



April 29, 2008

Ms. Cheri Vogel
New Mexico Office of the State Engineer
Water Use and Conservation Bureau
P.O. Box 25102
Santa Fe, New Mexico 87504-5102

Re: Gallup Commercial Audit Summary Report

Dear Cheri:

Daniel B. Stephens & Associates, Inc. is pleased to present the following summary of the City of Gallup commercial water audits performed February 25 through 28, 2008.

A total of 15 establishments participated in the project. Restaurant participation and audit scheduling were coordinated by Elizabeth Barriga, Gallup Joint Utilities Water Conservation Coordinator. High commercial water users were targeted for participation in the project. Table 1 provides the date and time of each audit. Completed water audit questionnaires are provided as Attachment 1.

The smallest participating user was Roosevelt Elementary School, billed for approximately 420,000 gallons in 2007. The largest participating user was Earl's Restaurant, billed for over 4.8 million gallons in 2007. The daily water use for the participating commercial users in 2007 ranged from approximately 1,100 gallons per day (gpd) to over 13,000 gpd. Table 2 presents billed water data for each participating restaurant for 2005, 2006, and 2007; these data are plotted by restaurant in Figures 1 through 15.

Water use in the commercial sector accounts for approximately 60 percent of total water use in Gallup. Commercial weekend demand is much higher than weekday demand, due to the high influx of people into Gallup from the Navajo Nation. Many of the restaurants that were interviewed reported that they serve more than double the number of meals on weekend days than they do on weekdays.

A total of 13 Niagara Conservation Power Rinser pre-rinse spray nozzles were installed at the participating restaurants during the commercial audits, and 4 were left for future installation. Of these 4 nozzles, 2 were to be replaced within a week after the audit appointments (Earl's and Genero's), while the other 2 may or may not be installed (Applebee's and Furr's). At least 1 nozzle was installed at each of the participating restaurants except Applebee's, Furr's, and Genero's. The existing Applebee's nozzle had a low flow rate of 1 gallon per minute (gpm), and was therefore left in place. A replacement nozzle was installed at Furr's, but was removed at their request due to concerns over the effectiveness of the replacement nozzle. Genero's did not have a pre-rinse spray fixture, but is planning to have one installed. At Earl's, 1 nozzle was

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replaced and a second nozzle was left with them for a plumber to install (the existing nozzle could not be removed). A total of 2 nozzles were replaced at Golden Corral. The flow rates of the existing pre-rinse spray nozzles ranged from 1 to 4 gpm, while the flow rates of the replacement nozzles were between 1 and 1.5 gpm.

The participating fast food restaurants use on the order of 2,000 to 3,000 gpd, and have very few faucets and fixtures (including no dishwashers), while most of the other restaurants use significantly more water (5,000 to 13,000 gpd). Most of the participating restaurants are mindful of their water use, although 8 of the 15 have leaks that need to be addressed (Table 3). Golden Corral had the most pressing water leaks to address, with leaks totaling almost 800 gpd, or over 6 percent of their daily water use.

Most of the kitchen faucets at all participating restaurants do not have aerators, and the fixtures in place would need to be changed out in order to add aerators. Aerators were present on the majority of the handwashing faucets, and should be installed on those where they were missing.

Ice machine model numbers were missing on many of the machines, and so the capacity and cooling method (water or air) could not be determined for all ice machines. Water-cooled ice machines can waste a lot of water if they are leaking. This is a problem that Genero's identified and fixed by replacing their ice machine prior to their water audit, as illustrated by the change in the volume billed between 2006 and 2007 (Figure 8).

Of the 15 participating restaurants, 5 use garbage disposals (Earl's, Roosevelt Elementary School, McDonald's Northside, Don Diego's, and El Sombrero). All but 5 of the participating restaurants use water softeners (Genero's, Don Diego's, El Sombrero, Pizza Hut, and Sonic do not). A total of 4 of the participating restaurants have on-site laundry facilities (Furr's, Roosevelt Elementary School, McDonald's Northside, and El Sombrero). Only 2 of the participating restaurants have on-site showers (Earl's and Roosevelt Elementary School); these showers are rarely used.

Many of the participating restaurants have low-flow toilets (1.6 gallons per flush), but there are also a total of 35 high-flow toilets (3.5 gallons per flush) being used at the participating restaurants (Table 4).

Each of the restaurants listed in Table 4 is eligible to take advantage of the City of Gallup toilet rebate program. To participate, restaurants need to contact Elizabeth Barriga with Gallup Joint Utilities to arrange a time for her to verify that the existing toilets qualify for the rebate. Toilet rebates are \$75 for each toilet replaced in the commercial sector, credited to the customer's water bill. Customers are responsible for toilet purchase and installation.

Three of the participating restaurants irrigate landscaping. Cracker Barrel irrigates approximately 1,100 square feet of grass. El Sombrero irrigates over 3,500 square feet of grass. Denny's East waters bushes using a wall spigot. The Office of the State Engineer (OSE) has

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quantified landscape irrigation water requirements by vegetation and irrigation type for each county in New Mexico. Their estimate of the landscape irrigation water requirement using flood or sprinkler irrigation for Kentucky bluegrass in McKinley County is 33.40 inches per year (Wilson, 1996). Kentucky bluegrass is a cool season grass; cool season grasses are planted much more frequently than warm season grasses, such as Bermuda grass, which turn brown in the winter. Using the Kentucky bluegrass landscape irrigation requirement for McKinley County, water use for grass irrigation is approximately 23,000 gallons per year at Cracker Barrel, and 73,000 gallons per year at El Sombrero. Grass is often overwatered; therefore, actual water use for irrigation may exceed these estimates.

The City of Gallup has a xeriscape rebate program, which allows customers to receive rebates on their water bill for each square foot of irrigated turf grass that is removed and replaced with an approved xeric landscape. To qualify for the rebate program, a customer must replace 25 percent of the qualifying total square footage of irrigated turf grass removed with qualifying low-water use plants; spray irrigation is not allowed in the rebate areas. Mulch around the plants is also required. Rebates are \$0.25 per square foot of irrigated turf grass replaced, with the minimum and maximum areas of 500 square feet (\$125) and 12,500 square feet (\$3,125), respectively, for commercial accounts. A 13-page xeric plant list, which identifies 275 low-water use plants recommended for Gallup, is available to the public.

Most of the participating restaurants use a mop and bucket to clean their floors, but Applebee's and Furr's use a hose to spray floors clean. Significantly less water would be used by these restaurants if they were to discontinue this practice.

Letters have been sent to each of the participating restaurants thanking them for their participation, summarizing the findings of each individual audit, and including suggestions for how each restaurant can be more water efficient. These letters are included as Attachment 2.

We appreciate the opportunity to work on this project. Please contact me at (505) 822-9400 if you have any questions.

Sincerely,

DANIEL B. STEPHENS & ASSOCIATES, INC.



Amy Ewing
Hydrogeologist

AE/rpf

Enclosures

cc: Elizabeth Barriga, Gallup Joint Utilities

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Reference

Wilson, B.C. 1996. *Water conservation and quantification of water demands in subdivisions: A guidance manual for public officials and developers*. Technical Report 48, New Mexico State Engineer Office. May 1996.

Figures

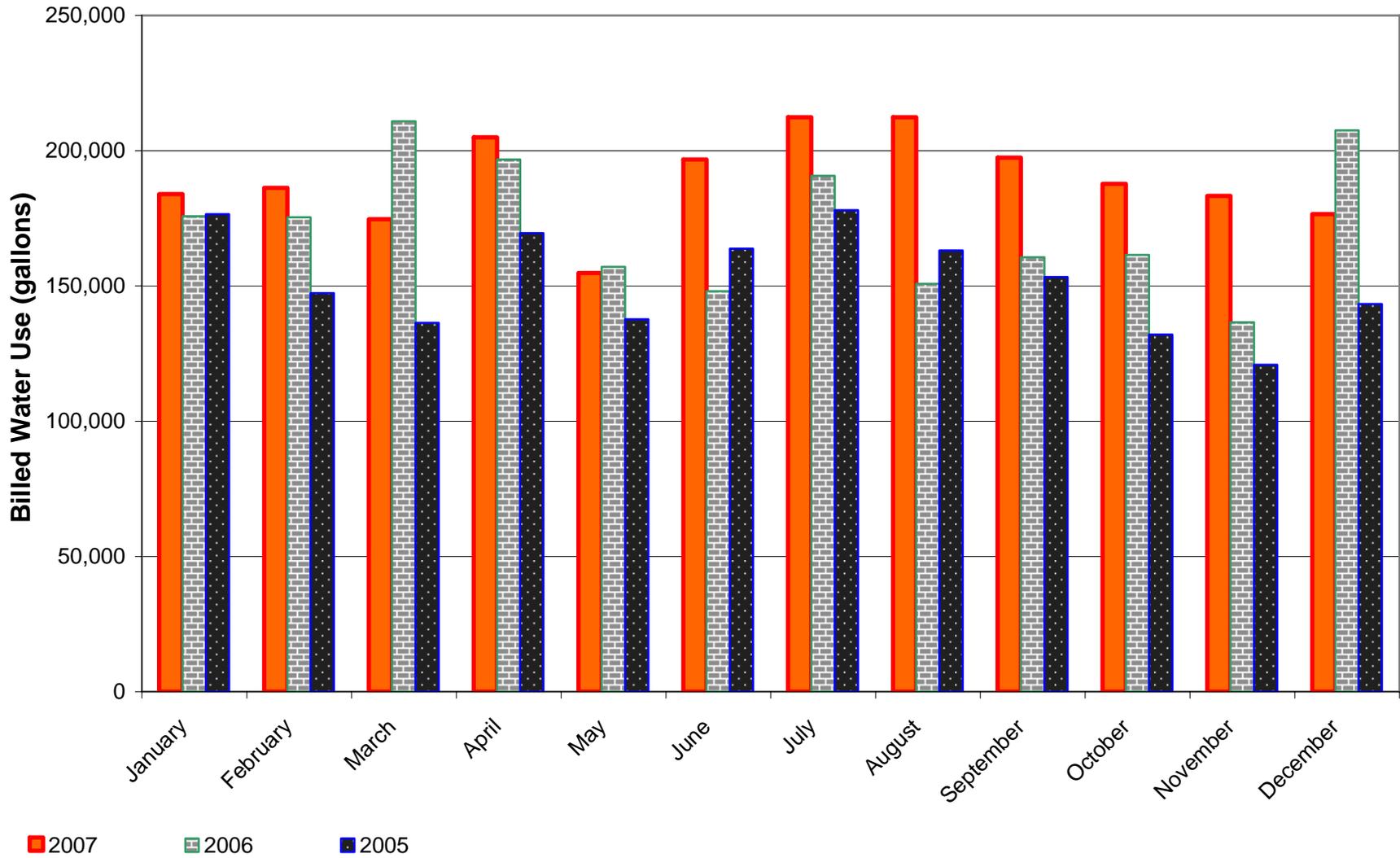


Figure 1



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CITY OF GALLUP COMMERCIAL WATER AUDITS
**Billed Water Use for Applebee's
2005-2007**

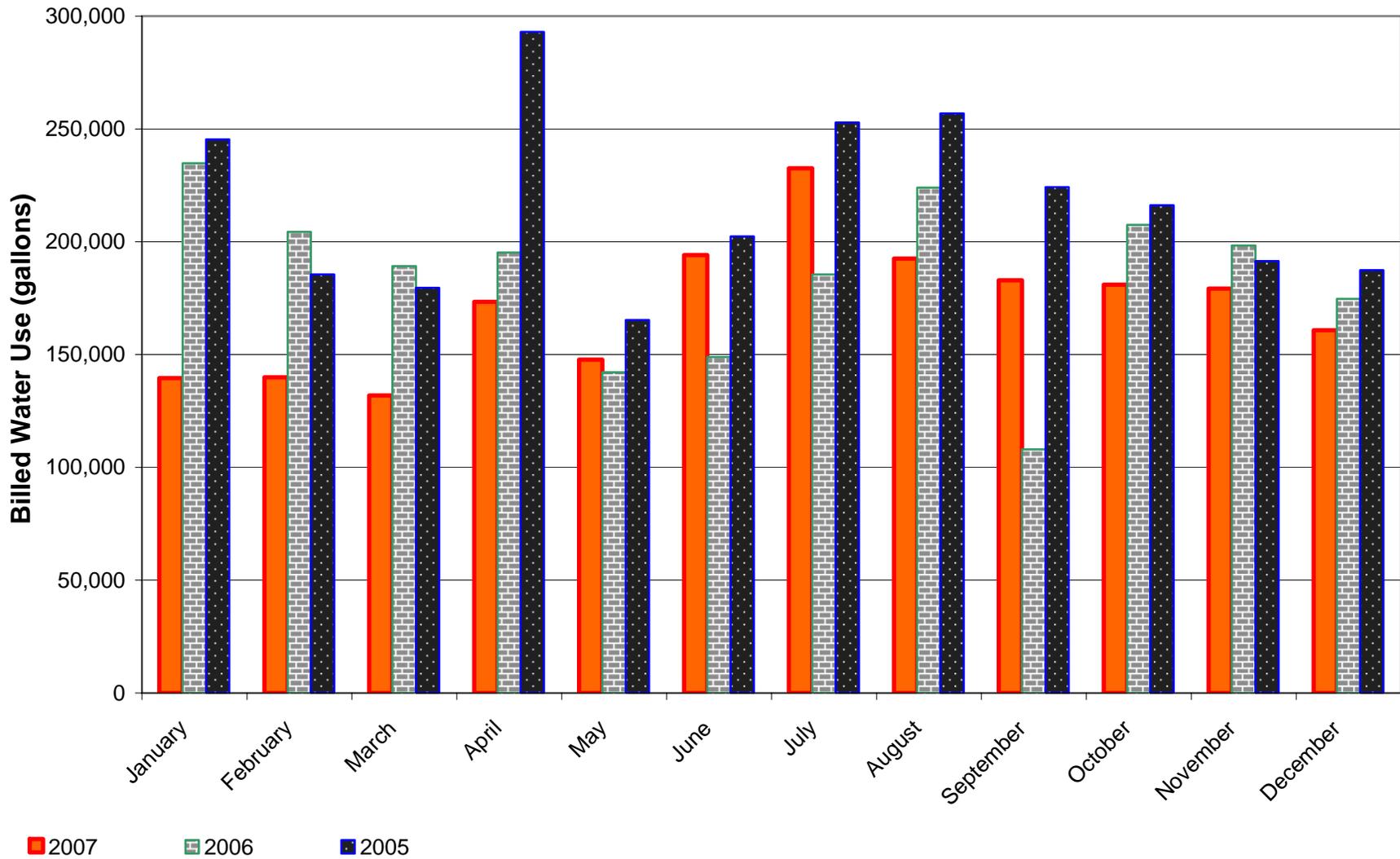


Figure 2

CITY OF GALLUP COMMERCIAL WATER AUDITS
Billed Water Use for Cracker Barrel
2005-2007



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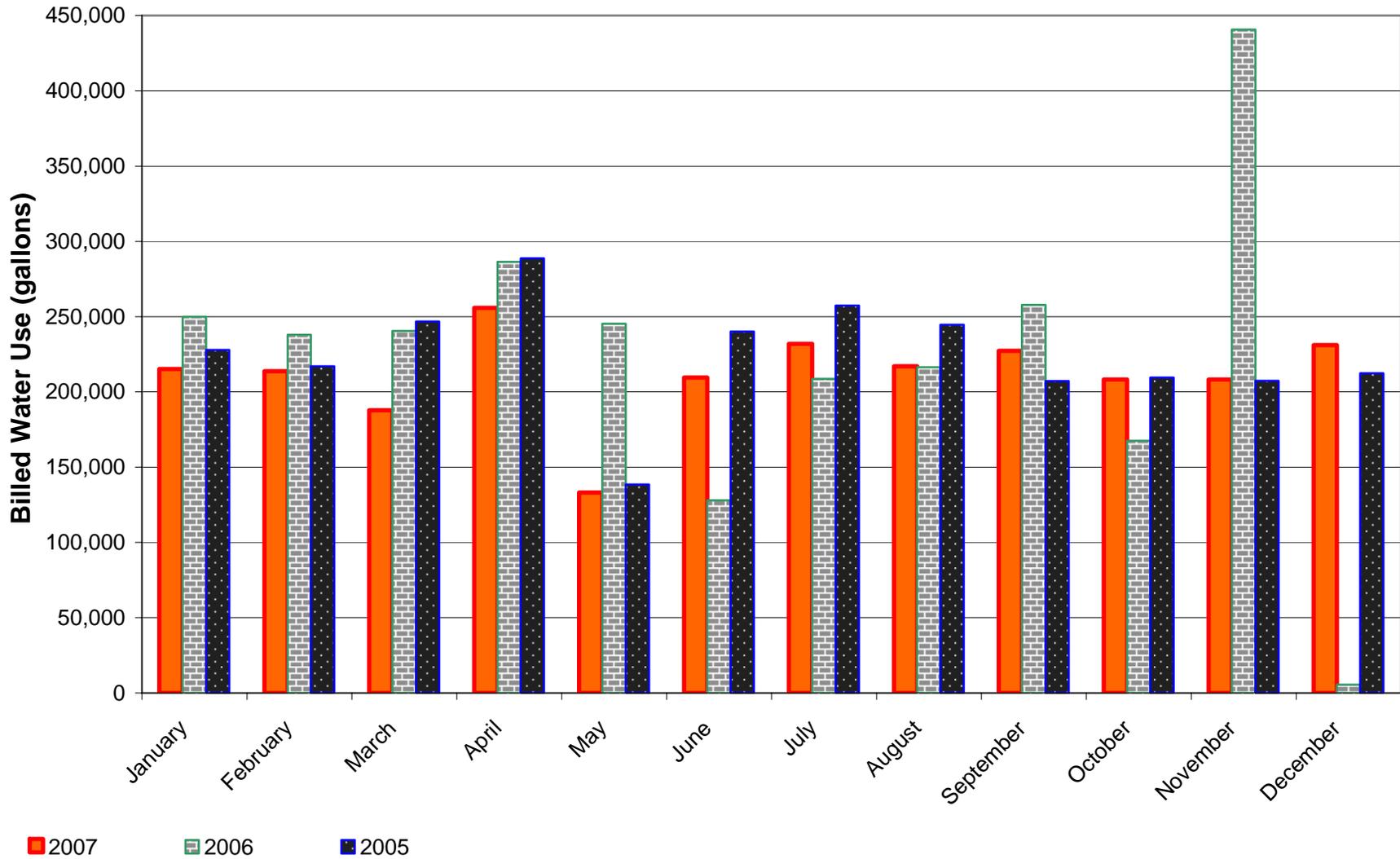


Figure 3



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CITY OF GALLUP COMMERCIAL WATER AUDITS
**Billed Water Use for Furr's
2005-2007**

