 min.	30 min.	30 min.	30 min.
d. Unaccounted water loss	>5.1%	>5.1%	>5.1%	>5.1%
(meter accuracy, hydrant flushing, leaks/breaks,				
etc.				

## Regional Plan Priority: Community Facilities and services (includes Public Safety)

Goal: Reduce accidents and maintain high safety standards.

Objective: To communicate the importance of safety and loss control through our safety program

Type of Measure: Outcome

**Tool:** Risk management tracking of recordable incidents

Frequency: Daily, Monthly, Quarterly and Yearly

**Scoring:** low –accidents, ( -1.25% -2% -2.5% /low to high)

Trend: average

	CY 11	CY12	CY 13	CY 14
Measures:	Actual	Actual	Estimate	Proposed
Number of Injury Accidents	6	1	0	0
Number of Lost Time Accidents	1	1	0	0
Safety Training Hours per Employee		20.3	38.5	38.5

SECTION:	49-V	VATER DISTI	RIBU	TION						
EXPENDITURES BY CATEGORY:										
		Actual		Adopted	Е	Estimated		Proposed		
	Ex	Expenditures		Budget	E	penditures		Budget	Bud	lget-Budget
	2	011-2012	2	2012-2013	2	012-2013	2	2013-2014	١	/ariance
PERSONAL SERVICES	\$	893,888	\$	954,198	\$	918,304	\$	924,279	\$	(29,919
CONTRACTUAL		37,687		91,650		91,650		215,650		124,000
COMMODITIES		376,312		402,678		402,678		387,747		(14,931
CAPITAL		51,989		130,000		130,000		45,000		(85,000
TOTAL	\$	1,359,876	\$	1,578,526	\$	1,542,632	\$	1,572,676	\$	(5,850
		, , ,		, ,				, ,		, .
EXPENDITURES BY PROGRAM:										
GENERAL ADMINISTRATION	\$	157.530	\$	256 577	\$	205.007	\$	201.301	\$	(1EE 076)
WATER SYSTEM MAINT - OPERATION	φ	239,067	Φ	356,577 233,839	Ф	325,987 233,270	Ф	233,615	Ф	(155,276 (224
MAIN AND SERVCE LINE REPAIR		298,587		314,626		314,381		338,327		23,701
MAIN EXT - FIRE HYDRANT / VALVE		290,307		314,020		32,288		31,869		166
VALVE AND FIRE HYDR MAINTENANCE		131.464		131.442		130.566		251,196		119,754
METER INSTALLATION		367,423		375,552		372,610		378,234		2,682
METER REPAIR AND TESTING		95,156		98.951		97,640		101,038		2,082
BLUE STAKE		41,329		35.836		35.890		37,096		1,260
TOTAL	\$	1,359,876	\$	1,578,526	\$	1,542,632	\$	1,572,676	\$	(5,850
TOTAL	Ψ_	1,339,670	Ψ_	1,376,320	4	1,342,032	P	1,372,070	Ψ	(3,030
SOURCE OF FUNDING:										
	WA	TER AND WA	STEV	WATER FUND			\$	1,572,676		
							\$			

Water Distribution operating budget has increased 5% and capital expenditures total \$45,000 resulting in an overall net decrease of less than 1%. Personal Services decreased due to moving one position to Utilities Administration. There are increases in personal services for a market increase and increases in benefits. Contractual increases are for three new programs to address aging infrastructure including leak detection, fire hydrant maintenance, and valve maintenance. Commodities decrease is due to prior year one-time items and increases to parts. Major capital (>\$10,000) is for a replacement vehicle (\$45,000).

## **SECTION 53**

WILDCAT WASTEWATER
TREATMENT PLANT

## **MISSION**

Provide wastewater treatment and reclaim water that meets or exceeds all regulatory requirements, minimize treatment cost per unit of treated wastewater, maintain state certified Laboratory Standards, encourage use of reclaim water by Fairfield golf courses and various customers. Submit all required state and federal monitoring reports accurately and on time.

#### PROGRAM DESCRIPTION

The Wildcat Hill Wastewater Plant is a 6 million gallon- per- day advanced treatment facility. This program is responsible for the day-to-day operation and maintenance, as well as the pumping of treated wastwater to the Fairfield golf courses, Buffalo tank. The plant operates a State-certified laboratory, which performs the majority of the required routine lab analysis.

