

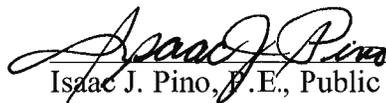
City of Santa Fe, New Mexico

memo

DATE: June 3, 2015

TO: City Council

VIA: Brian K. Snyder, City Manager *BKS*


Isaac J. Pino, P.E., Public Works Department Director

FROM: David Pfeifer, Facilities Division Director *DP*

ISSUE:

Pursuant to Resolution No. 2105-33, Report on Findings and Fiscal Impact Related to Replacement of Toilets and Urinals in the City owned and Operated Buildings and Facilities.

SUMMARY:

- The Facilities Maintenance staff went to each of the 75 buildings counting Toilets and Urinals.
- A total of 465 Toilets were counted. Of the 465 Toilets 64 were 1.2 Gallons Per Flush (GPF).
- A total of 107 Urinals were counted. Of the 107 Urinals 14 were waterless, and 3 were 0.5 GPF or less.

A bid was obtained from a plumbing supply company in Santa Fe, and the cost to replace a 1.6 GPF with a 1.2 GPF toilet is \$226.20. The cost to replace a 1 GPF with a 0.5 GPF urinal is \$293.97; and to replace the 1 GPF with a waterless urinal is \$500.31. The pricing is for materials only.

The material cost to replace the 401 toilets with 1.2 GPF would be \$90,706.20

The material cost to replace the 90 urinals to 0.5 GPF would be \$26,457.30

The material cost to replace the 93 urinals to waterless would be 46,528.83

- If the toilets, and urinals are replaced as they break down the Facilities Maintenance staff will replace them.
- If the goal is to replace all the toilets and urinals all at once bids will need to be obtained from plumbing contractors.

Memorandum – Colonia Prisma Park
February 5, 2015
Page 2 of 2

Switching to a waterless urinal, the average water savings per year is 19,300 gallons. If you look at 19,300 times the 93 replacement waterless urinals, you would be saving 1,794,900 gallons of water annually.

Switching to the 1.2 GPF toilets, the average water savings per year is 1,600 gallons. If you look at 1,600 times the 401 replacement toilets, you would be saving 641,600 gallons of water annually.