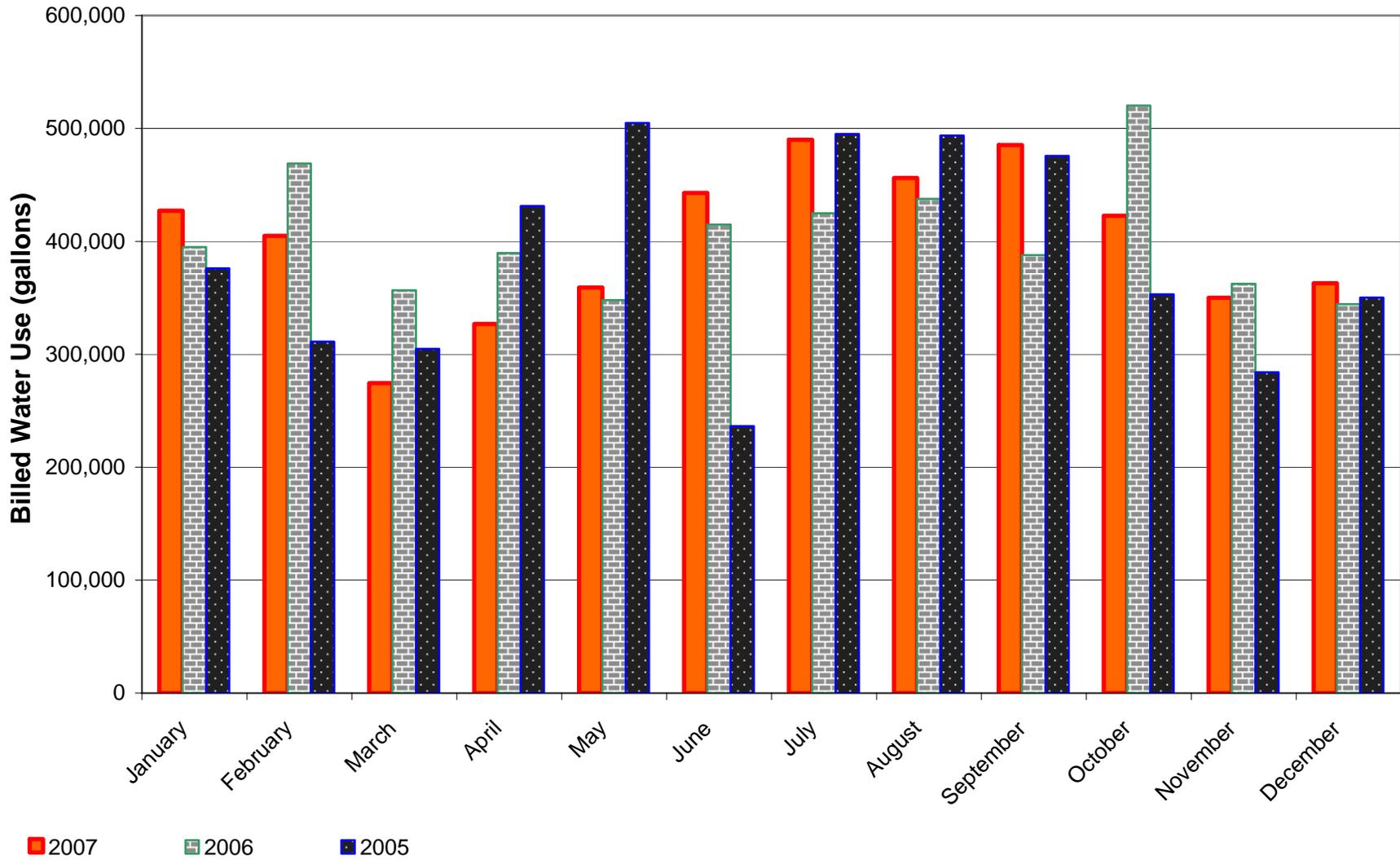


Figure 4

CITY OF GALLUP COMMERCIAL WATER AUDITS
**Billed Water Use for Earl's
2005-2007**



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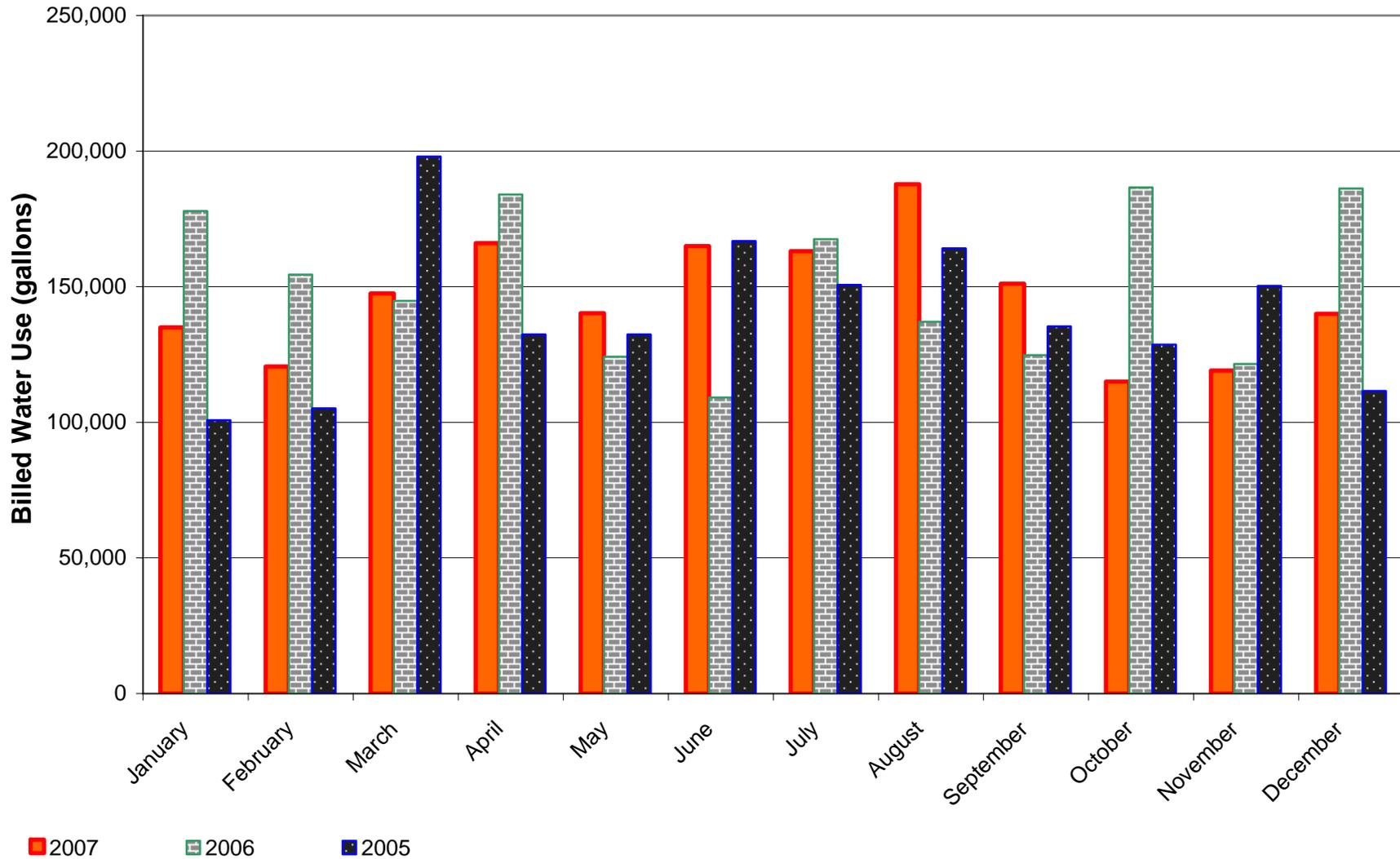


Figure 5



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CITY OF GALLUP COMMERCIAL WATER AUDITS
Billed Water Use for Denny's East
2005-2007

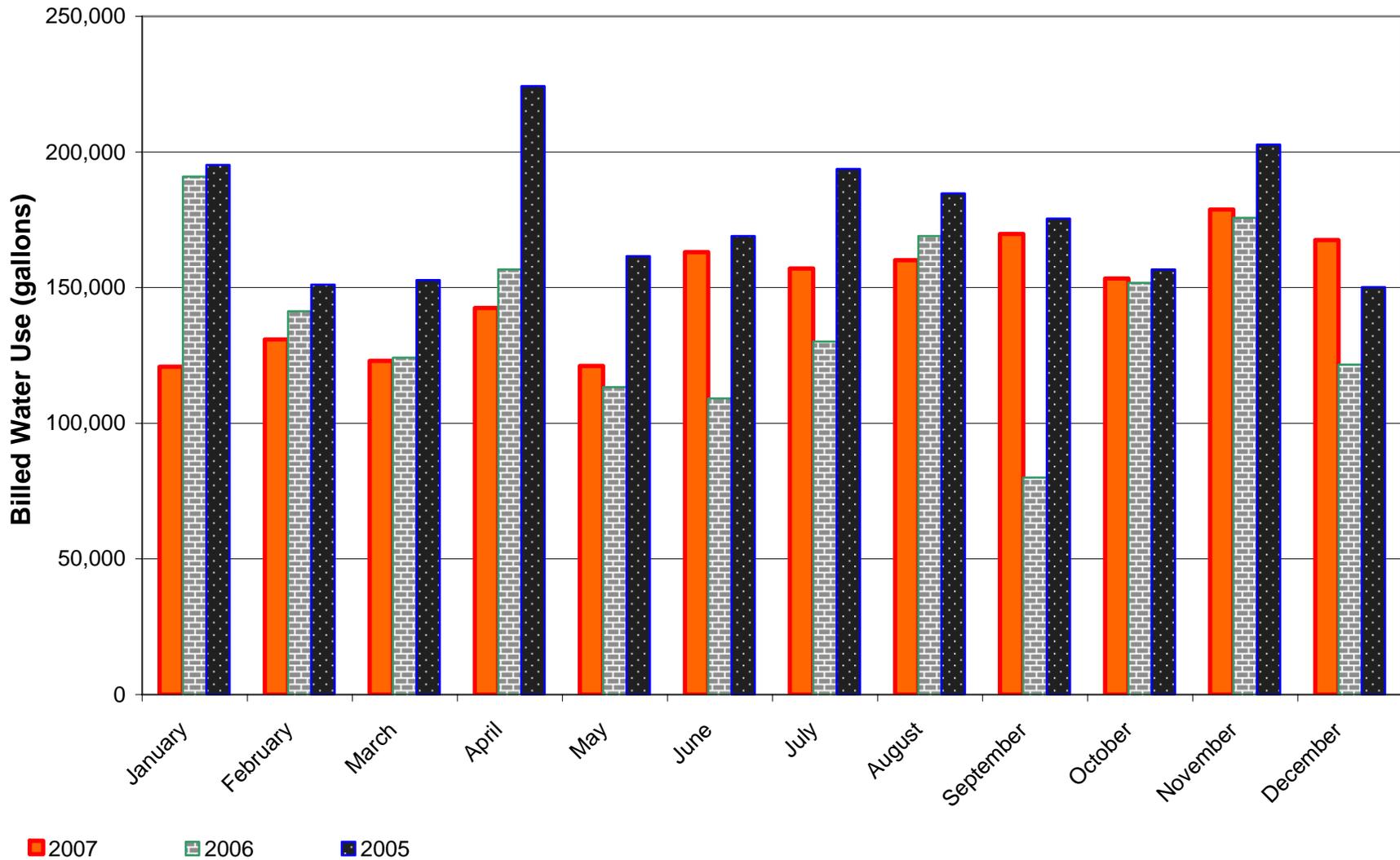


Figure 6



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CITY OF GALLUP COMMERCIAL WATER AUDITS
Billed Water Use for Denny's North
2005-2007

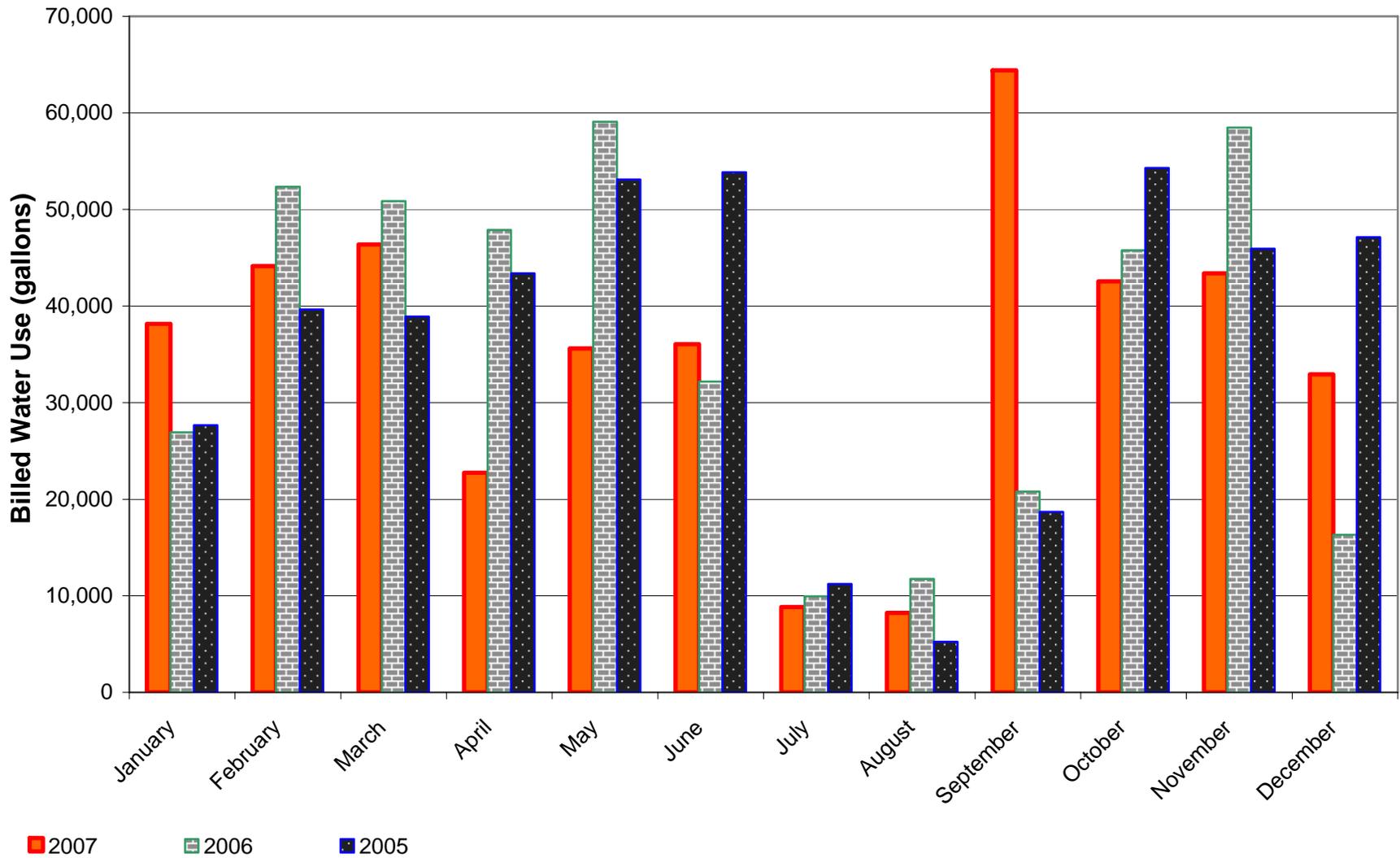


Figure 7

CITY OF GALLUP COMMERCIAL WATER AUDITS
Billed Water Use for Roosevelt Elementary School
2005-2007



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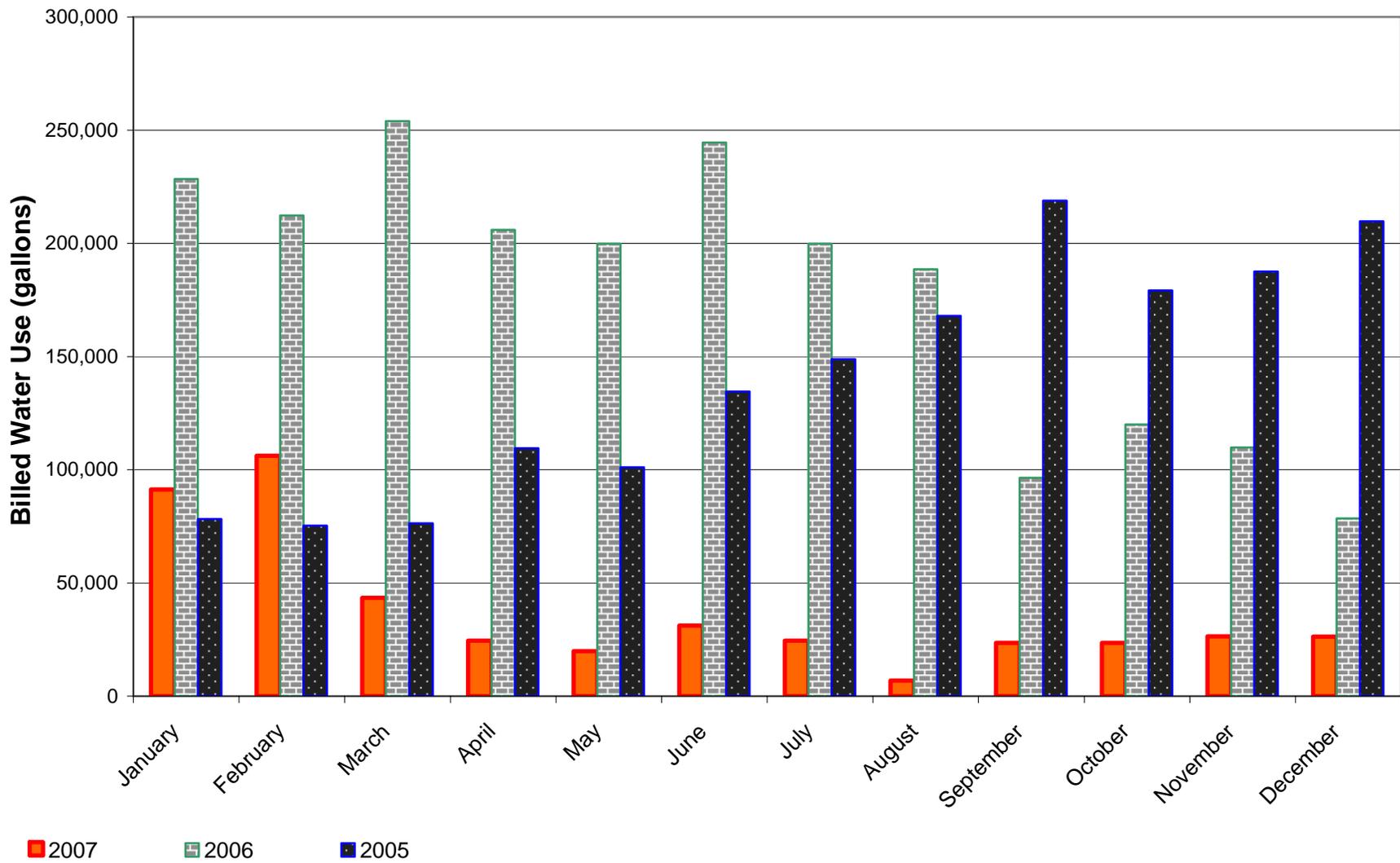


Figure 8

CITY OF GALLUP COMMERCIAL WATER AUDITS
**Billed Water Use for Genero's
2005-2007**