## **FY 13 ACCOMPLISHMENTS**

- ✓ Started addressing solids handling in collaboration with utility administration.
- ✓ Worked well with Kruger Reps on IFAS that led to improvements in process controls and treatment quality.
- ✓ Newly installed solar power plant at Wildcat Hill WWTP is online.
- ✓ Implemented new site security measures.
- ✓ Process disinfection improvements, which will save money in reduced chemical usage.
- ✓ Resolved issues with false positive analysis for cyanide in our final effluent
- ✓ Addressed and solved a long standing issue with emergency generator.
- Actively participated in the development of the Utilities Department SCADA Master Plan

## **FY 14 NEW INITIATIVES AND GOALS**

- Complete and implement solids handling improvements.
- > Improve methane delivery system to facility co-generation system.
- ➤ Improve process treatment to meet at least 90% 95% A+ water.
- Work with Industrial Waste Div. and local industries to eliminate the source of selenium in final effluent.
- > Implement SCADA system enhancements based on critical needs identified in SCADA Master Plan
- > Implement additional site security enhancements

#### PERFORMANCE MEASURES

**Council Priority:** Resiliency and Preparedness Efforts **Goal:** Run Co-Generation at 100% power on digester gas.

**Objective:** Reduce demand on public utilities by utilizing available digester gas.

Type of Measure: Outcome

**Tool:** Meters on digester and natural gas at Co-Gen.

Frequency: Quarterly / Yearly

Scoring: Efficiency based on % digester gas.

Trend: ↓

	CY 11	CY 12	CY 13	CY 14
Measures:	Actual	Actual	Estimated	Proposed
Digester gas / Natural gas	59%			

## UTILITIES SECTION 53

WILDCAT WASTEWATER
TREATMENT PLANT

**Council Priority:** Community Facilities and Services (includes Public Safety)

Goal: Provide a good quality of life for our customers, neighbors, and employees.

Objective: Reduce the number of complaints and injuries.

Type of Measure: Outcome

**Tool:** Reports received from customers

Frequency: Daily

**Scoring:** 1-2 = 90%  $3-5 = 75\% \ge 6 = 50\%$ 

Trend: 个

	CY 11	CY 12	CY 13	CY 14
Measures:	Actual	Actual	Estimated	Proposed
Number of complaints /odors ect.	0	0	0	0
Number of on the job lost time accidents /	0	2	0	0
injuries.				

## Council Priority: Community Facilities and Services (includes Public Safety)

Goal: Maintain financial responsibility that meets or exceeds the City of Flagstaff expectations.

**Objective:** Maintain cost per thousand to treat.

Type of Measure: Outcome Tool: Financial Reports Frequency: Monthly

**Scoring:** < \$1.60 = 100% \$1.60 - \$1.80 = 90% > \$1.80 = 75-50%

Trend:  $\leftarrow \rightarrow$ 

	CY 11	CY 12	CY 13	CY 14
Measures:	Actual	Actual	Estimated	Proposed
Cost per thousand to treat (influent).	\$1.66	\$1.59	\$1.70	1.80

Note: Cost for treatment do not include wastewater collection or Utilities overhead

## Council Priority: Repair, Replace, Maintain Infrastructure (streets & utilities)

Goal: Provide wastewater treatment that meets or exceeds criteria for Federal, State & Water Reuse Permits

Objective: Production and distrubution of reclaimed water that is safe for its intended use.

Type of Measure: Outcome Tool: Laboratory testing

Frequency: Daily, Monthly, Quarterly and Yearly Scoring:  $1-2 = 90\% \ 3-5 = 75\% \ge 6 = 50\%$ 

Trend: 个

	CY 11	CY 12	CY 13	CY 14
Measures:	Actual	Actual	Estimated	Proposed
Number of regulatory permit violations (within plant design)	24*	6*	3*	0
Number of regulatory permit violations (beyond plant capabilities)	2	9*	5*	0

<sup>\*</sup>most of these violations are from recurring issues the facility has been working on.

## **UTILITIES**

Council Priority: Repair, Replace, Maintain Infrastructure (streets & utilities)

**Goal:** Exceed the expectations of our customers.

**Objective:** Continue to provide services that meet or exceed all Federal, State and City requirements.

Type of Measure: Input Tool: Flow measurements Frequency: Daily

**Scoring:** 50-65% of capacity = 100% 65-75% of capacity = 90% >75% of capacity = 75-50%

Trend:  $\leftarrow \rightarrow$ 

	CY 11	CY 12	CY 13	CY 14
Measures:	Actual	Actual	Estimated	Proposed
Gallons of influent treated (billions).	1.19	1.21	1.30	1.30
Gallons of septage treated (millions).	3.27	3.12	3.25	3.25
Gallons of reclaim water sold (millions).	400.48	405	400	400
Gallons of grease treated (thousands).	701	630	700	700
Gallons of interceptor sludge (thousands).	39	30	40	40
Dry metric tons of solids/sludge injected.	587	686	800	800