06/03/2015

Building	Address	# of Toilets	GPF	# of Urinals	GPF	Cost to replace		Cost to replace
						Cost to replace Toilets with 1.2 GPF @ 226.20	Urinals with 0.5 GPF @ 293.97	Urinals with Waterless @ 500.31
1 City Hall	200 Lincoln Ave	12.0	1.6	4.0	1	\$2,714.40	\$1,175.88	\$2,001.24
2 Main Library	122 Washington Ave	11.0	1.6	2.0	1	\$2,488.20	\$587.94	\$1,000.62
3 Water street parking lot	100 East Water St	4.0	1.6	1.0	1	\$904.80	\$293.97	\$500.31
4 Ft. Marcy Complex	490 Washington	8.0	1.6	2.0	1	\$1,809.60	\$587.94	\$1,000.62
5 Sandoval Parking facility	216 W San Francisco St	3.0	1.6	1.0	1	\$678.60	\$293.97	\$500.31
6 MEG Senior Center	1121 Alto St	12.0	1.6	3.0	1	\$2,714.40	\$881.91	\$1,500.93
7 Bicentennial Pool	1121 Alto St	12.0	1.6	2.0	1	\$2,714.40	\$587.94	\$1,000.62
8 La Comunidad	1121 Alto St	8.0	1.6			\$1,809.60		
9 New Vistas	1121 Alto St	3.0	1.6			\$678.60		
10 Monica Roybal Center	735 Agua Fria	7.0	1.6	2.0	1	\$1,583.40	\$587.94	\$1,000.62
11 Teen Center	735 1/2 Agua Fria	3.0	1.6	1.0	1	\$678.60	\$293.97	\$500.31
12 Salvador Perez Pool	601 Alta Vista	14.0	1.6	2.0	1	\$3,166.80	\$587.94	\$1,000.62
13 Water Division Admin	801 W San Mateo	7.0	1.6	2.0	1	\$1,583.40	\$587.94	\$1,000.62
14 Conservation Building	801 W San Mateo	2.0	1.6			\$452.40		
15 TND Building	801 W San Mateo	4.0	1.6			\$904.80		
16 La Farge Library	1730 Llano St	5.0	1.6	2.0	1	\$1,131.00	\$587.94	\$1,000.62
17 Police Admin Building	2515 Camino Entrada	10.0	1.6	2.0	1	\$2,262.00	\$587.94	\$1,000.62
18 Fire Station #1	200 Murales Rd	6.0	1.6	2.0	1	\$1,357.20	\$587.94	\$1,000.62
19 Fire Station #3	1751 A Cerrillos Rd	10.0	1.6	2.0	Waterless	\$2,262.00		
20 Fire Station #4	1030 Arroyo Chamisa	5.0	1.2	1.0	0.125			\$500.31
21 Fire Station #5 Training	1130 Siler Rd	1.0	1.6	2.0	1	\$226.20	\$587.94	\$1,000.62
22 Fire Station #5 Maintenance	1130 Siler Rd	1.0	1.6	1.0	1	\$226.20	\$293.97	\$500.31
23 Fire Station #5 Portables	1130 Siler Rd	2.0	1.6			\$452.40		
24 Fire Station #6	1030 W Alameda	1.0	1.6			\$226.20		
25 Fire Station #7	2391 Richards Ave	10.0	1.6	4.0	1	\$2,262.00	\$1,175.88	\$2,001.24
26 Fire Station #8	6796 Jaguar Dr	9.0	1.6	6.0	1	\$2,035.80	\$1,763.82	\$3,001.86
27 Fire Station #9	2501 Camino Entrada	1.0	1.6	1.0	1	\$226.20	\$293.97	\$500.31
28 Fire Station #10	121 Aviation Dr	7.0	1.6	1.0	1	\$1,583.40	\$293.97	\$500.31
29 Professional Standards	2501 Camino Entrada	2.0	1.6			\$452.40		
30 GCCC	3221 Rodeo Rd	61.0	1.6	16.0	1	\$13,798.20	\$4,703.52	\$8,004.96
31 Streets/Solid Waste 'A'	1142 Siler Rd	5.0	1.6	3.0	1	\$1,131.00	\$881.91	\$1,500.93
32 Parks Building 'C'	1142 Siler Rd	7.0	1.6	3.0	1	\$1,583.40	\$881.91	\$1,500.93
33 Public Transit Facility	2931 Rufina St	16.0	1.6	4.0	1	\$3,619.20	\$1,175.88	\$2,001.24
34 Municipal Courts	2511 Camino Entrada	16.0	1.6			\$3,619.20		