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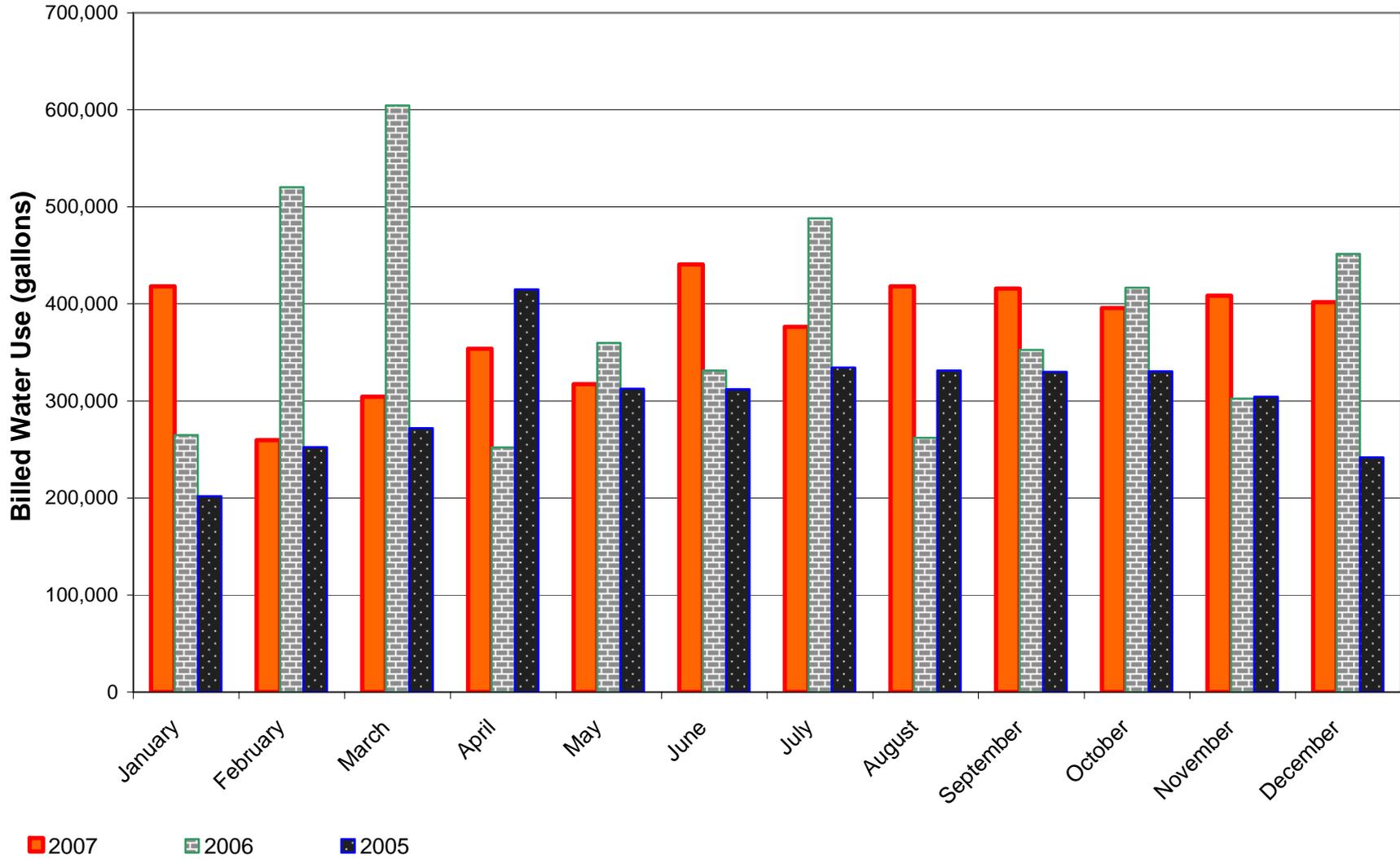


Figure 9



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CITY OF GALLUP COMMERCIAL WATER AUDITS
Billed Water Use for Golden Corral
2005-2007

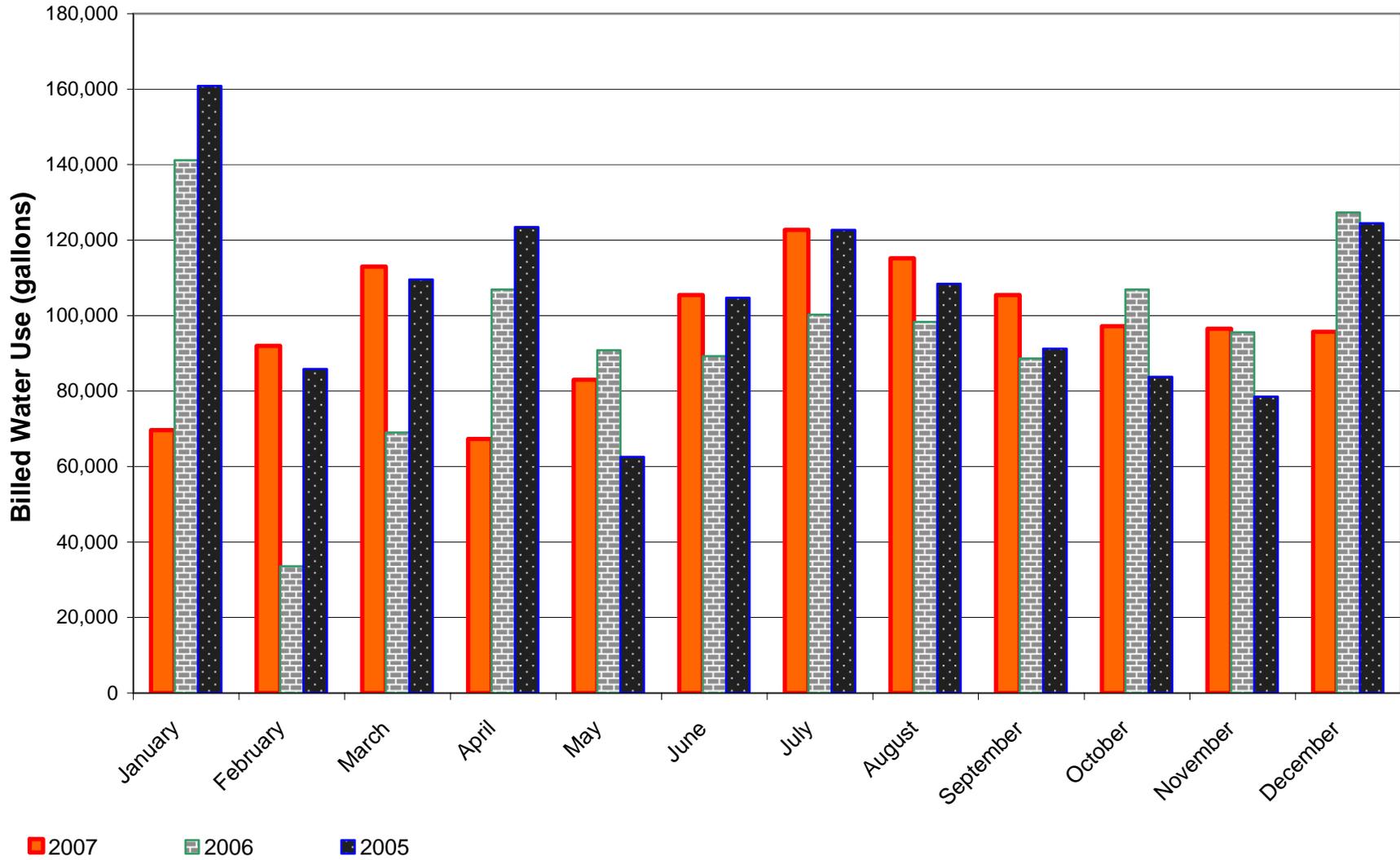


Figure 10

CITY OF GALLUP COMMERCIAL WATER AUDITS
Billed Water Use for McDonald's Northside
2005-2007



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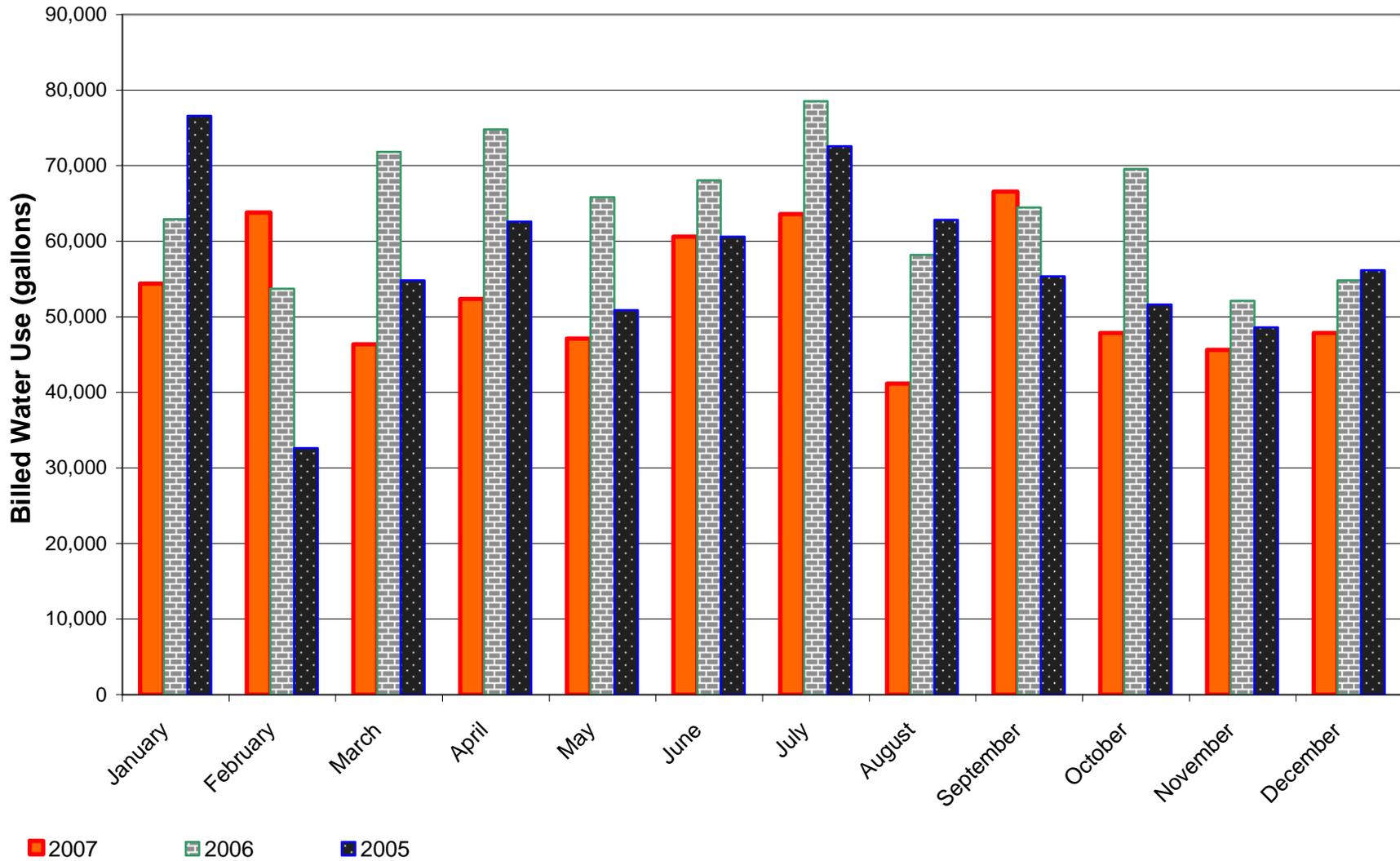


Figure 11

CITY OF GALLUP COMMERCIAL WATER AUDITS
Billed Water Use for Wendy's
2005-2007



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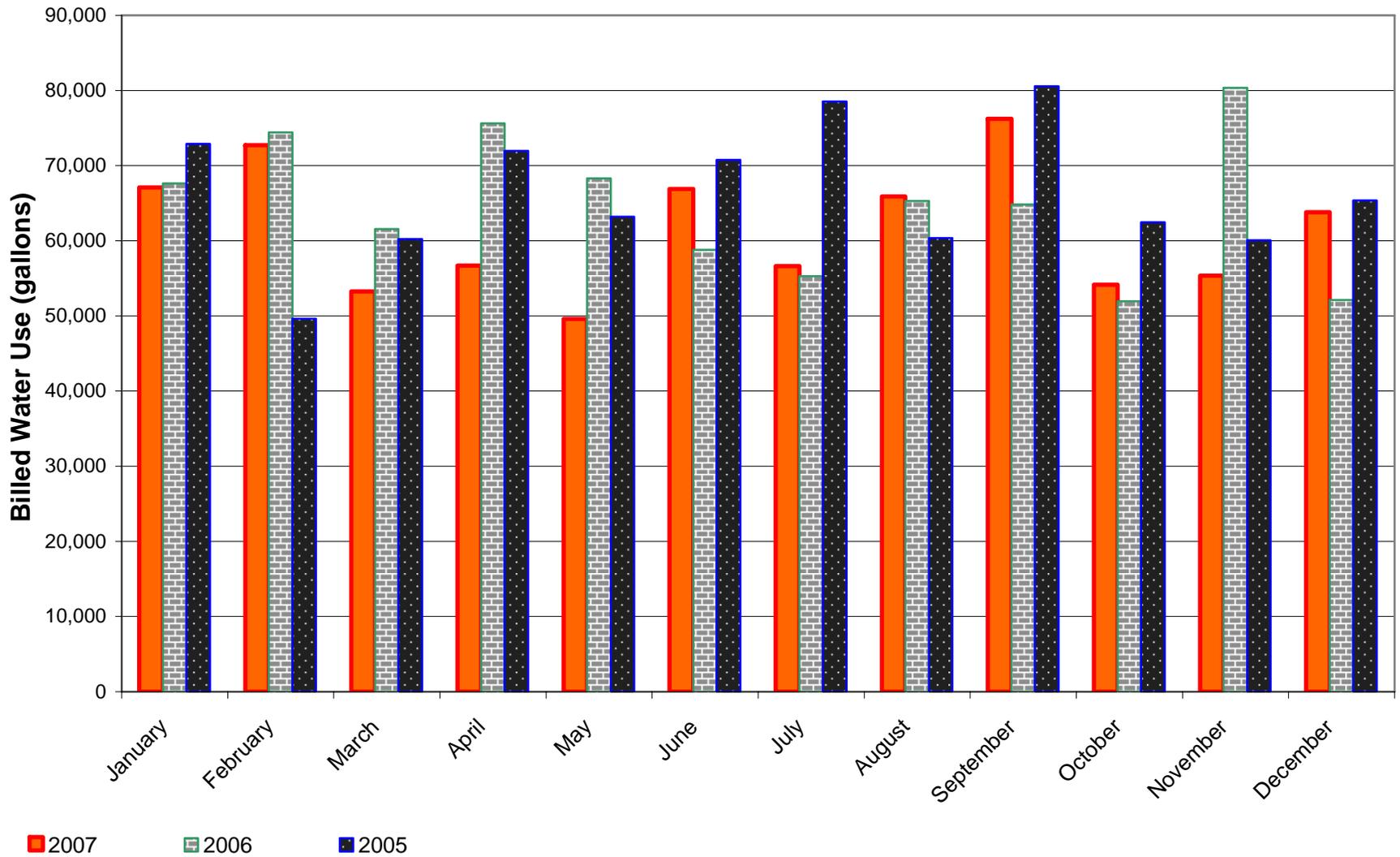


Figure 12



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CITY OF GALLUP COMMERCIAL WATER AUDITS
**Billed Water Use for Don Diego's
2005-2007**

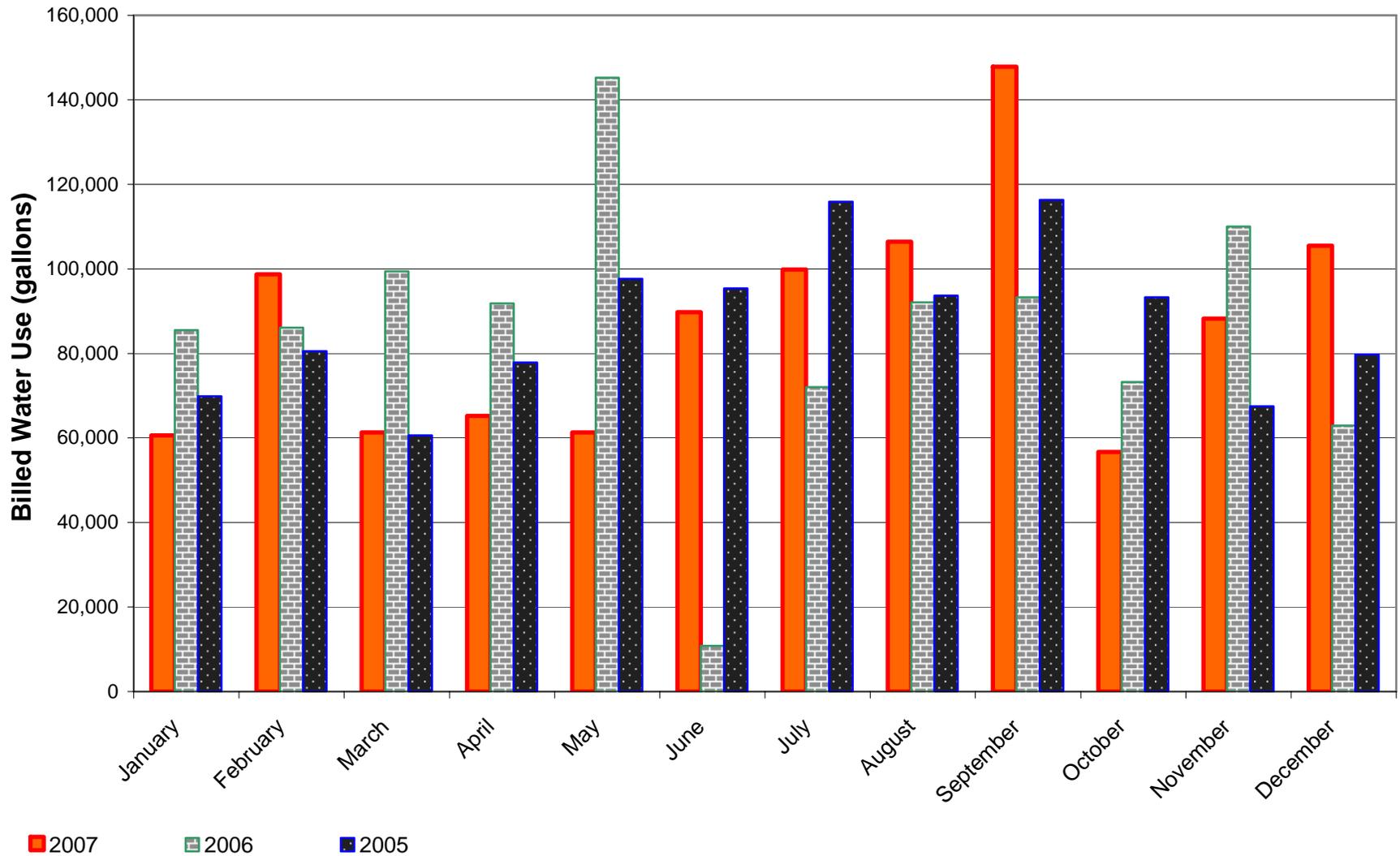


Figure 13



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CITY OF GALLUP COMMERCIAL WATER AUDITS
Billed Water Use for El Sombrero
2005-2007