SECTION:	53-V	VILDCAT WA	STE	WATER TREA	ТМЕ	NT PLANT				
EXPENDITURES BY CATEGORY:										
		Actual		Adopted	I	Estimated		Proposed		
	Ex	Expenditures		Budget	E	kpenditures		Budget	Bud	get-Budget
	2	011-2012	2	012-2013	2	012-2013	2	013-2014	\	/ariance
PERSONAL SERVICES	\$	843,989	\$	838,211	\$	819,925	\$	911,110	\$	72,899
CONTRACTUAL		849,499		990,050		987,449		1,025,050		35,000
COMMODITIES		328,340		296,614		297,129		296,614		-
CAPITAL		175,767		179,000		52,000		188,000		9,000
TOTAL	\$	2,197,595	\$	2,303,875	\$	2,156,503	\$	2,420,774	\$	116,899
EXPENDITURES BY PROGRAM:										
GENERAL ADMINISTRATION	\$	104,297	\$	323,214	\$	147,755	\$	268,291	\$	(54,923)
WC - PLANT OPERATIONS		1,017,850		1,126,644		1,095,017		1,126,988		344
WC - PLANT MAINTENANCE		606,585		546,420		609,686		695,534		149,114
WC - LAB - PROC CONTROL - MONITOR		199,663		220,655		216,586		227,708		7,053
WC - SEPTAGE		472		650		600		650		-
WC - WH RIO MAINTENANCE		1,421		1,700		1,138		1,700		-
WC - DRYING BEDS OPERATIONS		-		400		400		400		-
WC - SLUDGE INJECTION		91,505		84,192		85,321		90,303		6,111
RECLAIM SERVICES - WILDCAT		-		-		-		9,200		9,200
DIGESTOR I REPAIR		100,767		-		-		-		-
DIGESTOR I REPAIR OPTION		75,035		-		-		-		-
TOTAL	\$	2,197,595	\$	2,303,875	\$	2,156,503	\$	2,420,774	\$	116,899
SOURCE OF FUNDING:	14/	TED AND	OTE:					0.400.75		
	WA	IER AND WA	STEV	VATER FUND	1		\$ <b>\$</b>	2,420,774 <b>2,420,774</b>		

#### COMMENTARY:

Wastewater Treatment Plant operating budget increased by 5% and capital expenditures total \$188,000 resulting in an overall net increase of 5%. Personal Services increases are due a market increase and increases in benefits. There is also costs related to increasing hours for one position. Contractuals increased due utilities and maintenance. Commodities remain unchanged. Major capital (>\$10,000) includes building repairs (\$45,000), LAN equipment (\$20,000) and gas conveyence system improvements (\$123,000).

The mission of the Utilities Division / Wastewater Collections Section is to professionally and cost effectively provide sewer services that meet the present and future environmental, health, and safety needs of the community and our co-workers.

#### PROGRAM DESCRIPTION

The Wastewater Collections system operators safely and efficiently operate, maintain and repair all wastewater collection and reclaim distribution mains and manholes. Eliminating or reducing health hazards, system failures, customer complaints and property damage throughout our community.

## **FY 13 ACCOMPLISHMENTS**

- ✓ Relocated sewer line at Fire
- ✓ Department
- ✓ Training Facility as part of the solar project.
- √ Video inspection of both public and private lines in the area of the Hillside Project to help
- ✓ with development plans.
- √ Video inspection of a line at City Hall for Stormwater for drainage project.
- Crewmembers assisted a contractor in installing two new manholes that were for a test of material. This is a new composite manhole material that we are testing.
- ✓ Installed new test manhole material (adjustment rings) under manhole ring and cover. This is a
- ✓ test for the new product.
- ✓ Assisted the Rio de Flag Water Reclamation Plant in locating and repairing a leak in the reclaim system.
- ✓ Assisted the Water Distribution Section with all frozen lines, as needed.
- ✓ Repaired five mains, six service saddles, and conducted five walk through inspections.
- ✓ Assisted various departments within the City of Flagstaff.

## **FY 14 NEW INITIATIVES AND GOALS**

- Stay within budget reductions and keep the same level of service.
- > Reduce the number of blockages in the main lines.
- > Reschedule cutting and cleaning procedures to compensate for a reduction in chemical root control.
- > Convert the Sewer Inspection (TV) Van from VHS tape and paper to DVD, and upgrade the Pipe Logix software with a external computer hard drive.
- Inspect and re-evaluate the repairs along the Rio de Flag that were done to mitigate infiltration into the collection system and make any necessary repairs.
- > Assist other Sections within Utilities as needed.

## **WASTEWATER COLLECTION**

## PERFORMANCE MEASURES

Council Priority: Community Facilities and Services (includes Public Safety)

Goal: Exceed Customers sewer service expectation.

Objective: Reduce the number of Sanitary Sewer system backups through proper maintenance and inspection

procedures.

**UTILITIES** 

Type of Measure: Outcome

**Tool:** CMMS Maintenance tracking system **Frequency:** Monthly, Quarterly and Yearly

Scoring: low / Blockages per quarter 5-7-9 (low to high), claims 10,000, 15,000, 20,000 (low to high)

Trend: below

	CY 11	CY12	CY 13	CY 14
Measures:	Actual	Actual	Estimate	Proposed
Number of Main line blockages		14	12	12
Miles of Sewer Jetted (cleaned)		207	250	250
Percent of Sewer Collection System Cleaned		75%	91%	91%
Miles of Sewer Inspected		23.3	25	25
Miles of Sewer Inspected per 100 miles of Sewer		8.5	9.1	9.1
Complaints		9	6	6
Compliments		1	6	6
Complaints per 1000 Customers		0.47	0.3	0.3

Council Priority: Community Facilities and Services (includes Public Safety)

Goal: Reduce accidents and maintain high safety standards.