06/03/2015

Building	Address	# of Toilets	GPF	# of Urinals	GPF	Cost to replace Toilets with 1.2 GPF @ 226.20	Cost to replace Urinals with 0.5 GPF @ 293.97	Cost to replace Urinals with Waterless @ 500.31
35 Southside Library	6599 Jaguar Dr	11.0	1.6	3.0	Waterless	\$2,488.20		
36 Waste Water Admin Building	73 Paseo Rael		1.0	1.6		\$226.20		
37 Airport Terminal Offices	443 Airport Rd	7.0	1.6	3.0	1	\$1,583.40	\$881.91	\$1,500.93
38 Airport Maintenance Shop	443 Airport Rd	1.0	1.6			\$226.20		
39 Marty Sanchez Golf Course	205 Caja Del Rio	15.0	1.6	3.0	1	\$3,393.00	\$881.91	\$1,500.93
40 MRC Baseball/Soccer Fields	205 Caja Del Rio	10.0	1.6	3.0	1	\$2,262.00	\$881.91	\$1,500.93
41 MRC Rugby Concession	205 Caja Del Rio	7.0	1.6	2.0	1	\$1,583.40	\$587.94	\$1,000.62
42 OMC Parks	1142 Siler St	2.0	1.6	1.0	1	\$452.40	\$293.97	\$500.31
43 Zona Del Sol	6601 Jaguar Dr	8.0	1.6			\$1,809.60		
44 Building 'C'	2651 Siringo Rd	2.0	1.6			\$452.40		
45 Building 'D'	2651 Siringo Rd	2.0	1.6			\$452.40		
46 Building 'E'	2651 Siringo Rd	2.0	1.6			\$452.40		
47 Building 'F'	2651 Siringo Rd							
48 Building 'G'	2651 Siringo Rd							
49 Building 'H'	2651 Siringo Rd	5.0	1.6	1.0	1	\$1,131.00	\$293.97	\$500.31
50 Building 'I'	2651 Siringo Rd							
51 Building 'J'	2651 Siringo Rd	1.0	1.6			\$226.20		
52 SFCCC	210 W Marcy St	52.0	1.2	9.0	Waterless			
53 MARKET STATION	500 Market St	7.0	1.2	2.0	0.5			\$1,000.62
54 Southside Transit	2521 Camino Entrada	5.0	1.6	1.0	1	\$1,131.00	\$293.97	\$500.31
55 Buckman Rd Transfer Station Admin	2600 Buckman Rd							
56 Buckman Rd Transfer Station Barn	2600 Buckman Rd							
57 Santa Fe Convention Parking	119 South Federal Place	1.0	1.6			\$226.20		
58 Railyard Parking Garage	503 Camino De La Familia	1.0	1.6			\$226.20		
59 Train Depot	410 South Guadalupe	2.0	1.6			\$452.40		
60 Canyon Rd Treatment Plant	1780 Upper Canyon Rd	3.0	1.6			\$678.60		
61 Waste Water Admin Building	73 Paseo Real	3.0	1.6	1.0	1	\$678.60	\$293.97	\$500.31
62 Waste Water Daf Building	73 Paseo Real	1.0	1.6			\$226.20		
63 Waste Water Lab Building	73 Paseo Real	2.0	1.6			\$452.40		
64 Waste Water IP Building	73 Paseo Real	2.0	1.6			\$452.40		
65 Waster Water GB Building	73 Paseo Real	1.0	1.6			\$226.20		
66 Waste Water Training Building	73 Paseo Real	1.0	1.6			\$226.20		
67 Waste Water Maintenance	73 Paseo Real	1.0	1.6			\$226.20		
68 Waste Waste Collections	73 Paseo Real	2.0	1.6			\$452.40		
69 Waste Water Supply	73 Paseo Real	1.0	1.6			\$226.20		

06/03/2015

Building	Address	# of Toilets	GPF	# of Urinals	GPF	Cost to replace Toilets with 1.2 GPF @ 226.20	Cost to replace Urinals with 0.5 GPF @ 293.97	Cost to replace Urinals with Waterless @ 500.31
70 Waste Water Compost	73 Paseo Real	1.0	1.6			\$226.20		
71 Franklin Miles Park Concession	1027 Camino Carlos Rey	9.0	1.6	3.0	1	\$2,035.80	\$881.91	\$1,500.93
72 Solid Waste Maintenance	2931 Rufina St	1.0	1.6			\$226.20		
73 Telecommunications	301 Montezuma Ave	1.0	1.6			\$226.20		
74 Ragle Park Concession	2530 W Zia Rd	9.0	1.6	3.0	1	\$2,035.80	\$881.91	\$1,500.93
75 Alto Park Concession	1043 Alto St							
	<u>Toatls:</u>	465		107		\$90,706.20	\$26,457.30	\$46,528.83

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

CITY OF SANTA FE, NEW MEXICO

RESOLUTION NO. 2015-33

INTRODUCED BY:

Councilor Peter Ives

A RESOLUTION

DIRECTING STAFF, IN THE INTEREST OF WATER CONSERVATION, TO COMPLETE AN INVENTORY OF ALL TOILETS/URINALS AT CITY FACILITIES IN AN EFFORT TO DETERMINE THE NEED AND COST FOR LOW FLOW TOILET/URINAL REPLACEMENTS.