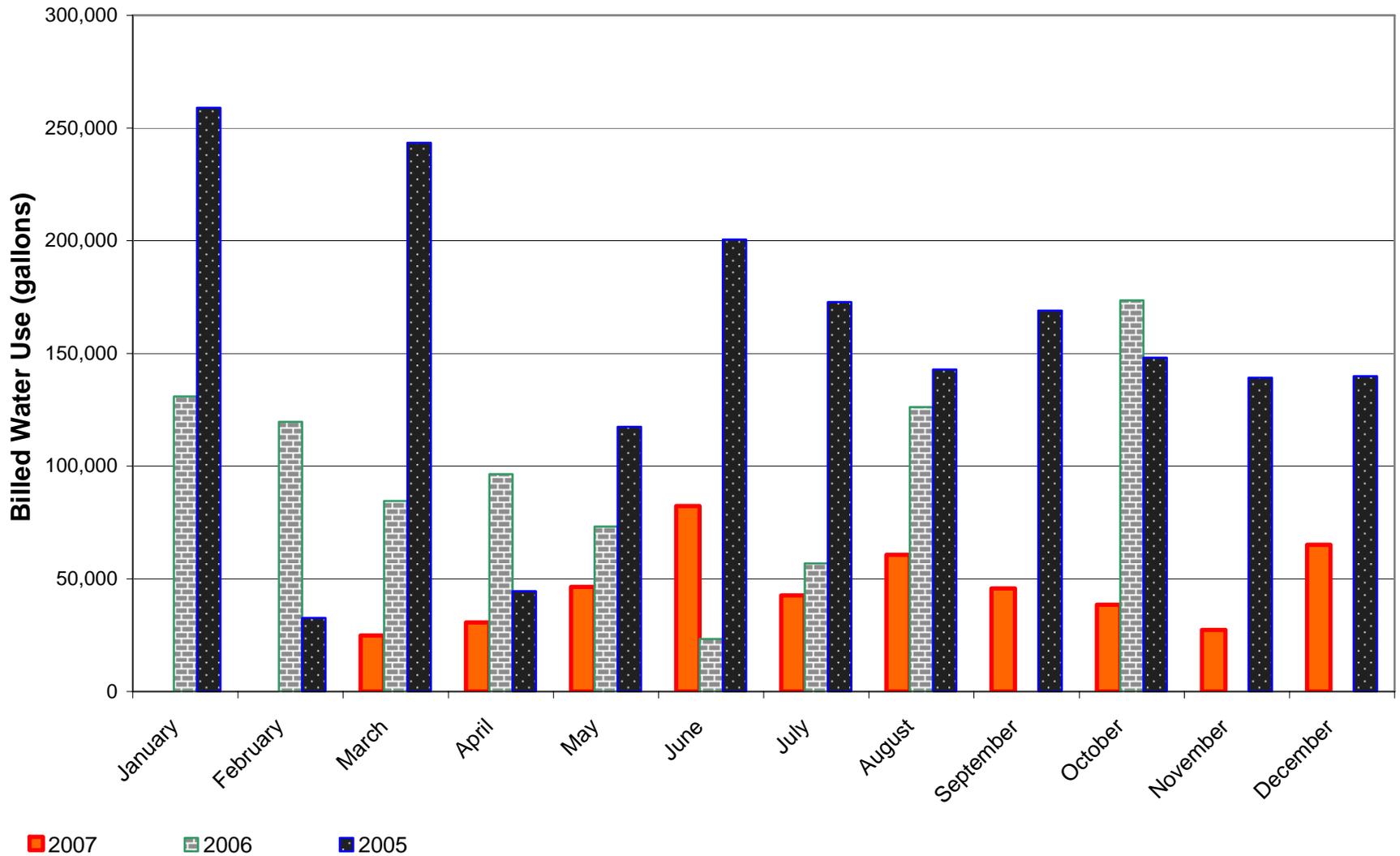


Figure 14

CITY OF GALLUP COMMERCIAL WATER AUDITS
Billed Water Use for Pizza Hut
2005-2007



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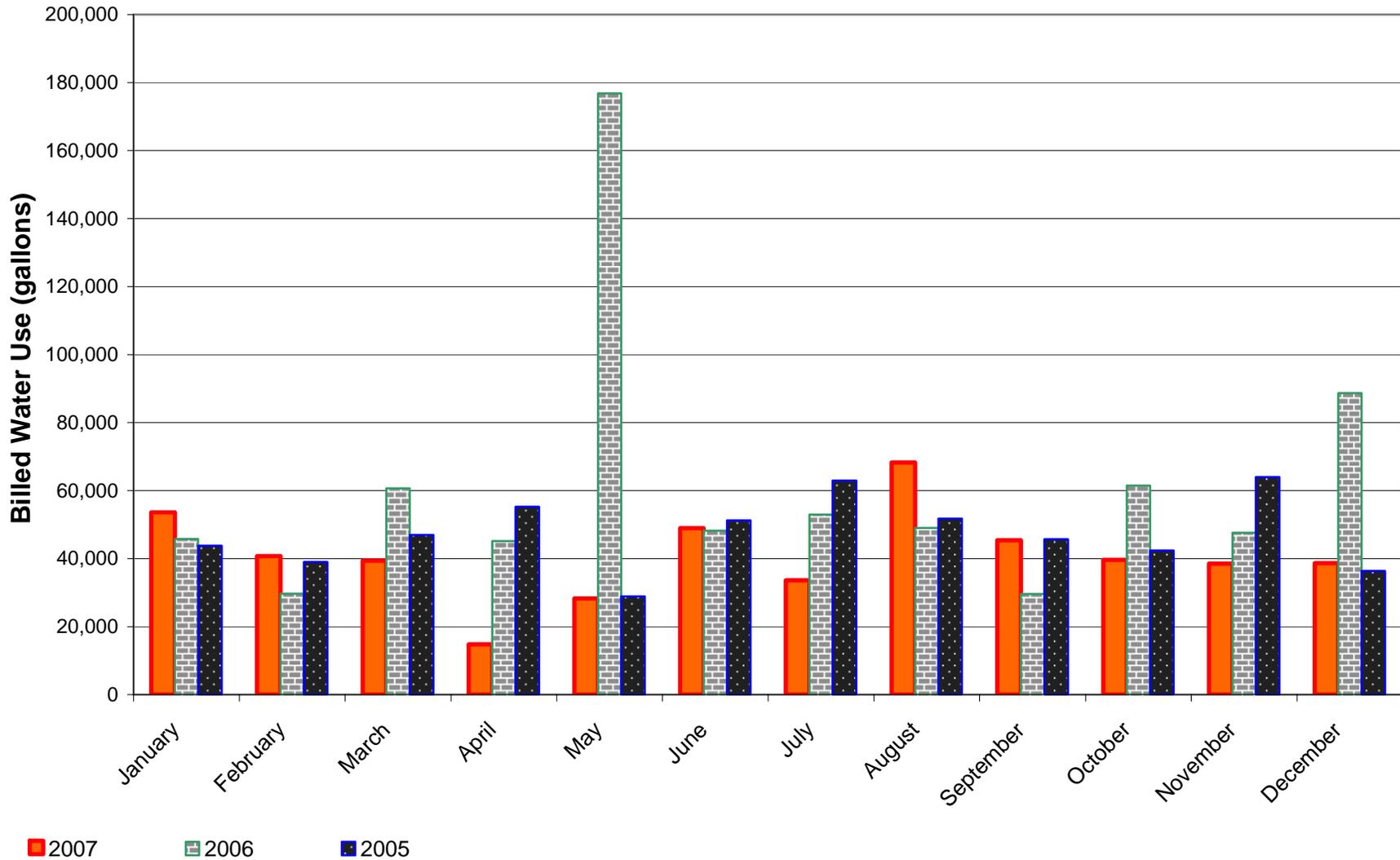


Figure 15



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CITY OF GALLUP COMMERCIAL WATER AUDITS
Billed Water Use for Sonic Northside
2005-2007

Tables



Table 1. City of Gallup Water Audit Schedule

Audit Time	Audit Date			
	2/25/2008	2/26/2008	2/27/2008	2/28/2008
8:30–10:00 a.m.	Applebee's 1560 W. Maloney Ave.	Denny's East 3810 E. Hwy 66	Golden Corral 600 N. 11th St.	El Sombrero 1201 W. Hwy 66
10:15–11:45 a.m.	Cracker Barrel 1480 W. Maloney Ave.	Denny's North 836 N. Hwy 491	McDonald's Northside 700 N. Hwy 491	Pizza Hut 1510 E. Hwy 66
1:30–3:00 p.m.	Furr's 505 N. Hwy 491	Roosevelt Elementary 404 E. Logan Ave.	Wendy's 985 N. Hwy 491	Sonic Drive-In 1001 N. Hwy 491
3:15–4:45 p.m.	Earl's 1400 E. Hwy 66	Genero's 600 W. Hill Ave.	Don Diego's 801 W. Hwy 66	---



Table 2. Water Consumption Data for Participating City of Gallup Users
Page 1 of 2

User	Water Consumption (gallons)														Average Daily Use	Average Monthly Use
	Year	January	February	March	April	May	June	July	August	September	October	November	December	Total for Year		
Applebee's 1560 W. Maloney Ave.	2007	184,008	186,252	174,658	204,952	154,836	196,724	212,432	212,432	197,472	187,748	183,260	176,528	2,271,302	6,223	189,275
	2006	175,780	175,331	210,936	196,724	157,080	148,104	190,740	150,872	160,670	161,568	136,585	207,495	2,071,885	5,676	172,657
	2005	176,528	147,356	136,360	169,572	137,632	163,812	178,024	163,064	153,340	132,022	120,802	143,317	1,821,829	4,991	151,819
Cracker Barrel 1480 W. Maloney Ave.	2007	139,502	139,876	131,872	173,386	147,693	194,031	232,553	192,573	182,849	181,016	179,221	160,820	2,055,392	5,631	171,283
	2006	234,782	204,354	189,244	195,228	142,120	148,874	185,504	224,041	107,959	207,495	198,295	174,733	2,212,629	6,062	184,386
	2005	245,344	185,541	179,557	292,992	165,308	202,409	252,899	256,938	224,250	216,172	191,488	187,367	2,600,265	7,124	216,689
Furr's 505 N. Hwy 491	2007	215,200	213,778	187,748	255,816	133,144	209,440	231,880	216,920	227,392	208,318	208,318	231,132	2,539,086	6,956	211,591
	2006	249,982	238,014	240,407	286,484	245,344	127,983	208,617	216,396	257,836	167,552	440,699	5,483	2,684,796	7,356	223,733
	2005	227,766	217,070	246,690	288,653	138,455	240,108	257,312	244,596	207,196	209,440	207,420	212,357	2,697,064	7,389	224,755
Earl's 1400 Hwy 66	2007	427,108	404,892	274,292	326,876	359,040	442,816	489,940	456,280	485,452	422,620	350,064	362,780	4,802,160	13,157	400,180
	2006	394,944	468,996	356,796	389,708	347,970	414,990	424,864	437,580	387,838	520,234	362,406	344,454	4,850,780	13,290	404,232
	2005	376,244	311,168	304,735	431,297	504,900	236,368	495,176	493,680	475,728	353,056	284,090	350,214	4,616,656	12,648	384,721
Denny's East 3810 Hwy 66	2007	135,014	120,578	147,580	166,056	140,250	164,934	163,064	187,748	151,096	115,042	119,082	140,026	1,750,470	4,796	145,872
	2006	177,874	154,462	144,738	184,008	124,168	109,208	167,552	137,034	124,766	186,626	121,550	186,252	1,818,238	4,981	151,520
	2005	100,756	105,169	197,996	132,396	132,396	166,804	150,722	164,186	135,388	128,656	150,348	111,527	1,676,343	4,593	139,695
Denny's North 836 N. Hwy 491	2007	120,802	130,900	123,046	142,494	121,176	163,064	157,080	160,072	169,796	153,340	178,772	167,552	1,788,094	4,899	149,008
	2006	190,964	141,297	124,168	156,706	113,322	109,208	130,152	169,048	80,036	151,844	175,705	121,625	1,664,076	4,559	138,673
	2005	195,228	151,096	152,742	224,250	161,568	169,048	193,732	184,756	175,406	156,706	202,708	150,198	2,117,438	5,801	176,453
Roosevelt Elementary School 404 E. Logan	2007	38,148	44,132	46,376	22,739	35,605	36,054	8,826	8,228	64,403	42,561	43,384	32,912	423,368	1,160	35,281
	2006	26,928	52,360	50,864	47,872	59,092	32,164	9,948	11,744	20,794	45,778	58,494	16,306	432,344	1,185	36,029
	2005	27,676	39,644	38,896	43,384	53,108	53,856	11,220	5,236	18,700	54,305	45,927	47,124	439,076	1,203	36,590
Genero's Restaurant 600 W. Hill	2007	91,219	106,104	43,459	24,460	19,897	31,117	24,460	6,807	23,562	23,562	26,404	26,330	447,379	1,226	37,282
	2006	228,364	212,282	253,983	205,924	199,828	244,484	199,940	188,533	96,492	119,979	109,806	78,465	2,138,083	5,858	178,174
	2005	78,203	75,286	76,296	109,507	101,055	134,565	148,889	167,889	218,865	179,146	187,561	209,702	1,686,964	4,622	140,580
Golden Corral 600 N. 11th St.	2007	418,132	259,556	304,436	353,804	317,152	440,572	376,244	418,132	415,888	395,692	408,408	401,676	4,509,692	12,355	375,808
	2006	264,867	520,159	604,384	252,076	359,788	331,364	488,070	261,950	352,532	416,636	302,416	451,568	4,605,810	12,619	383,818
	2005	201,810	252,450	271,973	415,065	312,664	311,916	334,356	331,364	329,868	330,616	304,436	241,978	3,638,496	9,968	303,208
McDonald's Northside 700 N. Hwy 491	2007	69,639	91,929	112,948	67,320	83,028	105,468	122,672	115,192	105,468	97,240	96,492	95,744	1,163,140	3,187	96,928
	2006	141,148	33,585	69,040	106,964	90,807	89,236	100,232	98,362	88,638	106,964	95,594	127,310	1,147,881	3,145	95,657
	2005	160,820	85,870	109,582	123,495	62,533	104,720	122,672	108,460	91,256	83,776	78,540	124,467	1,256,191	3,442	104,683
Wendy's 985 N. Hwy 491	2007	54,380	63,804	46,376	52,360	47,124	60,588	63,580	41,140	66,572	47,872	45,628	47,872	637,296	1,746	53,108
	2006	62,907	53,706	71,808	74,800	65,824	68,068	78,540	58,194	64,478	69,564	52,136	54,828	774,853	2,123	64,571
	2005	76,595	32,613	54,828	62,608	50,864	60,588	72,556	62,832	55,352	51,612	48,620	56,175	685,243	1,877	57,104



Table 2. Water Consumption Data for Participating City of Gallup Users
Page 2 of 2

User	Water Consumption (gallons)														Average Daily Use	Average Monthly Use
	Year	January	February	March	April	May	June	July	August	September	October	November	December	Total for Year		
Don Diego's 801 W. Hwy 66	2007	67,096	72,706	53,258	56,698	49,592	66,871	56,624	65,899	76,221	54,155	55,352	63,782	738,254	2,023	61,521
	2006	67,619	74,426	61,560	75,623	68,292	58,793	55,277	65,300	64,814	51,949	80,335	52,136	776,125	2,126	64,677
	2005	72,885	49,637	60,214	71,958	63,206	70,761	78,540	60,364	80,560	62,458	60,064	65,375	796,022	2,181	66,335
El Sombrero 1201 W. Hwy 66	2007	60,588	98,736	61,261	65,226	61,261	89,760	99,858	106,440	147,805	56,698	88,264	105,468	1,041,366	2,853	86,780
	2006	85,496	86,095	99,409	91,854	145,262	10,771	72,032	92,079	93,306	73,199	110,031	62,907	1,022,441	2,801	85,203
	2005	69,863	80,560	60,588	77,792	97,614	95,370	115,865	93,650	116,314	93,276	67,470	79,737	1,048,098	2,872	87,341
Pizza Hut 1510 E. 66th	2007	0	0	24,908	30,668	46,376	82,280	42,636	60,588	45,628	38,447	27,377	65,076	463,984	1,271	38,665
	2006	130,900	119,680	84,524	96,492	73,154	23,338	56,848	126,188	0	173,536	0	0	884,660	2,424	73,722
	2005	258,883	32,613	243,474	44,506	117,436	200,464	172,788	142,868	169,048	148,104	139,128	139,876	1,809,188	4,957	150,766
Sonic Drive-In 1901 N. Hwy 66	2007	53,579	40,706	39,337	14,780	28,274	48,919	33,585	68,218	45,329	39,644	38,522	38,672	489,566	1,341	40,797
	2006	45,793	29,696	60,663	45,149	176,782	48,171	52,973	48,979	29,598	61,478	47,543	88,698	735,523	2,015	61,294
	2005	43,758	38,971	46,959	55,247	28,873	51,238	62,982	51,762	45,703	42,337	63,954	36,338	568,121	1,556	47,343



Table 3. Quantified Leaks by Restaurant

Restaurant	Total Lost to Leaks	
	(gallons per day)	(gallons per year)
Applebee's	24	8,760
Furr's	10	3,650
Denny's North	10	3,650
Golden Corral	778	283,970
McDonald's Northside	25	9,125
Don Diego's	20	7,300
El Sombrero	27	9,855
Sonic Drive-In	24	8,760
Total	918	335,070



Table 4. Number of High-Flow Toilets by Restaurant

Restaurant	Number of High-Flow Toilets (3.5 gallons per flush)
Cracker Barrel	2
Furr's	5
Roosevelt Elementary School	13
Genero's	1
McDonald's Northside	2
Wendy's	1
Don Diego's	5
El Sombrero	3
Pizza Hut	2
Sonic Drive-In	1
Total	35

Attachment 1
Completed Surveys

City of Gallup Commercial Water Audit Questionnaire

1. General information

Business name Applebee's Phone 505-726-0401

Contact person name and title Chad Denny, Manager

Physical address 1560 W. Maloney Ave., Gallup, NM 87301-5396

Mailing address (if different) same as above

2. Background information

Restaurant water account number 47739-24246

Is all of the water billed to this account used by this restaurant? Yes No

Total water billed in 2007 (gallons)

Jan	<u>184,008</u>	Apr	<u>204,952</u>	Jul	<u>212,432</u>	Oct	<u>187,748</u>
Feb	<u>186,252</u>	May	<u>154,836</u>	Aug	<u>212,432</u>	Nov	<u>183,260</u>
Mar	<u>174,658</u>	Jun	<u>196,724</u>	Sep	<u>197,472</u>	Dec	<u>176,528</u>

Meter size 2-inch

Number of employees 70-80 Number of shifts per day 2 (11 a.m.-4 p.m., 4 p.m.-close)

Number of meals served per day 500-700 Days and hours of operation Monday through

Friday 11 a.m.-11 p.m., Saturday and Sunday 11 a.m.-12 a.m.

Date the facility was built 2004 Size of the facility (square footage) Unsure

Restaurant seating capacity 197 Date of last remodel Not applicable.