**Objective:** To communicate the importance of safety and loss control through our safety program.

Type of Measure: Outcome

**Tool:** Risk management tracking of recordable incidents.

Frequency: Daily, Monthly, Quarterly and Yearly

**Scoring:** high / above average injuries this year (1, 2, 3) low to high

Trend: ↓

	FY11	FY12	FY 13	FY 14
Measures:	Actual	Actual	Estimate	Proposed
Number of Accidents resulting in Injury		1	0	0
Number of Lost Time Accidents		1	0	0
Safety Training (hr/person)		10.4	20	20

SECTION:	54-V	VASTEWATE	R C	DLLECTION					
EXPENDITURES BY CATEGORY:		Actual penditures 011-2012		Adopted Budget	Ex	stimated penditures 012-2013		Proposed Budget	lget-Budget /ariance
PERSONAL SERVICES CONTRACTUAL COMMODITIES CAPITAL TOTAL	\$ \$	713,868 34,621 194,118 100,992 <b>1,043,599</b>	\$ <b>\$</b>	752,585 56,030 211,888 85,000 <b>1,105,503</b>	\$ <b>\$</b>	673,456 56,730 208,641 55,000 <b>993,827</b>	\$ <b>\$</b>	677,274 107,530 214,889 233,000 <b>1,232,693</b>	\$ (75,311) 51,500 3,001 148,000 127,190
EXPENDITURES BY PROGRAM:  GENERAL ADMINISTRATION SERVICE CONNECTIONS PREVENTIVE MAINTENANCE TV INSPECT AND HYDRO - CLEAN CORRECTIVE MAINTENANCE RECLAIMED WATER LINE TOTAL	\$	352,481 54,681 370,271 163,826 84,740 17,600 1,043,599	\$	393,141 52,648 368,922 175,505 102,906 12,381 1,105,503	\$	329,187 49,231 349,239 158,973 95,772 11,425 <b>993,827</b>	\$	492,095 49,917 353,221 168,633 157,499 11,328 <b>1,232,693</b>	\$ 98,954 (2,731 (15,701 (6,872 54,593 (1,053
SOURCE OF FUNDING:	WA	TER AND WA	\STE	WATER FUN	D		\$ <b>\$</b>	1,232,693 <b>1,232,693</b>	

The Wastewater Collection operating budget has decreased 2% and capital expenditures total \$233,000 resulting in an overall net increase of 12%. Personal Services decreased due to moving one position to Utilities Administration. There are increases in Personal Services for a market increase and increases in benefit costs. Contractual increase is for manhole rehab to address aging infrastructure. Commodities increases are for fuel costs. Major Capital (>\$10,000) is for building improvements (\$30,000), vehicle replacement (\$45,000), air compressor replacement (\$25,000), and a dump truck replacement (\$125,000).

Our mission is to protect the potable drinking water distribution system from contamination through business and industry inspections and user education of cross-connection and contamination potential. To maintain a Backflow Prevention/ Cross-Connection program to provide our citizens with safe, clean, and uncontaminated drinking water throughout the distribution system. Our section also regularly inspects commercial and residential establishments in an effort to protect the publicly-owned treatment works (POTW) including the wastewater collection system and wastewater treatment plants from intentional or unintentional contaminates or slug loads that possess the potential to adversely impact our infrastructure or personnel.

#### PROGRAM DESCRIPTION

This section provides monitoring, permitting, and reporting of industrial and commercial wastewater discharges into the City of Flagstaff's wastewater collection system to achieve compliance with Local, State and Federal mandated pretreatment regulations and to prevent upset at the City's wastewater treatment plants. Other activities include administration of the City's cross-connection control program and wastewater monitoring.

#### **FY 2013 ACCOMPLISHMENTS**

- ✓ Provided training and resources for new inspector to achieve Backflow Prevention Assembly Tester status
- ✓ Increased training levels of the existing staff to produce two cross connection control specialists/ surveyors/ administrators; assuring competent job performance and thorough drinking water risk assessments during inspections.
- ✓ Reduced the amount of fats, oils and greases from being discharged into the wastewater collections system
- ✓ Improved the new IWS downtown facility to better meet the needs of the IWS.
- ✓ Incorporated a new system for tracking all of the City's thousands of backflow prevention assemblies and methods of contacting all of the assembly's owners with compliance status updates and penalties for noncompliance.
- ✓ Met with ADEQ representatives to provide transparency and discuss program successes as well as areas for improvement.
- ✓ Invested in new updated equipment to effectively reduce costs of industry compliance monitoring with more accurate sampling results with less redundancy and errors due to missed samples.
- ✓ Improved safety of inspectors by investing in safer, more modern equipment and hand tools resulting in less worker injuries and associated time missed.
- ✓ Reworked industry inspection templates to reduce time required for inspections while simultaneously improving accuracy and quality of data collected during such inspections.
- ✓ Developed new business inspection reports to assure compliance with Senate Bill 1598 for increased clarity with its guidelines