WHEREAS, water quality and availability are extremely important to the citizens of Santa Fe; and

WHEREAS, an amendment to Section 2.03, 1987 SFCC was approved by the voters of the City of Santa Fe at the March 4, 2014 Regular Municipal Election to amend the section to include the last sentence that mandates “the governing body to protect, preserve and enhance the city’s water resources through regulation, conservation and relating development to water availability”; and

WHEREAS, the City of Santa Fe is a leader in water conservation efforts and should evidence that leadership by ensuring that it conserves waters within public buildings; and

WHEREAS, the City use of water in its buildings should promote water conservation by using available technologies to conserve water; and

1 **WHEREAS**, by using less potable water, a building will also reduce the amount of energy
2 needed to transport, treat, and redistribute that water, including the cost savings associated with
3 reduced potable water consumption; and

4 **WHEREAS**, chemical urinals are estimated to save 26,000 gallons of water a year over
5 standard toilets; and

6 **WHEREAS**, each high efficiency toilet (HET), using 1.28 gallons per flush, can save
7 significant amounts of water as shown below:

Gallons per Flush	Times Used/Day	Water Used
7 GPF	5*	12,775
5 GPF	5*	9,125
3.5 GPF	5*	6,388
1.6 GPF	5*	2,920
1.28 GPF	5*	2,336

15
16 **WHEREAS**, over a year, an HET can save 10,439 gallons when compared to a 7 GPF toilet;
17 and

18 **WHEREAS**, a high efficiency urinal uses 0.5 gallons per flush, compared with standard
19 urinals that use anywhere from 1 gallon to 5 gallons per flush.

20 **NOW, THEREFORE, BE IT RESOLVED BY THE GOVERNING BODY OF THE**
21 **CITY OF SANTA FE** that the Governing Body directs staff, in the furtherance of water conservation
22 and the City being a leader in water conservation efforts in the City of Santa Fe, to inventory all
23 toilets and urinals in City owned and operated buildings and facilities, noting the number by facility
24 and the water usage per flush of said toilets and urinals.

25 **BE IT FURTHER RESOLVED** that on a going forward basis, any toilets that are replaced

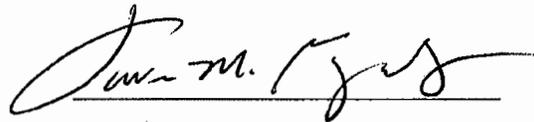
1 within City owned and operated facilities shall be replaced with high efficiency toilets or high
2 efficiency dual flow toilets.

3 **BE IT FURTHER RESOLVED** that on a going forward basis, any urinals that are
4 replaced within City owned and operated facilities shall be replaced with either chemical
5 urinals or high efficiency urinals.

6 **BE IT FURTHER RESOLVED** staff provide an estimate of the annual water
7 savings from conversion to HETs and high efficiency or chemical urinals to best understand
8 the potential saving.

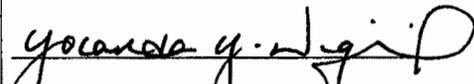
9 **BE IT FURTHER RESOLVED** staff is required to report their findings to the Governing
10 Body thirty (30) days following the approval of this resolution.

11 PASSED, APPROVED and ADOPTED this 29th day of April, 2015.

12
13 

14 JAVIER M. GONZALES, MAYOR

15 ATTEST:

16
17 
18 YOLANDA Y. VIGIL, CITY CLERK

19 APPROVED AS TO FORM:

20
21 
22 KELLEY A. BRENNAN, CITY ATTORNEY

23

24

25 *M/Legislation/Resolutions2015/2015-33 Toilet_Urinal Replacement*