Description of any existing water conservation measures All of the fixtures are relatively new

because this restaurant was built in 2004. No other conservation measures are currently in place.

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3. Kitchen water use

Dishwasher description and use (number of loads washed each day) A new dishwashing system was installed this week (APEX EcoLab CMA-44). This is the busiest Applebee's in New Mexico. An average of 200 dishwashing loads are washed daily during the week, and an average of 300 dishwashing loads are washed on weekend days.

Is the dishwasher rinse water reused? Yes No

Number of kitchen faucets 12 Two of the faucets have aerators, nine do not (not counting the pre-rinse spray nozzle).

	Comments:	Aerator Yes/No	Flow rate (gpm)
1 Drink station	This faucet is dripping (leaking at a rate of 19 gpd).		4.5
2 Food preparation	Small fixture, one handled design.		4
3 Dishwashing	Faucet is located below the pre-rinse spray nozzle (shares the same sink).		3
4 Pre-rinse spray nozzle	The flow rate of the original nozzle is extremely low, but is effective. The original nozzle was left in place.		1
5 Food preparation	Small fixture, one handled design. Hot water only; no drain.		4.5
6 Food preparation	Located at a large sink that is used to thaw food (under running water).		6
7 Bucket sink	This faucet has a hose installed and is used to spray floors and mats.		4
8 Food preparation			5.5
9 Handwashing sink	This faucet had a fast leak. The staff removed the faucet bib while we were on-site, reducing the leak to 5 gpd.		out of order
10 Food preparation	Small fixture, one handled design. Used to fill rag buckets.		3
11 Food preparation	Located opposite the grill; no drain.		4

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	Comments:	Aerator Yes/No	Flow rate (gpm)
12 Food preparation	Located opposite the grill; no drain.		4

Ice machine Brand Hoshizaki Model number B-900SE (storage bin)

Pound capacity 660 Cooling method (water or air?) Unsure

Is a garbage disposal used? Yes No

Is there a water softener? Yes No If so, list the brand Culligan

Model number _____

Does the water softener run on a *timer*? or on *measured flow*?

Describe cleaning methods and equipment (for floors, etc.) The floors are sprayed down using a hose each evening (the floors are not mopped).

Discuss any other kitchen water use None.

4. Restroom water use

Toilets: *Flush valve:* Number 3 (women's restroom) Volumes 1.6 gallons per flush

Flush valve: Number 2 (men's restroom) Volumes 1.6 gallons per flush

Urinals: Number 1 Volumes 1 gallon per flush

Have any toilets or urinals been retrofitted with lower flow models? Yes No

If so, how many? _____ When? All are low flow due to recent construction (2004).

Lavatory sinks: Women's restroom 2 Flow rate 0.5 gpm

Men's restroom 2 Flow rate 0.5 gpm

How many faucets have aerators installed? None All Number _____

5. Laundry water use

Are any clothes washing machines used on-site? Yes No

6. Cooling water use

Cooling Units:	Number	Size
Refrigerated air	<u>5</u>	<u>Large units (unsure of size)</u>

How much of the year is the cooler used? 4 months/year

How long each day? On full day, off at night.

7. Outdoor water use

Area of irrigated landscape: None

Is any water used to clean sidewalks/hose down parking lots? Yes No

Describe any other outdoor water uses. Floor mat cleaning (see next section).

8. Other uses, leaks, and lost water

Method of floor mat cleaning: Floor mats are cleaned daily by spraying them with a hose out back.

If sprayed, estimate the number of minutes per day. 30-40 minutes

Describe any wait station water use. This restaurant has a bar with two faucets. One faucet has no aerator (4.5 gpm flow rate), and the other has a loose aerator (3.5 gpm flow rate). Both are used for handwashing.

Describe any janitor closet water use. None

List any quantifiable leaks and estimated rates and locations. Two kitchen faucets have leaks, which are dripping at rates of 19 and 5 gallons per day.

Are there any showers on-site? Yes No

Describe any other water uses. None

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1. General information

Business name Cracker Barrel Phone 505-726-2992

Contact person name and title Steve Mulvaney, General Manager

Physical address 1480 W. Maloney Ave., Gallup, NM 87301-3304

Mailing address (if different) same as above

2. Background information

Restaurant water account number 33303-21958, 33303-21772 (two meters)

Is all of the water billed to this account used by this restaurant? Yes No

Total water billed in 2007 (gallons)

Jan	<u>139,502</u>	Apr	<u>173,386</u>	Jul	<u>232,553</u>	Oct	<u>181,016</u>
Feb	<u>139,876</u>	May	<u>147,693</u>	Aug	<u>192,573</u>	Nov	<u>179,221</u>
Mar	<u>131,872</u>	Jun	<u>194,031</u>	Sep	<u>182,849</u>	Dec	<u>160,820</u>

Meter: Size 2-inch; 1-inch

Number of employees 84 (110 in summer) Number of shifts per day 3

Number of meals served per day 800

Days and hours of operation 6 a.m.-10 p.m. weekdays, 6 a.m.-11 p.m. weekends

Date the facility was built May 4, 1998 Size of the facility (square footage) Unsure

Restaurant seating capacity 150 Date of last remodel There was one pushback for the retail store, but it didn't affect seating. There hasn't been any other remodeling.

Description of any existing water conservation measures This restaurant has gas/electric conservation measures in place, but no water conservation measures.

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3. Kitchen water use

Dishwasher description and use (number of loads washed each day) Low temp. EcoLab WH-44

Is the dishwasher rinse water reused? Yes No

Number of kitchen faucets 17

	Type:	Usage:	Aerator Yes/No	Flow rate (gpm)
1	<u>Handwashing sink</u>	<u>Handwashing</u>	<u>No</u>	<u>1.5</u>
2	<u>Pot washing sink</u>	<u>Pot sink wash</u>	<u>No</u>	<u>8</u>
3	<u>Pot washing sink</u>	<u>Pot sink rinse</u>	<u>No</u>	<u>4</u>
4	<u>Drink station sink</u>	<u>Used to fill pitchers. This faucet has a 5 gpm partial leak (can be turned off).</u>	<u>Yes</u>	<u>3.5</u>
5	<u>Drink station sink</u>	<u>Drink station faucet at second station; used to fill pitchers.</u>	<u>No</u>	<u>3.5</u>
6	<u>Handwashing sink</u>	<u>Handwashing</u>	<u>Yes</u>	<u>2</u>
7	<u>Wall tap</u>	<u>Wall tap used to fill buckets for mopping.</u>	<u>No</u>	<u>7</u>
8	<u>Food preparation</u>	<u>Food preparation area.</u>	<u>No</u>	<u>6</u>
9	<u>2 dripper wells</u>	<u>Drip faucets for ice cream scoops; continuous flow.</u>	<u>No</u>	<u>0.25</u>
10	<u>Food preparation</u>	<u>Together in one sink with the faucet listed below; used to wash food.</u>	<u>No</u>	<u>4</u>
11	<u>Food preparation</u>	<u>Together in one sink with the faucet listed above; used to wash food.</u>	<u>No</u>	<u>6</u>
12	<u>Handwashing sink</u>	<u>Handwashing sink; eye wash as well.</u>	<u>Yes</u>	<u>2</u>
13	<u>Pre-rinse spray nozzle</u>	<u>Used to wash kettles.</u>	<u>NA</u>	<u>1.5</u>
14	<u>Mop sink</u>	<u>Used to fill buckets for mopping.</u>	<u>No</u>	<u>8</u>
15	<u>2 Pre-rinse spray nozzles</u>	<u>Two pre-rinse spray nozzles in the dish area. One nozzle was changed out, reducing flow from 3 to 1.5 gpm.</u>	<u>NA</u>	<u>3 each</u>

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Ice machine Brand Hoshizaki Model number B-900SD (storage bin)
Pound capacity Unsure Cooling method (water or air?) Unsure

Is a garbage disposal used? Yes No

Is there a water softener? Yes No If so, list the Brand Culligan, discharges daily
Model number HiFlo2
Percent discharged Unsure

Does the water softener run on a *timer*? or on *measured flow*?

Describe cleaning methods and equipment (for floors, etc.) A mop and bucket are used to scrub the floors daily. A hose was used to spray down the floors in the past, but this practice damaged the tile and was discontinued.

Discuss any other kitchen water use None

4. Restroom water use

Toilets: *Flush valve:* Number 1 Volumes 3.5 gpf (women's employee restroom)
Flush valve: Number 1 Volumes 3.5 gpf (men's employee restroom)
Flush valve: Number 3 Volumes 1.6 gpf (women's guest restroom)
Flush valve: Number 2 Volumes 1.6 gpf (men's guest restroom)

Urinals: Number 2 Volumes 1 gpf

Have any toilets or urinals been retrofitted with lower flow models? Yes No
If so, how many? 5 When? _____

Lavatory sinks: Number 1 (women's employee restroom) Estimated flow 2 gpm
Number 1 (men's employee restroom) Estimated flow 2 gpm
Number 2 (women's guest restroom) Estimated flow 2 gpm
Number 2 (men's guest restroom) Estimated flow 2 gpm

How many faucets have aerators installed? None All Number _____

5. Laundry water use

Are any clothes washing machines used on-site? Yes No

6. Cooling water use

Cooling Units:	Number	Size
Refrigerated air	<u>5</u>	<u>Unsure</u>

The restaurant has central refrigerated air, with 3 large units for the main seating area and 2 smaller units for the back area.

There is an automatic thermostat (heat/cool) that keeps the restaurant temperature between 68 and 72 degrees. Unsure of the number of days/length that the cooler is in use.

7. Outdoor water use

Area of irrigated landscape: Approximately 1,100 square feet

Landscape materials:

Plant type Grass Percentage of total area 100%

Plant type Bushes and trees Percentage of total area Minimal

The rest of the landscaping is rock.

Watering/irrigation system description Program clock controlled

Irrigation schedule: Time of day Water comes on at 5 a.m.

Number of days per week 3 days Number of weeks per year _____

A drip system is used to irrigate the trees and bushes, and Rainbird control sprinklers are used for the grass. The sprinkler system has a rain gauge, and doesn't irrigate when the grass is wet. The system is blown out each year, to keep the lines from freezing in winter.

Condition of landscape (maintained, mulched, abandoned, etc.) Maintained

Is any water used to clean sidewalks/hose down parking lots? Yes No

Water is used to clean pavement surfaces outside when it is warm enough.

Describe any other outdoor water uses. None

8. Other uses, leaks, and lost water

Method of floor mat cleaning: Floor mats are no longer used to prevent them being a trip hazard.

If sprayed, estimate the number of minutes per day. Not applicable

Describe any wait station water use. None

Describe any janitor closet water use. None

List any quantifiable leaks and estimated rates and locations. None

Are there any showers on-site? Yes No

Describe any other water uses. None

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1. General information

Business name Furr's Phone 505-722-4349

Contact person name and title Ken Turnbow (met with Brian Blackwell)

Physical address 505 N. Hwy 491, Gallup, NM 87301-5351

Mailing address (if different) same as above

2. Background information

Restaurant water account number 46193-15742

Is all of the water billed to this account used by this restaurant? Yes No

Total water billed in 2007 (gallons)	Jan	<u>215,200</u>	Apr	<u>255,816</u>	Jul	<u>231,880</u>	Oct	<u>208,318</u>
	Feb	<u>213,778</u>	May	<u>133,144</u>	Aug	<u>216,920</u>	Nov	<u>208,318</u>
	Mar	<u>187,748</u>	Jun	<u>209,440</u>	Sep	<u>227,392</u>	Dec	<u>231,132</u>

Meter: Size 2-inch

Number of employees 32 Number of shifts per day 3

Number of meals served per day 200-300 Days and hours of operation 11 a.m.-8 p.m., 7 days/week

Date the facility was built 1983 Size of the facility (square footage) Unsure

Restaurant seating capacity 270 Date of last remodel Cosmetic remodel in 2003

Description of any existing water conservation measures None

3. Kitchen water use

Dishwasher description and use (number of loads washed each day) EcoLab dishwasher, run 50-100 loads per day (rough estimate).

Is the dishwasher rinse water reused? Yes No

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Number of kitchen faucets 20

	Type:	Usage:	Aerator Yes/No	Flow rate (gpm)
1	Mop sink	Spigot has a hose attached; used to fill buckets.	No	6
2	Pre-rinse spray nozzle	Pre-rinse spray nozzle located in the dish area.	NA	3
3	Handwashing sink	Handwashing	Yes	2
4	Pre-rinse spray nozzle	Pre-rinse spray nozzle located in the dish area.	NA	3
5	Pot washing	Pot washing. Located in the same area as the following 2 faucets.	No	8
6	Pot washing	Pot washing. Located in the same area as the faucets listed before and after this one.	No	8
7	Pot washing	Pot washing. Located in the same area as the previous 2 faucets.	No	8
8	Food preparation	Food preparation area.	No	10
9	Food preparation	Food preparation area.	No	10
10	Food preparation	Food preparation area.	Yes	2
11	Food preparation	Spigot has a hose attached; used for floor cleaning.	No	10
12	Handwashing sink	Handwashing	Yes	2
13	Fry station	Located at fry station; has a 10 gpd drip.	No	10
14	Fry station	Located at fry station.	No	10
15	Vegetable station	Washing vegetables.	No	8
16	Vegetable station	Washing vegetables.	No	10
17	Handwashing sink	Handwashing	Yes	2
18	Bakery area	Located in the bakery area.	No	10
19	Bakery area	Located in the bakery area.	No	10

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Type:	Usage:	Aerator Yes/No	Flow rate (gpm)
20 <u>Front line</u>	<u>Used for drinking water.</u>	<u>No</u>	<u>7</u>

Ice machine Brand Follett Model number SG1650S-60 (storage bin)

Pound capacity Unsure Cooling method (water or air?) Unsure

Is a garbage disposal used? Yes No

Is there a water softener? Yes No If so, list the Brand Culligan

Model number Serial #126673

Percent discharged Unknown

Does the water softener run on a *timer*? or on *measured flow*?

Describe cleaning methods and equipment (for floors, etc.) Floors are sprayed down with a hose.

Discuss any other kitchen water use None

4. Restroom water use

Toilets: *Flush valve:* Number 2 Volumes 3.5 gpf (men's restroom)

Flush valve: Number 3 Volumes 3.5 gpf (women's restroom)

Urinals: Number 1 Volumes 1 gpf (men's restroom)

Have any toilets or urinals been retrofitted with lower flow models? Yes No

Sinks: Number 2 *Aerator?:* Yes Volumes 2 gpm (women's restroom)

One sink is leaking from the drain onto the floor.

Number 2 *Aerator?:* Yes Volumes 3 gpm; 4 gpm (men's restroom)

How many faucets have aerators installed? None All Number _____

5. Laundry water use

Are any clothes washing machines used on-site? Yes No

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If so, list the type, brand, model number, and capacity for each:

Brand:	Model number:	Capacity:
<u>Kenmore</u>	<u>11026442501</u>	<u>Super (household type)</u>

Number of laundry loads washed daily? 2-3 (towels only) Is the rinse water reused? Yes No

6. Cooling water use

Cooling Units:	Number	Size
<u>Refrigerated air</u>	<u>5-6</u>	<u>Unknown</u>

How much of the year is the cooler used? 4 months How long each day? All day

The air conditioning system is programmed to keep the restaurant temperature at 72 degrees, so it turns on and off automatically, and is left on at night.

7. Outdoor water use

Area of irrigated landscape: None

8. Other uses, leaks, and lost water

Method of floor mat cleaning: Floors are cleaned by wetting them down with a hose, scrubbing them by hand, and rinsing with a hose. There are no floor mats.

If sprayed, estimate the number of minutes per day. Floors are sprayed for ~30 minutes per day

Describe any wait station water use. None

Describe any janitor closet water use. None

List any quantifiable leaks and estimated rates and locations. One of the fry station faucets is dripping (noted above).

Are there any showers on-site? Yes No

Describe any other water uses. None

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1. General information

Business name Earl's Phone 505-863-4201

Contact person name and title Ralph Richards, Owner/Mario Trejo, Manager

Physical address 1400 E. Hwy 66, Gallup, NM 87301-4947

Mailing address (if different) same as above

2. Background information

Restaurant water account number 11205-9910

Is all of the water billed to this account used by this restaurant? Yes No

Total water billed in 2007 (gallons)

Jan	<u>427,108</u>	Apr	<u>326,876</u>	Jul	<u>489,940</u>	Oct	<u>422,620</u>
Feb	<u>404,892</u>	May	<u>359,040</u>	Aug	<u>456,280</u>	Nov	<u>350,064</u>
Mar	<u>274,292</u>	Jun	<u>442,816</u>	Sep	<u>485,452</u>	Dec	<u>362,780</u>

Meter: Size 2-inch

Number of employees 95-100 Number of shifts per day 2

Number of meals served per day 850 (2,000 on Saturday) Days and hours of operation Open 6 a.m.-9 p.m. daily. Janitors clean 9 p.m.-5 a.m. daily.

Date the facility was built December 19, 1990 Size of the facility (square footage) Unknown

Restaurant seating capacity 300

Date of last remodel Currently expanding men's restroom

Description of any existing water conservation measures A few of the toilets have been replaced with low-flow models, and one of the three water heaters is tankless.

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3. Kitchen water use

Dishwasher description and use (number of loads washed each day) Proclean model ADC-44(H); 400-500 loads are washed each day.

Is the dishwasher rinse water reused? Yes No

Number of kitchen faucets 14

Type:	Usage:	Aerator Yes/No	Flow rate (gpm)
1 Three water taps	Push back drink taps used to fill pitchers and cups; located on the front line.	No	2
2 Front line sink	Sink located on the front line.	Yes	2.5
3 Front line sink	Sink located on the front line.	Yes	1.5
4 Front line sink	Sink located on the front line.	Yes	1.5
5 Pre-rinse spray nozzle	Pre-rinse spray nozzle located in the dish area. Nozzle was replaced with a 1 gpm nozzle.	NA	1.5
6 Pre-rinse spray nozzle	Pre-rinse spray nozzle located in the dish area. A second new fixture was given to Earl's to replace this fixture (we were unable to remove the existing nozzle).	NA	2.5
7 Dish area sink	Faucet located in the dish area.	No	4.5
8 Mop sink	Fixture has a hose attached, and is used to fill buckets.	No	5
9 Food preparation	Faucet located in the bread baking area.	Yes	2
10 Handwashing sink	Handwashing	Yes	5
11 Food preparation	Faucet used to fill skillets.	No	5
12 Food preparation	Faucet used to fill kettles.	No	2

Ice machine Brand Manitowoc

There are three ice machines; two are air-cooled and one is water-cooled. The two air-cooled machines are used year round, and the third (water-cooled) machine is used only during the

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summer. Mario was unsure of their size, but he said that when they have run out of ice in the past, and gone to purchase it, 800 pounds of ice fills one of the storage bins about halfway.

Is a garbage disposal used? Yes No If so, number of minutes used per day Unsure

Is there a water softener? Yes No If so, list the Brand Culligan

The water softener is only used on drinking water and steam water.

Does the water softener run on a *timer*? or on *measured flow*?

Describe cleaning methods and equipment (for floors, etc.) Floors are mopped (using a bucket full of water and changing the water as needed).

Discuss any other kitchen water use The coffee maker uses approximately 5 gallons every half hour.