#### **FY 2014 NEW INITIATIVES AND GOALS**

- Work with local industries to address selenium contamination issues with regards to WWTP's violations
- Complete the changes to the IWS building to address the needs of wastewater workers.
- Provide further training to inspectors to increase the level of customer service.
- Reduce overtime and increase efficiency by implementing technology to automate the backflow preventer testing and tracking process.
- > Improve the accuracy of industry discharge monitoring by reducing and removing the reliance on industry flow meters used to calculate wastewater fees and penalties for non-compliance. Purina only
- Continue to enforce industry compliance with local, state, and federal discharge regulations.
- Continue to foster mutually beneficial relationships with local industries and businesses.
- Inspectors to attend utility systems disaster preparedness seminars sponsored by DHS

#### PERFORMANCE MEASURES

Council Priority: Repair, replace, maintain infrastructure (streets & utilities)

Goal: Protect wastewater treatment facilities from possible damage from business & industrial discharges. **Objective:** Inspect all businesses connected to City of Flagstaff water system for pretreatment needs.

Type of Measure: Output

**Tool:** Inspections Frequency: Daily Scoring: 75% Trend: 个

	FY 11	FY 12	FY 13	FY 14
Measures:	Actual	Actual	Estimate	Proposed
# of blockages/Notice of Violations (NOV's) issued	1	3	0	0
# resulting in sewer line cleaning	1	3	0	0

Council Priority: Repair, replace, maintain infrastructure (streets & utilities)

Goal: Protect city drinking water.

**Objective:** Protect water quality and prevent cross connections into water system.

Type of Measure: Outcome

**Tool:** Testing and installation of Backflow prevention assemblies

Frequency: Daily

**Scoring:** 75% - (more inspections of businesses to educate resulting in fewer problems)

Trend: 个

	FY 11	FY 12	FY 13	FY 14
Measures:	Actual	Actual	Estimate	Proposed
# of backflow prevention assemblies tested	2241	2872	2872	3000
% of bpa's tested that failed	10%	10%	10%	7%
Water quality violations due to bpa failing	0	0	0	0

## Regional Plan Priority: Community Facilities and Services (includes Public Safety)

Goal: Prevent harmful and illegal discharges into collection system

Objective: Prevent damage and upsets of the wastewater collection system that could harm equipment or

personnel.

Type of Measure: Outcome Tool: Notifications, Inspections

Frequency: Daily

Scoring: 75% - (fewer problems due to better communication and education with the public)

Trend: 个

	FY 11	FY 12	FY 13	FY 14
Measures:	Actual	Actual	Estimate	Proposed
# of Industry and plant samples analyzed	2773	2773	2773	2773
# of NOV's written to industries	0	1	0	0
# of NOV's written to commercial sites	0	3	0	0

SECTION:	55-IN	IDUSTRIAL	WAS	ГЕ						
EXPENDITURES BY CATEGORY:	Fyr	Actual penditures		Adopted Budget	_	stimated penditures		Proposed Budget	Buc	lget-Budget
		011-2012		012-2013		012-2013		013-2014		/ariance
PERSONAL SERVICES CONTRACTUAL COMMODITIES CAPITAL	\$	187,885 58,400 16,158 6.551	\$	189,174 85,417 19,015	\$	189,566 86,042 17,998	\$	196,207 239,417 16,015	\$	7,033 154,000 (3,000)
TOTAL	\$	268,994	\$	293,606	\$	293,606	\$	451,639	\$	158,033
EXPENDITURES BY PROGRAM:										
GENERAL ADMINISTRATION NPDES MONITORING INDUSTRIAL WASTE MONITOR HAZARDOUS WASTE	\$	112,602 34,255 44,828 740	\$	110,034 56,746 68,092	\$	108,486 47,254 58,606	\$	113,405 44,002 55,348	\$	3,371 (12,744) (12,744)
BACKFLOW X CONN CONTROL LOCAL LIMITS STUDY		76,569 -		58,734 -		79,260 -		88,884 150,000		30,150 150,000
TOTAL	\$	268,994	\$	293,606	\$	293,606	\$	451,639	\$	158,033
SOURCE OF FUNDING:	WATER AND WASTEWATER FUND					\$ <b>\$</b>	451,639 <b>451,639</b>			

The Industrial Waste budget has increased 54% and there are no capital expenditures. Personal Services increases are related to a market increase and increases in benefit costs. Contractuals increased for a local limits study and building maintenance. Commodities decrease is related to prior year one-time items. There is no major capital (>\$10,000) for this section.

To provide wastewater reclamation that exceeds all federal, state and reuse requirements in a safe and cost-effective manner. To submit all required regulatory reports on time without exception. To promote the use of reclaim water for all approved uses throughout the City of Flagstaff and vacinity. To educate the public on issues related to water reclamation, water conservation, and sustainable use.

#### PROGRAM DESCRIPTION

The Rio de Flag Water Reclamation Facility processes wastewater flow from the western half of the city and reclaims water for a variety of non-potable uses. Landscape irrigation is the principal use of reclaim water but water is also used for non-potable commercial and industrial uses. Excess reclaim water is released to the Rio de Flag wash for riparian enhancement. This semi-automated treatment facility uses advanced technology to produce non-potable water that is rated as Class A+ by the state of Arizona. The program monitors product water quality as well as downstream water quality. Staff is also responsible for pumping the water into the citywide distribution system and maintaining the reclaim water storage facilities at Buffalo Park.

#### **FY 13 ACCOMPLISHMENTS**

- ✓ Started to provide reclaimed water to Arizona Snowbowl for snow making
- ✓ Installed new, higher efficiency VFDs on two of five RAS pumps
- ✓ Actively participated in the development of the Utilities Dept. SCADA Master Plan
- ✓ Implemented new site security measures
- ✓ Relieved of the requirement to maintain a valid Air Quality permit with ADEQ

#### **FY 14 NEW INITIATIVES AND GOALS**

- > UV disinfection system improvements to extend life of system and maintain reliable disinfection
- > Additional site security measures will be implemented
- > Begin implementing SCADA enhancements based on critical needs determined from SCADA Master Plan

## PERFORMANCE MEASURES

Council Priority: Repair, Replace, Maintain Infrastructure (streets & utilities)

Goal: Provide wastewater treatment that meets or exceeds criteria for Federal, State & Water Reuse Permits

Objective: Production and distrubution of reclaimed water that is safe for its intended use.

Type of Measure: Outcome Tool: Laboratory Analysis

Frequency: Daily, Weekly, Monthly, Quarterly, Annual

**Scoring:**  $1-2 = 90\% \ 3-5 = 75\% \ge 6 = 50\%$ 

Trend: ↓

Measures:	CY 11	CY 12	CY 13	CY 14
	Actual	Actual	Estimated	Proposed
Number of Permit Violations	0	0	0	0

## **SECTION 56**

**RIO DE FLAG RECLAIM PLANT** 

## Council Priority: Repair, Replace, Maintain Infrastructure (streets & utilities)

**Goal:** Promote and encourage use of reclaimed water through education and Public Relations programs. Provide information in a timely manner.

**Objective:** Promote the use of reclaimed water where appropriate, there by off setting the demands for potable

water.

Type of Measure: Program Outcome

**Tool:** Plant Flow Reports **Frequency:** Monthly

**Scoring:** 50-65% of capacity = 100% 65-75% of capacity = 90% >75% of capacity =75-50%

Trend:  $\leftarrow \rightarrow$ 

	CY 11	CY 12	CY 13	CY 14
Measures:	Actual	Actual	Estimated	Proposed
Gallons of Wastewater Treated (millions)	689	707	700	700
Gallons of Reclaim Water Reused (millions)	290	315	400	410

## Council Priority: Community Facilities and Services (includes Public Safety)

**Goal:** Maintain operations, maintenance and lab budgets within the projected amounts.

**Objective:** Control our costs while maintaining service levels at existing levels

Type of Measure: Program Outcome

**Tool:** Financial Reports **Frequency:** Monthly

**Scoring:** < \$1.20 = 100% \$1.20 - \$1.40 = 90% >\$1.40 = 75-50%

Trend: ↓

	CY 11	CY 12	CY 13	CY 14
Measures:	Actual	Actual	Estimated	Proposed
Cost/thousand gallons of reclaimed water	\$1.17	\$1.26	\$1.30	\$1.32
produced				

Note: Cost to treat do not include wastewater collection or Utilities overhead

## Council Priority: Repair, Replace, Maintain Infrastructure (streets & utilities)

**Goal:** Provide a good quality of life for our customers, neighbors, and employees.

**Objective:** Reduce the number of complaints and injuries.

Type of Measure: Outcome

**Tool:** Reports received from customers

Frequency: Daily

**Scoring:**  $1-2 = 90\% \ 3-5 = 75\% \ge 6 = 50\%$ 

Trend: ↓

	CY 11	CY 12	CY 13	CY 14
Measures:	Actual	Actual	Estimated	Proposed
Number of complaints /odors ect.	0	0	0	0
Number of on the job lost time accidents /	0	0	0	0
injuries.				