4. Restroom water use

Toilets: *Flush valve:* Number 1 Volumes 1.6 gpf (employee restroom)

Flush valve: Number 3 Volumes 1.6 gpf (women's restroom)

Flush valve: Number 2 Volumes 1.6 gpf (men's restroom)

Urinals: Number 3 Volumes 1 gpf (men's restroom)

Have any toilets or urinals been retrofitted with lower flow models? Yes No

If so, how many? 3 When? Unsure

Sinks: Number 1 *Aerator?:* No Volumes 2.2 gpm (employee restroom)

Number 3 *Aerator?:* Yes Volumes 2 gpm (women's restroom)

Number 2 *Aerator?:* No; yes Volumes 4 gpm; 1 gpm (men's restroom)

How many faucets have aerators installed? None All Number 5 of 6

Sinks in restroom janitor closets:

Women's restroom 8 gpm (used to fill buckets; no aerator)

Men's restroom 6 gpm (used to fill buckets; no aerator)

5. Laundry water use

Are any clothes washing machines used on-site? Yes No

6. Cooling water use

Cooling Units:	Number	Size
Refrigerated air	<u>7</u>	<u>Large (unsure of size)</u>

If evaporative cooling is used, do the cooling units recirculate water? Yes No

How much of the year is the cooler used? ~6 months

The cooling system is automated, and comes on as needed.

7. Outdoor water use

Area of irrigated landscape: None

Describe any other outdoor water uses. None

8. Other uses, leaks, and lost water

Method of floor mat cleaning: Rinsed using buckets of water (water is poured over them).

Describe any wait station water use. None

Describe any janitor closet water use. Janitor closets are located inside the restrooms, and flow rates are noted above.

List any quantifiable leaks and estimated rates and locations. None

Are there any showers on-site? Yes No If so:

Number 1 Use frequency Rarely Estimated flow 2 gpm

Describe any other water uses. The office also has a faucet with a 1 gpm flow rate, and a 3.5 gpf toilet.

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1. General information

Business name Denny's East Phone 505-863-8858

Contact person name and title Keri Hanley, Manager

Physical address 3810 E. Hwy 66, Gallup, NM 87301

Mailing address (if different) Darrell Pettee, District Manager

4762 N. Stewart Mountain, Golden Valley, AZ 86413

2. Background information

Restaurant water account number 25095-20652

Is all of the water billed to this account used by this restaurant? Yes No

Total water billed in 2007 (gallons)

Jan	<u>135,014</u>	Apr	<u>166,056</u>	Jul	<u>163,064</u>	Oct	<u>115,042</u>
Feb	<u>120,578</u>	May	<u>140,250</u>	Aug	<u>187,748</u>	Nov	<u>119,082</u>
Mar	<u>147,580</u>	Jun	<u>164,934</u>	Sep	<u>151,096</u>	Dec	<u>140,026</u>

Meter: Size 2-inch

Number of employees 51 Number of shifts per day 3

Number of meals served per day 500-600 on weekdays; 900-1,200 on weekend days

A casino is opening approximately 10 miles from this restaurant this summer, so they expect to get busier (they will increase to 74 employees by summer).

Days and hours of operation 24 hours, 7 days/week

Date the facility was built 1994 Size of the facility (square footage) Unsure

Restaurant seating capacity 175

Date of last remodel They are up for a full remodel next year (new booths, paint, etc.), although the size of the restaurant will not change.

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Description of any existing water conservation measures None

3. Kitchen water use

Dishwasher description and use (number of loads washed each day) EcoLab ES4000

Is the dishwasher rinse water reused? Yes No

Number of kitchen faucets 16

	Type:	Usage:	Aerator Yes/No	Flow rate (gpm)
1	<u>Handwashing sink</u>	<u>Handwashing</u>	<u>Yes</u>	<u>2.5</u>
2	<u>Dipper well</u>	<u>Drip faucet used for ice cream scoops; continuous flow.</u>	<u>NA</u>	<u>0.25</u>
3	<u>Drink station</u>	<u>Faucet located at the drink station.</u>	<u>No</u>	<u>6</u>
4	<u>Dipper well</u>	<u>Drip faucet used for ice cream scoops; continuous flow.</u>	<u>NA</u>	<u>0.25</u>
5	<u>Drink tap</u>	<u>Push back drink tap; not used.</u>	<u>NA</u>	<u>0.5</u>
6	<u>Handwashing sink</u>	<u>Handwashing sink located at the wait station.</u>	<u>No</u>	<u>4</u>
7	<u>Pot washing</u>	<u>Faucet used for pot washing; located at the same sink as the next faucet.</u>	<u>No</u>	<u>4.5</u>
8	<u>Pot washing</u>	<u>Faucet used for pot washing; located at the same sink as the previous faucet.</u>	<u>No</u>	<u>6</u>
9	<u>Pre-rinse spray nozzle</u>	<u>Pre-rinse spray nozzle used to rinse dishes. Fixture was replaced with a new nozzle (1 gpm).</u>	<u>NA</u>	<u>3.5</u>
10	<u>Food preparation</u>	<u>Food preparation sink.</u>	<u>No</u>	<u>4</u>
11	<u>Handwashing sink</u>	<u>Handwashing</u>	<u>No</u>	<u>5</u>
12	<u>2 dipper wells</u>	<u>Drip faucets located in the grill area used for ice cream scoops; continuous flow.</u>	<u>NA</u>	<u>0.75</u>
13	<u>Steam bath faucet</u>	<u>Faucet used to fill steam baths.</u>	<u>No</u>	<u>5</u>

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Type:	Usage:	Aerator Yes/No	Flow rate (gpm)
14 Handwashing sink	Handwashing	Yes	5
15 Mop sink	Spigot has a hose connected to it, and is used to fill buckets.	NA	5.5

Ice machine Brand Hoshizaki Model number KM-1300SRH

Pound capacity 1,163 lb/24 hours Cooling method (water or air?) Air

Is a garbage disposal used? Yes No

Is there a water softener? Yes No If so, list the Brand Kineticco

Model number 60

Does the water softener run on a *timer*? or on *measured flow*?

The water softener runs on a timer, and is checked daily.

Describe cleaning methods and equipment (for floors, etc.) Mop and bucket.

Discuss any other kitchen water use None

4. Restroom water use

Toilets: *Flush valve:* Number 3 Volumes 1.6 gpf (women's restroom)

Flush valve: Number 2 Volumes 1.6 gpf (men's restroom)

Urinals: Number 2 Volumes 1.0 gpf (men's restroom)

Have any toilets or urinals been retrofitted with lower flow models? Yes No

Sinks: Number 2 *Aerator?:* Yes Volumes 2 gpm (women's restroom)

Number 2 *Aerator?:* Yes Volumes 2 gpm (men's restroom)

How many faucets have aerators installed? None All Number _____

5. Laundry water use

Are any clothes washing machines used on-site? Yes No

6. Cooling water use

Cooling Units:	Number	Size
Refrigerated air	<u>Unsure</u>	<u>Unsure</u>

This restaurant has a Universal Air refrigerated air system, but Keri's not sure of the number or size of the cooling units.

How many days per year is the cooler used? Unsure How long each day? Unsure

7. Outdoor water use

Landscape materials:

Plant type Juniper shrubs Percentage of total area _____

This restaurant has irrigation controls, although they are not hooked up. The landscaping maintenance and upkeep is contracted out to Holiday Nursery, who waters the existing shrubs from a wall spigot (this spigot requires a key to turn it on, and so its flow rate was not measured). There is no grass.

Is any water used to clean sidewalks/hose down parking lots? Yes No

The back area near the grease bin is scrubbed and hosed off once a week.

Describe any other outdoor water uses. None

8. Other uses, leaks, and lost water

Method of floor mat cleaning: There are a few mats in the dishwashing area, and these mats are picked up by an outside company who cleans them off-site and returns them.

If sprayed, estimate the number of minutes per day. NA

Describe any wait station water use. Wait station use is included in the list of faucets above.

Describe any janitor closet water use. None

List any quantifiable leaks and estimated rates and locations. None

Are there any showers on-site? Yes No

Describe any other water uses. None

City of Gallup Commercial Water Audit Questionnaire

1. General information

Business name Denny's North Phone 505-722-6945

Contact person name and title Brenda Ramos

Physical address 836 N. Hwy 491, Gallup, NM 87301-5388

Mailing address (if different) Darrell Pettee, District Manager

4762 N. Stewart Mountain, Golden Valley, AZ 86413

2. Background information

Restaurant water account number 40359-15596

Is all of the water billed to this account used by this restaurant? Yes No

Total water billed in 2007 (gallons)	Jan <u>120,802</u>	Apr <u>142,494</u>	Jul <u>157,080</u>	Oct <u>153,340</u>
	Feb <u>130,900</u>	May <u>121,176</u>	Aug <u>160,072</u>	Nov <u>178,772</u>
	Mar <u>123,046</u>	Jun <u>163,064</u>	Sep <u>169,796</u>	Dec <u>167,552</u>

Meter: Size 2-inch

Number of employees 30 Number of shifts per day 3

Number of meals served per day 380 on weekdays; 1,000 on weekend days

Days and hours of operation 24 hours, 7 days/week

Date the facility was built Unsure. Denny's remodeled the existing building, moving in ~2000.

Size of the facility (square footage) Unsure Restaurant seating capacity 83

Date of last remodel None. They have plans to remodel this year, and will double seating.

Description of any existing water conservation measures None

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3. Kitchen water use

Dishwasher description and use (number of loads washed each day) EcoLab ES2000
(approximately 8 loads per hour)

Is the dishwasher rinse water reused? Yes No

Number of kitchen faucets 13

Type:	Usage:	Aerator Yes/No	Flow rate (gpm)
1 Food preparation	Faucet located in the food preparation area.	No	7
2 Pre-rinse spray nozzle	Pre-rinse spray nozzle used to rinse dishes. Fixture was replaced with a new nozzle (1.5 gpm).	NA	3
3 Pot washing	Pot washing sink.	No	4.5
4 Handwashing sink	Handwashing	No	6
5 Handwashing sink	Handwashing	No	6
6 Mop sink	Fixture has a hose attached, and is used to fill buckets.	NA	5
7 Steam basin	Faucet used to fill steam basins.	No	4
8 Dipper well	Drip faucet used for ice cream scoops; continuous flow. Located in the kitchen.	NA	0.5
9 Handwashing sink	Handwashing; located on the front line.	Yes	2
10 3 dipper wells	Drip faucets used for ice cream scoops; continuous flow. Located on the front line.	NA	0.5
11 Handwashing sink	Handwashing; located on the front line.	No	5.5

Ice machine Brand Hoshizaki

Model number KM-1200MRE (ice machine); B-100PD (storage bin)

Pound capacity 1,125 lb/24 hours Cooling method (water or air?) Air

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Is a garbage disposal used? Yes No

Is there a water softener? Yes No If so, list the Brand Kinetico

Model number K10 with EC110 cartridge (has 4 cylinders labeled as high flow water filters)

Does the water softener run on a *timer*? or on *measured flow*?

Describe cleaning methods and equipment (for floors, etc.) Mop and bucket, spot cleaning with the hose (on the cook's line).

Discuss any other kitchen water use None

4. Restroom water use

Toilets: *Flush valve:* Number 1 Volumes 1.6 gpf (men's restroom)

Flush valve: Number 2 Volumes 1.6 gpf (women's restroom)

Urinals: Number 1 Volumes 1.0 gpf (men's restroom)

Have any toilets or urinals been retrofitted with lower flow models? Yes No

Sinks: Number 2 *Aerator?:* Yes Volumes 2 gpm (men's restroom)

Number 2 *Aerator?:* Yes Volumes 2 gpm (women's restroom)

How many faucets have aerators installed? None All Number _____

5. Laundry water use

Are any clothes washing machines used on-site? Yes No

6. Cooling water use

Cooling Units:	Number	Size
Refrigerated air	<u>3</u>	<u>Unsure</u>

How much of the year is the cooler used? 10 months How long each day? Unsure

This is a small restaurant, and the air conditioning is needed almost year round to control the temperature. The cooling units are automated (turn on and off as needed).

7. Outdoor water use

Area of irrigated landscape: None

Landscape materials:

Plant type Juniper bushes Percentage of total area _____

There is a wall hydrant with no handle (requiring a key), leaking at a rate of 10 gpd.

Watering/irrigation system description There is no outdoor watering at this restaurant.

Condition of landscape (maintained, mulched, abandoned, etc.) Not maintained

Is any water used to clean sidewalks/hose down parking lots? Yes No

Outdoor surfaces are hosed down weekly.

Describe any other outdoor water uses. None

8. Other uses, leaks, and lost water

Method of floor mat cleaning: There are three mats in the dish area and three mats in the cook's area. These mats are cleaned by loading them into a sink and spraying them with a hose.

If sprayed, estimate the number of minutes per day. Ten minutes, three times daily (30 min/day)

Describe any wait station water use. None

Describe any janitor closet water use. None

List any quantifiable leaks and estimated rates and locations. The outdoor wall hydrant is leaking at a rate of 10 gpd.

Are there any showers on-site? Yes No

Describe any other water uses. None

City of Gallup Commercial Water Audit Questionnaire

1. General information

Business name Roosevelt Elementary School Phone 505-721-4108

Contact person name and title Sean Baca, Plant Supervisor; Vivian Armenta, Kitchen Manager

Physical address 404 E. Logan Ave., Gallup, NM 87301-6050

Mailing address (if different) 700 S. Boardmen Ave., Gallup, NM 87301-4707

2. Background information

Restaurant water account number 109-108

Is all of the water billed to this account used by this school? Yes No

All Roosevelt Elementary School water use is accounted for by this meter.

Total water billed in 2007 (gallons)	Jan	<u>38,148</u>	Apr	<u>22,739</u>	Jul	<u>8,826</u>	Oct	<u>42,561</u>
	Feb	<u>44,132</u>	May	<u>35,605</u>	Aug	<u>8,228</u>	Nov	<u>43,384</u>
	Mar	<u>46,376</u>	Jun	<u>36,054</u>	Sep	<u>64,403</u>	Dec	<u>32,912</u>

Meter: Size 2-inch

Number of employees 2 full-time, 1 part-time (kitchen staff) Number of shifts per day 1

Number of meals served per day 90 at breakfast, 190 at lunch during the school year

Days and hours of operation 6 a.m.-1:30 p.m. weekdays

The school began serving summer lunches in 2007 (100 hot and 300 cold each weekday), and is planning to do this again. School is not in session during the summer (this is why July & August water use is so low).

Date the facility was built ~1954 Size of the facility (square footage) Unsure

Restaurant seating capacity Lunch is served in two shifts (K-2, 3-5 + preschool)

Date of last remodel Unsure

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Commercial Water Audit Questionnaire

Description of any existing water conservation measures None

3. Kitchen water use

Dishwasher description and use (number of loads washed each day) Hobart AM-14 (6 loads washed after breakfast; 15 loads washed after lunch).

Is the dishwasher rinse water reused? Yes No

Number of kitchen faucets 7

Type:	Usage:	Aerator Yes/No	Flow rate (gpm)
1 Pre-rinse spray nozzle	Pre-rinse spray nozzle used to rinse dishes. Fixture was replaced with a new nozzle (1 gpm).	NA	3
2 Food preparation	Faucet in food preparation area. Faucet flow rate is drastically different between hot and cold.	Yes (loose)	7 (hot) 2 (cold)
3 Handwashing sink	Handwashing	Yes	2
4 Pot washing	Faucet located in the pot washing area.	Yes	2
5 Pot washing	Faucet located in the pot washing area.	Yes	2
6 Food preparation	Another faucet located in the food preparation; this faucet is never used.	Yes	2
7 Mop sink	Spigot with a hose attached.	NA	5

There is a 3 faucet sink located in the school auditorium (right outside the kitchen), where children wash their hands before eating. Each of the three faucets has a flow rate of 6 gpm, and none of these faucets have aerators.

Ice machine Brand No ice machine

Is a garbage disposal used? Yes No

If so, number of minutes used per day 7-10 minutes, as needed

Is there a water softener? Yes No If so, list the Brand Culligan

Model number 8561

Water softeners are being phased out of the Gallup-McKinley County Schools, although there is still one here at Roosevelt Elementary.

Does the water softener run on a timer? or on measured flow?

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Describe cleaning methods and equipment (for floors, etc.) Mop & bucket.

Discuss any other kitchen water use None

4. Restroom water use

Kitchen restroom

Sinks: Number: 1 Aerator?: Yes Flow rate: 2 gpm

Toilets: Gravity tank: Number 1 Volumes 1.6 gpf

Girl's restroom

Sinks: Number: 3 Aerators?: Yes Flow rate: 1 gpm; 2 gpm; 1 gpm

Toilets: Flush valve: Number 4 Volumes 3.5 gpf

Second Girl's restroom

Sinks: Number: 1 Aerator?: No Flow rate: 0.5 gpm

Toilets: Flush valve: Number 3 Volumes 3.5 gpf

Boy's restroom

Sinks: Number: 3 Aerator?: Yes Flow rate: 0.5 gpm; 1 gpm; 1 gpm (push-valve/auto-off)

Toilets: Flush valve: Number 2 Volumes 3.5 gpf

Urinals: Number 5 Volumes 1.0 gpf

Second Boy's restroom

Sinks: Number: 1 Aerator?: No Flow rate: 2 gpm

Toilets: Flush valve: Number 2 Volumes 3.5 gpf

Urinals: Number 2 Volumes 3.0 gpf

Teacher's Lounge restroom

Sinks: Number: 1 Aerator?: Yes Flow rate: 2 gpm

Toilets: Gravity tank: Number 1 Volumes 3.5 gpf

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Staff restroom

Sinks: Number: 1 Aerator?: Yes Flow rate: 2 gpm

Toilets: Flush valve: Number 1 Volumes 3.5 gpf

Have any toilets or urinals been retrofitted with lower flow models? Yes No

How many faucets have aerators installed? None All Number 9 of 11

5. Laundry water use

Are any clothes washing machines used on-site? Yes No

If so, list the type, brand, model number, and capacity for each:

Brand:	Location:	Model number:	Capacity:
<u>Roper</u>	<u>Kitchen</u>	<u>RAS8245EW1</u>	<u>Unknown</u>
<u>Frigidaire</u>	<u>Shower room</u>	<u>GLWS1339CS1</u>	<u>Unknown</u>

Number of laundry loads washed daily? 1 (aprons & towels)

Is the rinse water reused? Yes No

6. Cooling water use

Cooling Units:	Number	Size
<u>Evaporative cooler</u>	<u>1</u>	<u>Unsure</u>

If evaporative cooling is used, do the cooling units recirculate water? Yes No

How much of the year is the cooler used? 3-4 months How long each day? 3 hours

This evaporative cooler is dedicated to the kitchen, and it doesn't work very well (the back door is often propped open for air flow).

7. Outdoor water use

Area of irrigated landscape: None

Describe any other outdoor water uses. None

8. Other uses, leaks, and lost water

Method of floor mat cleaning: There is one mat in the kitchen, and it is swept off. The kitchen staff would like to get a few more mats, but will clean them in the same way.

If sprayed, estimate the number of minutes per day. Not applicable

Describe any janitor closet water use. Mop/utility closet has a faucet with a flow rate of 3 gpm. This faucet leaks when it is turned on, and has a hose taped at its connection.