SECTION:	56-R	IO DE FLAG	WA:	STEWATER 1	[REA]	MENT PLAN	ΙT			
EXPENDITURES BY CATEGORY:		A -41		A -l 4l		-4:4 - d		Danasa		
	Ev	Actual penditures		Adopted Budget		stimated penditures		Proposed Budget	Rud	get-Budge
		011-2012	2	2012-2013		)12-2013	2	2013-2014		ariance
PERSONAL SERVICES	\$	359,846	\$	345,634	\$	360,681	\$	371,933	\$	26,299
CONTRACTUAL		380,606		496,250		459,650		494,550		(1,700
COMMODITIES		61,704		118,919		96,100		115,419		(3,500
CAPITAL <b>TOTAL</b>	•	802,156	•	125,000	•	916,431	\$	171,200	\$	46,20 67,29
TOTAL	<u> </u>	002,130	Ą	1,085,803	Ą	910,431	- P	1,153,102	φ	07,29
EXPENDITURES BY PROGRAM:										
GENERAL ADMINISTRATION	\$	64,389	\$	119,576	\$	79,148	\$	133,133	\$	13,55
PLANT OPERATIONS	·	493,975	·	679,081	·	525,181	ľ	660,033	·	(19,04
PLANT MAINTENANCE		123,208		170,970		173,239		201,879		30,90
LAB - PROCESS CONTROL - MONITOR		120,584		116,176		138,863		124,057		7,88
RECLAIMED CONNECTIONS TOTAL	<u> </u>	- 000 456	•	1 005 003	•	046 424	•	1 152 102	-	67 20
TOTAL	<del>-</del>	802,156	Þ	1,085,803	<u> </u>	916,431	\$	1,153,102	\$	67,299
SOURCE OF FUNDING:										
	WAT	TER AND WA	ASTE	WATER FUN	D		\$	1,153,102		
							\$	1,153,102		

The Rio de Flag Treatment Plant operating budget increased 2% and capital expenditures total \$171,200 resulting in an overall net increase of 6%. Personal Services increases are related to a market increase and increases in benefit costs. Contractual decrease is related to prior year one-time items. The Commodities decrease is related to prior year one time items and an increase for one time maintenance costs. Major capital (>\$10,000) is for facility repairs (\$22,000), a chlorination system (\$24,200) and carbon filter media (\$125,000).

The mission of the Stormwater Section is to promote the public health, safety and general welfare, to minimize public and private losses due to flood conditions within the City of Flagstaff, and to comply with the applicable floodplain and stormwater regulations.

## PROGRAM DESCRIPTION

The Stormwater Section includes: administration, utility management, engineering/hydrology technical support, master planning, customer service, data collection, field inspection, and plan review components.

## **FY 13 ACCOMPLISHMENTS**

- ✓ Completed \$812,000 of capital drainage improvement projects (Shadow Mt. Linda Vista Valley Gutters, Route 66 and Rio De Flag, Skunk Canyon)
- ✓ Finished FEMA Flood Insurance Rate Map corrections (last map correction became effective on 11/19/12)
- ✓ Completed hydrologic model for the Bow and Arrow Master Drainage Plan. Initiated design contract for proposed improvements
- ✓ Installed streamflow monitoring station
- ✓ Initiated FEMA elevation certificate project to help remove properties from floodplain and reduce flood insurance rates
- ✓ Delivered current phase of the Picture Canyon Meander Restoration Project on-time, on-budget
- ✓ Obtained new Grant from Arizona Water Protection Fund in the amount of \$252,000 for Picture Canyon, Phase 2
- ✓ Achieved full compliance with NPDES Municipal Permit
- ✓ Completed additional Flood Control projects demonstrating LID/ rainwater harvesting features
- ✓ Achieved eligibility for a Class 6 flood insurance rating, resulting in an additional 5% discount for flood insurance
- Initiated the City Hall Maintenance, Landscape and Stormwater Infrastructure Project
- ✓ Initiated and completed large scale watershed community events that included removal of 6.29 tons of trash and debris from city property utilizing 106 volunteers (delivered by COF Flagstaff Area Stream Team)
- Completed three Stormwater Section public outreach workshops and tours in cooperation with city staff and community partners to further mission and goals

#### **FY 14 NEW INITIATIVES AND GOALS**

- ➤ Construct \$600,000 worth of capital drainage improvement projects (Citizen Residential Flooding Improvements, Columbia Circle Neighborhood Improvements, City property at 116 E. Butler)
- Complete City Hall Maintenance, Landscape and Stormwater Infrastructure Project
- Achieve a Class 6 discount for the flood insurance rating
- > Achieve full compliance with NPDES Municipal Permit
- Complete 100% plans for Bow and Arrow Wash
- > Achieve full compliance with the FEMA NFIP Program
- Complete FEMA Elevation Certificate Project
- Successfully deliver next phases of Picture Canyon Phase 2
- Complete a minimum of four Stormwater Section public outreach events

#### PERFORMANCE MEASURES

Regional Plan Priority: <u>Community Facilities and Services (includes Public Safety)</u> **Goal:** Personnel safety: No accidents, injuries or job related illnesses; utilize safety training.