List any quantifiable leaks and estimated rates and locations. See above

Are there any showers on-site? Yes No If so:

Number 1 Use frequency Rarely (only in case of accident) Estimated flow 3 gpm

Describe any other water uses. The staff room has a hand/dishwashing sink with a 3 gpm flow rate and an aerator. The shower room also has a sink with a 3 gpm flow rate and an aerator.

City of Gallup Commercial Water Audit Questionnaire

1. General information

Business name Genero's Restaurant Phone 505-863-6761

Contact person name and title Gigi Garcia, Owner; Bailey Padilla, Operations Manager

Physical address 600 W. Hill Ave., Gallup, NM 87301-6568

Mailing address (if different) P.O. Box 1100, Gallup, NM 87305-1100

2. Background information

Restaurant water account number 51995-5628

Is all of the water billed to this account used by this restaurant? Yes No

Total water billed in 2007 (gallons)	Jan	<u>91,219</u>	Apr	<u>24,460</u>	Jul	<u>24,460</u>	Oct	<u>23,562</u>
	Feb	<u>106,104</u>	May	<u>19,897</u>	Aug	<u>6,807</u>	Nov	<u>26,404</u>
	Mar	<u>43,459</u>	Jun	<u>31,117</u>	Sep	<u>23,562</u>	Dec	<u>26,330</u>

Meter: Size 5/8-inch

Number of employees 22 Number of shifts per day 2

Number of meals served per day 500 on weekdays; 700-1,000 on weekend days

Days and hours of operation 10:30 a.m.-8:00 p.m., Tuesday-Saturday

Date the facility was built Restaurant was established in 1975, but the building was here before then.

Size of the facility (square footage) Unknown

Date of last remodel July 2007 (expanded the seating, replaced kitchen fixtures, finished full basement, plumbing and wiring upgrades).

Description of any existing water conservation measures New dishwasher was recently installed; replaced leaking water-cooled ice machine. Business has doubled since 2006.

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3. Kitchen water use

Dishwasher description and use (number of loads washed each day) EcoLab ES-2000, installed January 2008

Is the dishwasher rinse water reused? Yes No

Number of kitchen faucets 4

Type:	Usage:	Aerator Yes/No	Flow rate (gpm)
1 Water tap	Push back drink tap used to fill pitchers and cups; located on the drink station.	NA	2
2 Handwashing sink	Handwashing	Yes	2
3 Food preparation	Faucet located in the food preparation area.	No	6.5
4 Dishwashing sink	Three compartment sink used for rinsing dishes. A pre-rinse spray nozzle will be installed at this sink next week (low flow nozzle left to install).	Yes	2.5

Ice machine Brand Manitowoc (two ice machines) Model number B400; B570

Pound capacity ~400 lbs; larger

Cooling method (water or air?) Air

Is a garbage disposal used? Yes No

Is there a water softener? Yes No

Describe cleaning methods and equipment (for floors, etc.) Mop & bucket

Discuss any other kitchen water use None

4. Restroom water use

Toilets: Gravity tank: Number 1 Volumes 1.6 gpf (front restroom)

Gravity tank: Number 1 Volumes 3.5 gpf (utility restroom)

Urinals: Number 0 Volumes _____

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Sinks: Number 1 Aerator?: Yes Volumes 2.5 gpm (front restroom)

Number 1 Aerator?: Yes Volumes 2 gpm (utility restroom)

How many faucets have aerators installed? None All Number _____

5. Laundry water use

Are any clothes washing machines used on-site? Yes No

6. Cooling water use

Cooling Units:	Number	Size
Refrigerated air	<u>3</u>	<u>Two 5 ton units; third unit is smaller</u>

How much of the year is the cooler used? 4 months How long each day? During open hours

The cooling system is new, and was installed in July 2007.

7. Outdoor water use

Area of irrigated landscape: None

The City cares for surrounding trees, and restaurant staff handwaters flowers during the summer. There is one outdoor faucet (5 gpm), but it is not used except for the occasional washing of kitchen mats.

Is any water used to clean sidewalks/hose down parking lots? Yes No

Describe any other outdoor water uses. None

8. Other uses, leaks, and lost water

Method of floor mat cleaning: Mats are hosed down at the car wash every Monday.

Describe any wait station water use. None

Describe any janitor closet water use. None

List any quantifiable leaks and estimated rates and locations. None

Are there any showers on-site? Yes No

Describe any other water uses. None

City of Gallup Commercial Water Audit Questionnaire

1. General information

Business name Golden Corral #698 Phone 505-863-3335

Contact person name and title Colleen Palmer, Manager

Physical address 600 N. 11th Street, Gallup, NM 87301-5319

Mailing address (if different) Ramon Rogers

P.O. Box 2000, Wayzata, MN 55391-0000

2. Background information

Restaurant water account number 40349-23042

Is all of the water billed to this account used by this restaurant? Yes No

Total water billed in 2007 (gallons)	Jan	<u>418,132</u>	Apr	<u>353,804</u>	Jul	<u>376,244</u>	Oct	<u>395,692</u>
	Feb	<u>259,556</u>	May	<u>317,152</u>	Aug	<u>418,132</u>	Nov	<u>408,408</u>
	Mar	<u>304,436</u>	Jun	<u>440,572</u>	Sep	<u>415,888</u>	Dec	<u>401,676</u>

Meter: Size 2-inch

Number of employees 48 Number of shifts per day 2

Number of meals served per day 600 weekdays; 1,500 weekend days

Days and hours of operation Monday-Thursday 10:45 a.m.-9:00 p.m.; Saturday 7:30 a.m.-10:00 p.m.; Sunday 7:30 a.m.-9:00 p.m.

Date the facility was built Unsure Size of the facility (square footage) Unsure

Restaurant seating capacity 405

Date of last remodel June 2007 (ceiling remodel, salad area, tiling in back)

Description of any existing water conservation measures None

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3. Kitchen water use

Dishwasher description and use (number of loads washed each day) Hobart C44A (serviced by EcoLab). Dishwashing loads are washed between 10:30 a.m. and 11:00 p.m., at an approximate rate of 30 per hour.

Is the dishwasher rinse water reused? Yes No

Number of kitchen faucets 20

	Type:	Usage:	Aerator Yes/No	Flow rate (gpm)
1	Bakery preparation	Sink located in the bakery preparation area.	No	4
2	Handwashing sink	Handwashing sink located in the bakery area.	Yes	2
3	Dishwashing sink	Dishwashing	No	6
4	Dishwashing sink	Dishwashing. Only the hot water is operational at this faucet.	No	4
5	Dishwashing sink	Dishwashing. Only the hot water is operational at this faucet, and the faucet has a 0.5 gpm leak (it's effectively running).	No	1
6	Handwashing sink	Handwashing sink located in the dishwashing area.	Yes	2
7	Pre-rinse spray nozzle	Pre-rinse spray nozzle used to rinse dishes. Fixture was replaced with a new nozzle (1 gpm).	NA	3.25
8	Pot washing	Pot washing	No	12
9	Pre-rinse spray nozzle	Broken pre-rinse spray nozzle. Fixture was replaced with a new nozzle (1 gpm).	NA	broken
10	Food preparation	Faucet located in the food preparation area.	Yes	3
11	Handwashing sink	Handwashing sink operated by foot pedals. One of the foot pedals is missing, and the faucet is difficult to turn off.	Yes	3.5

City of Gallup
Commercial Water Audit Questionnaire

Type:	Usage:	Aerator Yes/No	Flow rate (gpm)
12 Handwashing sink	Handwashing sink operated by foot pedals. One of the foot pedals is missing, but the faucet works.	Yes	2
13 Vegetable preparation	Used to wash vegetables.	No	5
14 Handwashing sink	Handwashing sink located in the vegetable preparation area.	Yes	3
15 Center wait station handwashing sink	Handwashing sink located at the center wait station.	No	1.5
16 Side wait station handwashing sink	Handwashing sink located at one of the side wait stations.	Yes	2
17 Side wait station handwashing sink	Handwashing sink located at one of the side wait stations.	Yes	2
18 Meat sink	Used to thaw meat.	No	6
19 Handwashing sink	Handwashing sink located in the meat room.	No	3
20 Mop sink	Spigot with a hose attached; used to fill buckets.	NA	7

Ice machine Brand Hoshizaki (two ice machines)

Model numbers KM-1300SAF3; KM-900MRF

Pound capacity 1,129 lb/24 hrs; 790 lb/24 hrs Cooling method (water or air?) Air (both)

Is a garbage disposal used? Yes No

Is there a water softener? Yes No If so, list the Brand Culligan

Model number HiFlo3

Does the water softener run on a *timer*? or on *measured flow*?

Describe cleaning methods and equipment (for floors, etc.) Water is poured from a bucket onto the floor, the floors are scrubbed, and then squeegeed off. Floors in the front area and back hallway are mopped.

Discuss any other kitchen water use None

4. Restroom water use

Toilets: *Flush valve:* Number 2 Volumes 1.6 gpf (men's restroom)

Flush valve: Number 5 Volumes 1.6 gpf (women's restroom; 1 out of order)

Urinals: Number 3 Volumes 1 gpf (men's restroom)

Have any toilets or urinals been retrofitted with lower flow models? Yes No

Sinks: Number 2 *Aerator?:* Yes; no Volumes 1.5 gpm; 2 gpm (men's restroom)

Number 2 *Aerator?:* Yes Volumes 2 gpm (women's restroom)

How many faucets have aerators installed? None All Number 3 of 4

5. Laundry water use

Are any clothes washing machines used on-site? Yes No

6. Cooling water use

Cooling Units:	Number	Size
Refrigerated air	<u>Unsure</u>	<u>Unsure</u>

How much of the year is the cooler used? 6 months

This restaurant has refrigerated cooling, but Colleen is not sure of the number or size of the cooling units. The system is automated, so comes on and off as needed.

7. Outdoor water use

Area of irrigated landscape: None

Landscape materials:

Plant type Mixed bushes Percentage of total area _____

Condition of landscape (maintained, mulched, abandoned, etc.) Unsure of the care the landscaping receives.

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Is any water used to clean sidewalks/hose down parking lots? Yes No

Describe any other outdoor water uses. There are two outdoor wall hydrants, and the one located on the west side of the building is leaking at a rate of 39 gpd.

8. Other uses, leaks, and lost water

Method of floor mat cleaning: Not applicable (no mats).

Describe any wait station water use. This information is listed along with the kitchen faucets.

Describe any janitor closet water use. None

List any quantifiable leaks and estimated rates and locations. There are three significant leaks at this restaurant: (1) the leaking hose under the steam table in the bakery area (19 gpd), (2) one of the faucets in the dishwashing area (720 gpd), and (3) one of the outdoor wall hydrants (39 gpd). These leaks total a loss of 778 gallons per day, or almost 300,000 gallons per year.

Are there any showers on-site? Yes No

Describe any other water uses. None

City of Gallup Commercial Water Audit Questionnaire

1. General information

Business name McDonald's Northside Phone 505-722-0002

Contact person name and title John Begay, Manager

Physical address 700 N. Hwy 491, Gallup, NM 87301-5337

Mailing address (if different) Martin and Myra Delariva

P.O. Box 2139, Gallup, NM 87305-2139

2. Background information

Restaurant water account number 17343-15532

Is all of the water billed to this account used by this restaurant? Yes No

Total water billed in 2007 (gallons)	Jan	<u>69,639</u>	Apr	<u>67,320</u>	Jul	<u>122,672</u>	Oct	<u>97,240</u>
	Feb	<u>91,929</u>	May	<u>83,028</u>	Aug	<u>115,192</u>	Nov	<u>96,492</u>
	Mar	<u>112,948</u>	Jun	<u>105,468</u>	Sep	<u>105,468</u>	Dec	<u>95,744</u>

Meter: Size 2-inch

Number of employees 45 Number of shifts per day 4

Number of meals served per day Approximately 1,500

Days and hours of operation 24 hours/7 days per week

Date the facility was built ~1992 Size of the facility (square footage) Unsure

Restaurant seating capacity ~100 Date of last remodel None

Description of any existing water conservation measures None

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3. Kitchen water use

Dishwasher description and use (number of loads washed each day) There is no dishwasher.

Number of kitchen faucets 3

Type:	Usage:	Aerator Yes/No	Flow rate (gpm)
1 <u>Handwashing sink</u>	<u>Handwashing</u>	<u>Yes</u>	<u>1.5</u>
2 <u>Pre-rinse spray nozzle</u>	<u>Pre-rinse spray nozzle used for washing the few dishes. Fixture was replaced with a new nozzle (1 gpm).</u>	<u>NA</u>	<u>3</u>
3 <u>Mop sink</u>	<u>Spigot with a hose attached; used for filling buckets.</u>	<u>NA</u>	<u>10</u>

Ice machine Brand Hoshizaki Model number Unsure

Pound capacity Unsure Cooling method (water or air?) Unsure

Is a garbage disposal used? Yes No If so, number of minutes used per day Unsure

Is there a water softener? Yes No If so, list the Brand Culligan

Model number 4429-29

Does the water softener run on a *timer*? or on *measured flow*?

Describe cleaning methods and equipment (for floors, etc.) Mop & bucket.

Discuss any other kitchen water use None

4. Restroom water use

Toilets: *Flush valve:* Number 2 Volumes 3.5 gpf (women's restroom)

Flush valve: Number 1 Volumes 1.6 gpf (men's restroom)

Urinals: Number 1 Volumes 3 gpf (men's restroom)

Have any toilets or urinals been retrofitted with lower flow models? Yes No

Sinks: Number 2 *Aerator?:* Yes Volumes 2 gpm (women's restroom); both faucets are leaking (10 gpd; 15 gpd).

Number 2 *Aerator?:* Yes Volumes 2 gpm (men's restroom)

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How many faucets have aerators installed? None All Number _____

5. Laundry water use

Are any clothes washing machines used on-site? Yes No

If so, list the type, brand, model number, and capacity for each:

Brand:	Model number:	Capacity:
<u>Maytag</u>	<u>MTW5620TQ1</u>	<u>Unsure</u>

Number of laundry loads washed daily? 4 Is the rinse water reused? Yes No

6. Cooling water use

Cooling Units:	Number	Size
<u>Refrigerated air</u>	<u>Unsure</u>	<u>Unsure</u>

How much of the year is the cooler used? 6 months How long each day? Unsure

7. Outdoor water use

Area of irrigated landscape: None

This restaurant has a few bushes, and the landscaping is semi-maintained, but is not watered. There is one outdoor wall hydrant, which is in good condition (does not leak).

Is any water used to clean sidewalks/hose down parking lots? Yes No

Describe any other outdoor water uses. None

8. Other uses, leaks, and lost water

Method of floor mat cleaning: There are only a few mats, and they are sprayed with a hose outside.

If sprayed, estimate the number of minutes per day. Unsure

Describe any wait station water use. None

Describe any janitor closet water use. The mop closet has two faucets with threaded fixtures (hose hook-ups), each with 5 gpm flow rates and no aerators.

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Commercial Water Audit Questionnaire

List any quantifiable leaks and estimated rates and locations. Both faucets in the women's restroom leak, at rates of 10 and 15 gpd.

Are there any showers on-site? Yes No

Describe any other water uses. None

City of Gallup Commercial Water Audit Questionnaire

1. General information

Business name Wendy's Phone 505-726-1071

Contact person name and title Katherine Yepes, Manager

Physical address 985 N. Hwy 491, Gallup, NM 87301-5340

Mailing address (if different) Tim Hogsett

4810 Hardware Dr. NE, Albuquerque, NM 87109-2013

2. Background information

Restaurant water account number 14667-21286

Is all of the water billed to this account used by this restaurant? Yes No

Total water billed in 2007 (gallons)	Jan	<u>54,380</u>	Apr	<u>52,360</u>	Jul	<u>63,580</u>	Oct	<u>47,872</u>
	Feb	<u>63,804</u>	May	<u>47,124</u>	Aug	<u>41,140</u>	Nov	<u>45,628</u>
	Mar	<u>46,376</u>	Jun	<u>60,588</u>	Sep	<u>66,572</u>	Dec	<u>47,872</u>

Meter: Size 2-inch

Number of employees 25 Number of shifts per day 3-4

Number of meals served per day 3,800 on weekdays; about double on weekend days

Days and hours of operation 10 a.m.-1 a.m., 7 days per week

Date the facility was built 1995 Size of the facility (square footage) Unsure

Restaurant seating capacity 94 Date of last remodel None

Description of any existing water conservation measures Dishwater is used for 4 to 5 hours at a time before the sink is drained and refilled.

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Commercial Water Audit Questionnaire

3. Kitchen water use

Dishwasher description and use (number of loads washed each day) Dishwater is left circulating in the dishwashing sink, and is changed every 4 to 5 hours.

Is the dishwasher rinse water reused? Yes No

Number of kitchen faucets 5

Type:	Usage:	Aerator Yes/No	Flow rate (gpm)
1 <u>Handwashing sink</u>	<u>Handwashing</u>	<u>Yes</u>	<u>1</u>
2 <u>Mop sink</u>	<u>Spigot with a hose attached.</u>	<u>No</u>	<u>5</u>
3 <u>Dishwashing sink</u>	<u>Dishwashing</u>	<u>Yes</u>	<u>6</u>
4 <u>Pre-rinse spray nozzle</u>	<u>Pre-rinse spray nozzle used for rinsing dishes. Fixture was replaced with a new nozzle (1 gpm).</u>	<u>NA</u>	<u>3</u>
5 <u>Food preparation</u>	<u>Faucet located in the salad preparation area.</u>	<u>Yes</u>	<u>8</u>

Ice machine Brand Hoshizaki Model number KM-2000SRF3

Pound capacity 1,760 lb/24 hrs Cooling method (water or air?) Air

Is a garbage disposal used? Yes No

Is there a water softener? Yes No If so, list the Brand Culligan

Model number HiFlo3

Does the water softener run on a *timer*? or on *measured flow*?

Describe cleaning methods and equipment (for floors, etc.) Wet vac.

Discuss any other kitchen water use None

4. Restroom water use

Toilets: *Flush valve:* Number 2 Volumes 1.6 gpf (women's restroom)

Flush valve: Number 1 Volumes 3.5 gpf (men's restroom)

Urinals: Number 1 Volumes 1 gpf (men's restroom)

City of Gallup
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Have any toilets or urinals been retrofitted with lower flow models? Yes No

If so, how many? 2 (women's restroom) When? Unsure

Sinks: Number 1 Aerator?: Yes Volumes 2 gpm (women's restroom)

Number 1 Aerator?: No Volumes 6 gpm (men's restroom)

How many faucets have aerators installed? None All Number 1 of 2

5. Laundry water use

Are any clothes washing machines used on-site? Yes No

6. Cooling water use

Cooling Units:	Number	Size
Evaporative cooler	<u>2</u>	<u>Unsure</u>

If evaporative cooling is used, do the cooling units recirculate water? Yes No

How much of the year is the cooler used? 4-5 months How long each day? Most of the day

They may switch over to refrigerated air cooling in the future.

7. Outdoor water use

Area of irrigated landscape: None

There is one outdoor wall hydrant, and it is in good condition (no leaks).

Is any water used to clean sidewalks/hose down parking lots? Yes No

Describe any other outdoor water uses. None

8. Other uses, leaks, and lost water

Method of floor mat cleaning: There is one mat used in front of the ice machine, and it is mopped daily. The carpet company also cleans it one to two times per month.