**Objective:** Safe vehicle operating and equipment handling with no injuries or work related sick days.

Type of Measure: Communication & feedback, injury reports; employee health & safety

Tool: Verbal, e-mail, phone contact; on-going safety training

**Frequency:** Annual employee training **Scoring:** 100% - Section participation

Trend: 个

	CY 11	CY 12	CY 13	CY 14
Measures:	Actual	Actual	Estimated	Proposed
a. No on-the-job injuries or accidents	100%	100%	100%	100%
b. No on-the-job non-injury accidents	100%	100%	100%	100%
c. No job related lost work days	100%	100%	100%	100%
d. No job related sick time (% of total)	100%	100%	100%	100%
e. Safety training (4 hrs/person)	100%	100%	100%	100%

## Regional Plan Priority: Resiliency and Preparedness Efforts

**Goal:** Respond to all Drainage Complaints within 24 hrs. of receiving complaint. Notify customer when a solution has been determined – usually within two weeks. Minimize flood damages and maximize responsiveness to citizen need during periods of potential flood hazard.

**Objective:** Provide excellent internal and external customer service in response to any drainage issues or concerns that develop. As well as provide timely responses to requests for information and assistance. Monitor areas of known drainage issues and develop a strategy for implementing corrective measures when fiscally possible.

Type of Measure: Direct communication (phone, in person or e-mail) with effected customers.

**Tool:** Verbal, e-mail, phone contact; site visit, field inspection

Frequency: As received

Scoring: 100% - Follow through whether solution is possible or not

Trend: 个

	CY 11	CY 12	CY 13	CY 14
Measures:	Actual	Actual	Estimated	Proposed
a. Complaints received	40	17	20	20
Complaints resolved	35	13	12	15
c. No public infrastructure damages (100% = no	95%	100%	100%	100%
damages; goal achieved)				
d. No damages/claims to private property (100%	95%	100%	100%	100%
= no damages; goal achieved)				

## Regional Plan Priority: Community Facilities and Services (includes Public Safety)

Goal: Drainage Channel Maintenance Program - Coordinate & oversee internal projects performed by streets channel maintenance crew as well as routine infrastructure maintenance.

Objective: Monitor areas of known drainage issues and develop a strategy for implementing corrective measures where fiscally possible.

Type of Measure: Direct communication (phone, in person or e-mail) with streets supervisor and/or effected customers.

Tool: Field verification

Frequency: As drainage issues are received & resolved.

Scoring: 100% - Follow through whether solution is possible or not

Trend: 个

	CY 11	CY 12	CY 13	CY 14
Measures:	Actual	Actual	Estimated	Proposed
Annual miles of channels cleaned	6	6	6	6
Per cent of catch basins & culverts cleaned	100%	100%	100%	100%
Per cent of inventory cleaned	75%	75%	75%	75%

SECTION:	98-STORMWATER UTILITY									
EXPENDITURES BY CATEGORY:										
	Actual		Adopted		Estimated		Proposed			
	Expenditures		Budget		Expenditures		Budget		Budget-Budget	
	2011-2012		2012-2013		2012-2013		2013-2014		Variance	
PERSONAL SERVICES	\$	502,085	\$	492,458	\$	477,694	\$	488,646	\$	(3,812)
CONTRACTUAL		23,677		149,045		149,045		107,045		(42,000)
COMMODITIES		7,853		43,160		43,160		36,460		(6,700)
TOTAL	\$	533,615	\$	684,663	\$	669,899	\$	632,151	\$	(52,512)
EXPENDITURES BY PROGRAM:										
GENERAL ADMINISTRATION	\$	247,355	\$	284,494	\$	284,928	\$	277,249	\$	(7,245)
ENGINEERING AND MASTER PLANNING		-	·	87,000	·	87,000		50,000		(37,000
OPERATIONS		284,674		313,169		297,971		279,902		(33,267
WATER QUALITY IMPROVEMENT GRANT		1,586		-		-		-		· -
RIO DE FLAG RESTORATION		-		-		-		25,000		25,000
TOTAL	\$	533,615	\$	684,663	\$	669,899	\$	632,151	\$	(52,512)
SOURCE OF FUNDING:										
	STORMWATER UTILITY FUND						\$	632,151		
							\$	632,151		

The Stormwater Utility operating budget has decrease of 8% and there are no capital expenditures. Personal Services decreases are due to a market increase and an increase in benefits offset by salary savings due to personnel turnover. Contractual decreases overall are due to a decrease in the Master Plan project and in consultant fees. Commodities decreased due to a decrease in other operating supplies. There are no major capital (>\$10,000) expenditures planned for this section.

Annual Financial Plan Page 349 City of Flagstaff