Describe any wait station water use. None

Describe any janitor closet water use. None

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List any quantifiable leaks and estimated rates and locations. None

Are there any showers on-site? Yes No

Describe any other water uses. None

City of Gallup Commercial Water Audit Questionnaire

1. General information

Business name Don Diego's Phone 505-722-5517

Contact person name and title Sandy Chavez, Owner

Physical address 801 W. Hwy 66, Gallup, NM 87301-6827

Mailing address (if different) same as above

2. Background information

Restaurant water account number 2639-2334

Is all of the water billed to this account used by this restaurant? Yes No

Total water billed in 2007 (gallons)

Jan	<u>67,096</u>	Apr	<u>56,698</u>	Jul	<u>56,624</u>	Oct	<u>54,155</u>
Feb	<u>72,706</u>	May	<u>49,592</u>	Aug	<u>65,899</u>	Nov	<u>55,352</u>
Mar	<u>53,258</u>	Jun	<u>66,871</u>	Sep	<u>76,221</u>	Dec	<u>63,782</u>

Meter: Size 1-inch

Number of employees 26 Number of shifts per day 3

Number of meals served per day 350 on weekdays; 1,000 on weekend days

Days and hours of operation Monday-Saturday, 8 a.m.-9 p.m.

Date the facility was built This business opened in 1986, but the building was in place at least 20 years before then.

Size of the facility (square footage) Unsure

Restaurant seating capacity 150 Date of last remodel None

Description of any existing water conservation measures They only serve water on request.

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Commercial Water Audit Questionnaire

3. Kitchen water use

Dishwasher description and use (number of loads washed each day) Proclean model#5AG;
approximately 160 loads are washed each day.

Is the dishwasher rinse water reused? Yes No

Number of kitchen faucets 10

Type:	Usage:	Aerator Yes/No	Flow rate (gpm)
1 Bar area faucet	Faucet in the bar area; has a 10 gpd drip.	No	6
2 Food preparation	Sink in the food preparation area.	No	3.5
3 Food preparation	Double sink in the food preparation area.	No	4
4 Handwashing sink	Handwashing	No	2
5 Food preparation	Double sink in the food preparation area.	No	4
6 Dishwashing sink	Triple sink used to wash dishes.	No	6
7 Pre-rinse spray nozzle	Pre-rinse spray nozzle used to rinse dishes. Fixture was replaced with a new nozzle (1.5 gpm).	NA	3.5
8 Food preparation	Used to fill the steam trays; located on the front line. This faucet has a 10 gpd drip.	No	1.5
9 Drink tap	Push back drink tap; located at the drink station.	NA	0.5
10 Drink tap	Push back drink tap; located at the drink station.	NA	0.5

Ice machine Brand Hoshizaki

Model number KM-1200MRE

Pound capacity 1,125 lb/24 hrs

Cooling method (water or air?) Air

Is a garbage disposal used? Yes No If so, number of minutes used per day ~1 hour

Is there a water softener? Yes No

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Describe cleaning methods and equipment (for floors, etc.) Mop & bucket.

Discuss any other kitchen water use None

4. Restroom water use

Toilets: Gravity tank: Number 1 Volumes 3.5 gpf (employee restroom)

Gravity tank: Number 2 Volumes 1.6 gpf; 3.5 gpf (women's restroom)

Gravity tank: Number 1 Volumes 3.5 gpf (men's restroom)

Gravity tank: Number 1 Volumes 3.5 gpf (second women's restroom)

Gravity tank: Number 1 Volumes 3.5 gpf (second men's restroom)

Urinals: Number 1 Volumes 1 gpf (men's restroom)

Number 1 Volumes 1 gpf (second men's restroom)

Have any toilets or urinals been retrofitted with lower flow models? Yes No

If so, how many? 1 When? Unsure

Sinks: Number 1 Aerator?: No Volumes 4 gpm (employee restroom)

Number 2 Aerator?: No; yes Volumes 3 gpm; 1 gpm (women's restroom)

Number 2 Aerator?: No; yes Volumes 4 gpm; 1 gpm (men's restroom)

Number 1 Aerator?: Yes Volumes 2.0 gpm (second women's restroom)

Number 1 Aerator?: Yes Volumes 2.5 gpm (second men's restroom)

How many faucets have aerators installed? None All Number 4 of 7

5. Laundry water use

Are any clothes washing machines used on-site? Yes No

6. Cooling water use

Cooling Units: Number Size

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Evaporative cooler	<u>3</u>	<u>Unsure</u>
Refrigerated air	<u>1</u>	<u>Large (AeroCool Trophy Model TD/TH 6800)</u>

If evaporative cooling is used, do the cooling units recirculate water? Yes No

How much of the year is the cooler used? Apr-Sept/Oct How long each day? All day

7. Outdoor water use

Area of irrigated landscape: None

Condition of landscape (maintained, mulched, abandoned, etc.) Landscaping includes juniper bushes that are trimmed, but not watered.

Is any water used to clean sidewalks/hose down parking lots? Yes No

Describe any other outdoor water uses. None

8. Other uses, leaks, and lost water

Method of floor mat cleaning: Not applicable (there are no mats).

Describe any wait station water use. Drink station faucets are included above.

Describe any janitor closet water use. There is a handwashing sink located in the janitor's closet with a 2 gpm flow rate and no aerator.

List any quantifiable leaks and estimated rates and locations. The steam table and bar area faucets each have 10 gpd leaks.

Are there any showers on-site? Yes No

Describe any other water uses. None

City of Gallup Commercial Water Audit Questionnaire

1. General information

Business name El Sombrero Phone 505-863-4554

Contact person name and title Adrian Landavazo

Physical address 1201 W. Hwy 66, Gallup, NM 87301-6824

Mailing address (if different) same as above

2. Background information

Restaurant water account number 3067-2734

Is all of the water billed to this account used by this restaurant? Yes No

Total water billed in 2007 (gallons)	Jan	<u>60,588</u>	Apr	<u>65,226</u>	Jul	<u>99,858</u>	Oct	<u>56,698</u>
	Feb	<u>98,736</u>	May	<u>61,261</u>	Aug	<u>106,440</u>	Nov	<u>88,264</u>
	Mar	<u>61,261</u>	Jun	<u>89,760</u>	Sep	<u>147,805</u>	Dec	<u>105,468</u>

Meter: Size 1-inch

Number of employees 40 Number of shifts per day 2

Number of meals served per day 2,400 on weekdays; 3,400 on weekend days

Days and hours of operation 9:00 a.m.-10:30 p.m. daily

Date the facility was built 1981 Size of the facility (square footage) Unsure

Restaurant seating capacity 85

Date of last remodel 2002 (replaced a few toilets, etc.)

Description of any existing water conservation measures None

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3. Kitchen water use

Dishwasher description and use (number of loads washed each day) The restaurant leases an EcoLab Typhoon and 400-500 loads are washed each day. They put 5 years of wear on a dishwasher in 6 months; the last dishwasher only lasted 8 months.

Is the dishwasher rinse water reused? Yes No

Number of kitchen faucets 10

Type:	Usage:	Aerator Yes/No	Flow rate (gpm)
1 Drink area	Faucet located in the drink area, on the front line.	No	5
2 Drink tap	Push back drink tap; located on the front line.	NA	1.5
3 Dishwashing	Faucet located in the dishwashing area.	No	6
4 Pre-rinse spray nozzle	Pre-rinse spray nozzle used to rinse dishes. Fixture was replaced with a new nozzle (1.5 gpm).	NA	2
5 Food preparation	Triple sink with two faucets, located in the food preparation area. This faucet has a 5 gpd drip.	No	7
6 Food preparation	Triple sink with two faucets, located in the food preparation area. This faucet has two 10 gpd drips (from the faucet outlet and at the faucet bib connection).	No	7
7 Handwashing sink	Handwashing	Yes	0.5
8 Food preparation	Faucet located in the food preparation area. This faucet has a 2 gpm drip.	Yes	7
9 Handwashing sink	Handwashing	Yes	2
10 Mop sink	Mop sink in the laundry/utility area.	Yes	7

Ice machine Brand Scotsman (crushed ice)

Model number NMEC50AE-1A

Pound capacity Unsure

Cooling method (water or air?) Water

There is a second ice machine, without any identification (brand name or model information).

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Is a garbage disposal used? Yes No Number of minutes used per day ~ 60 minutes

Is there a water softener? Yes No

A water softener cannot be used with the existing steamers.

Describe cleaning methods and equipment (for floors, etc.) Mop & bucket

Discuss any other kitchen water use None

4. Restroom water use

Toilets: *Flush valve:* Number 1 Volumes 3.5 gpf (employee restroom)

Flush valve: Number 1 Volumes 3.5 gpf (men's restroom)

Flush valve: Number 1 Volumes 3.5 gpf (women's restroom)

Urinals: Number 1 Volumes 1 gpf (automatic flush/electric eye; men's restroom)

Have any toilets or urinals been retrofitted with lower flow models? Yes No

Sinks: Number 1 *Aerator?:* Yes Volumes 2.5 gpm (employee restroom)

Number 1 *Aerator?:* Yes Volumes 2.5 gpm; 1 gpm (men's restroom)

Number 1 *Aerator?:* Yes Volumes 1 gpm (women's restroom)

This is a push on, auto-off type faucet

How many faucets have aerators installed? None All Number _____

5. Laundry water use

Are any clothes washing machines used on-site? Yes No

If so, list the type, brand, model number, and capacity for each:

Brand:	Model number:	Capacity:
<u>Wascomat Junior Double Loader (front loading)</u>	<u>4714525-04</u>	<u>Unsure</u>

Number of laundry loads washed daily? 15 Is the rinse water reused? Yes No

6. Cooling water use

Cooling Units:	Number	Size
Refrigerated air	<u>2</u>	<u>Unsure</u>

The existing refrigerated air units are original to the building (1981), and will be replaced soon.

If evaporative cooling is used, do the cooling units recirculate water? Yes No

How much of the year is the cooler used? 8-9 months How long each day? Off & on as needed

7. Outdoor water use

Area of irrigated landscape: 3,500 square feet

Landscape materials:

Plant type Grass Percentage of total area 100

Plant type Shrubs and trees Percentage of total area NA

Watering/irrigation system description The lawn sprinklers are on a timer, and there is a drip system for the shrubs and trees. The grass is watered for 5 to 10 minutes every 3 to 4 hours (so 4 times in 24 hours), 7 days per week, between April and October. Holiday Nursery maintains the landscaping.

Condition of landscape (maintained, mulched, abandoned, etc.) Maintained

Is any water used to clean sidewalks/hose down parking lots? Yes No

A high pressure hose is used twice a year to remove grease from these surfaces.

Describe any other outdoor water uses. None

8. Other uses, leaks, and lost water

Method of floor mat cleaning: There is one mat, and it is run through the dishwasher every evening.

Describe any wait station water use. None

Describe any janitor closet water use. See faucet section above

List any quantifiable leaks and estimated rates and locations. Both faucets at the triple sink in the food preparation area are leaking, in addition to a third faucet in the food preparation area. These leaks total 27 gpd, or almost 10,000 gallons per year.

Are there any showers on-site? Yes No

Describe any other water uses. None

City of Gallup Commercial Water Audit Questionnaire

1. General information

Business name Pizza Hut Phone 505-722-7731

Contact person name and title Don Clemenson, Area Coach

Physical address 1510 E. Hwy 66, Gallup, NM 87301-4934

Mailing address (if different) Kent Contreras, Director of Operations

5801 Wyoming Blvd. NE, Suite B, Albuquerque, NM 87109-3110

2. Background information

Restaurant water account number 36081-9908

Is all of the water billed to this account used by this restaurant? Yes No

Total water billed in 2007 (gallons)	Jan	<u>0</u>	Apr	<u>30,668</u>	Jul	<u>42,636</u>	Oct	<u>38,447</u>
	Feb	<u>0</u>	May	<u>46,376</u>	Aug	<u>60,588</u>	Nov	<u>27,377</u>
	Mar	<u>24,908</u>	Jun	<u>82,280</u>	Sep	<u>45,628</u>	Dec	<u>65,076</u>

Meter: Size 1.5-inch

Number of employees 35 Number of shifts per day 2

Number of meals served per day 350 on weekdays; 700 on weekend days

Days and hours of operation Sunday-Thursday 11 a.m.-10 p.m.; Friday-Saturday
11 a.m.-11 p.m.

Date the facility was built Building is at least 25 years old

Size of the facility (square footage) 3,200 ft²

Restaurant seating capacity 86 Date of last remodel 2006 (dining room only)

Description of any existing water conservation measures None

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3. Kitchen water use

Dishwasher description and use (number of loads washed each day) Autochlor 630-5503; an average of 724 loads per week were washed in February.

Is the dishwasher rinse water reused? Yes No

Number of kitchen faucets 5

Type:	Usage:	Aerator Yes/No	Flow rate (gpm)
1 Mop sink	Spigot with a hose attached; used to fill buckets.	NA	8
2 Handwashing sink	Handwashing	Yes	3
3 Pre-rinse spray nozzle	Pre-rinse spray nozzle used to rinse dishes. Fixture was replaced with a new nozzle (1.5 gpm).	NA	2.5
4 Dishwashing triple sink	Triple sink used for dishwashing.	No	7
5 Dishwashing sink	One basin sink used for food preparation/dishwashing.	No	4

Ice machine Brand Manitowoc

Model number SY0604A

Pound capacity 650 lb/24 hrs

Cooling method (water or air?) Air

Is a garbage disposal used? Yes No

Is there a water softener? Yes No

Describe cleaning methods and equipment (for floors, etc.) Mop & bucket; also scrubbed once per week.

Discuss any other kitchen water use None

4. Restroom water use

Toilets: Gravity tank: Number 1 Volumes 3.5 gpf (women's restroom)

Gravity tank: Number 1 Volumes 3.5 gpf (men's restroom)

Urinals: Number 1 Volumes 1 gpf (men's restroom)

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Have any toilets or urinals been retrofitted with lower flow models? Yes No

Sinks: Number 1 Aerator?: No Volumes 3 gpm (men's restroom)

Number 1 Aerator?: Yes Volumes 2 gpm (women's restroom)

How many faucets have aerators installed? None All Number 1 of 2

5. Laundry water use

Are any clothes washing machines used on-site? Yes No

6. Cooling water use

Cooling Units:	Number	Size
Refrigerated air	<u>2</u>	<u>3500 ft² each</u>

How much of the year is the cooler used? 4-5 months How long each day? Most of the day

7. Outdoor water use

Area of irrigated landscape: None

Is any water used to clean sidewalks/hose down parking lots? Yes No

Pizza Hut stopped hosing down their parking lot 2 years ago. They now have a service that comes to vacuum the parking lot about every 4 weeks.

Describe any other outdoor water uses. None

8. Other uses, leaks, and lost water

Method of floor mat cleaning: Mats are hosed down out back

If sprayed, estimate the number of minutes per day. About 5 minutes per day

Describe any wait station water use. None

Describe any janitor closet water use. Mop sink discussed above

List any quantifiable leaks and estimated rates and locations. None

Are there any showers on-site? Yes No

Describe any other water uses. None

City of Gallup Commercial Water Audit Questionnaire

1. General information

Business name Sonic Drive-In Phone 505-863-2100

Contact person name and title Abner Reed, Supervisor

Physical address 1001 N. Hwy 491, Gallup, NM 87301-5355

Mailing address (if different) same as above

2. Background information

Restaurant water account number 17469-15646

Is all of the water billed to this account used by this restaurant? Yes No

Total water billed in 2007 (gallons)

Jan	<u>23,712</u>	Apr	<u>18,476</u>	Jul	<u>34,483</u>	Oct	<u>32,613</u>
Feb	<u>26,479</u>	May	<u>25,133</u>	Aug	<u>32,463</u>	Nov	<u>31,865</u>
Mar	<u>11,594</u>	Jun	<u>35,904</u>	Sep	<u>34,034</u>	Dec	<u>28,499</u>

Meter: Size 5/8-inch

Number of employees 15 Number of shifts per day 2

Number of meals served per day 500-700 on weekdays; 1,000 on weekend days

Days and hours of operation Sunday-Thursday 6 a.m.-12 a.m.; Friday-Saturday 6 a.m.-1 a.m.

Date the facility was built July 7, 1992 Size of the facility (square footage) Unsure

Restaurant seating capacity 0 (no seating) Date of last remodel Facelift in October 2007

Description of any existing water conservation measures None

3. Kitchen water use

Dishwasher description and use (number of loads washed each day) No dishwasher

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Number of kitchen faucets 6

Type:	Usage:	Aerator Yes/No	Flow rate (gpm)
1 <u>Handwashing sink</u>	<u>Handwashing; faucet has a 19 gpd drip.</u>	<u>No</u>	<u>2</u>
2 <u>Handwashing sink</u>	<u>Handwashing</u>	<u>Yes</u>	<u>2.5</u>
3 <u>Dishwashing sink</u>	<u>Dish washing; faucet has a 5 gpd drip.</u>	<u>No</u>	<u>3.5</u>
4 <u>Pre-rinse spray nozzle</u>	<u>Pre-rinse spray nozzle used to rinse dishes. Fixture was replaced with a new nozzle (1.5 gpm).</u>	<u>NA</u>	<u>4</u>
5 <u>Mop sink</u>	<u>Spigot with a hose attached; used to fill buckets.</u>	<u>NA</u>	<u>3</u>
6 <u>Cleaning sink</u>	<u>Sink located near the drink station.</u>	<u>No</u>	<u>6</u>

Ice machine Brand Hoshizaki (two ice machines) Model numbers F1500MHC; E1500MRH

Pound capacity Unsure

Cooling method (water or air?) Air

Is a garbage disposal used? Yes No

Is there a water softener? Yes No

Describe cleaning methods and equipment (for floors, etc.) Mop & bucket

Discuss any other kitchen water use None

4. Restroom water use

Toilets: Gravity tank: Number 1 Volumes 1.6 gpf (men's restroom)

Gravity tank: Number 1 Volumes 3.5 gpf (women's restroom)

Urinals: Number 0 Volumes _____

Have any toilets or urinals been retrofitted with lower flow models? Yes No

If so, how many? 1 (men's restroom) When? Unsure

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Sinks: Number 1 Aerator?: Yes Volumes 2 gpm (men's restroom)

Number 1 Aerator?: Yes Volumes 2.5 gpm (women's restroom)

How many faucets have aerators installed? None All Number _____

5. Laundry water use

Are any clothes washing machines used on-site? Yes No

6. Cooling water use

Cooling Units:	Number	Size
Evaporative cooler	<u>3</u>	<u>Unsure</u>

If evaporative cooling is used, do the cooling units recirculate water? Yes No

How much of the year is the cooler used? April-October How long each day? All day

7. Outdoor water use

Area of irrigated landscape: None

Is any water used to clean sidewalks/hose down parking lots? Yes No

A mop & bucket is used to scrub the parking lot every Sunday.

Describe any other outdoor water uses. None

8. Other uses, leaks, and lost water

Method of floor mat cleaning: There's only one mat, and it is hosed off out back.

If sprayed, estimate the number of minutes per day. 5 minutes each evening

Describe any wait station water use. None

Describe any janitor closet water use. None

List any quantifiable leaks and estimated rates and locations. A handwashing sink in the kitchen has a 19 gpd drip, and one of the dishwashing faucets has a 5 gpd drip.

Are there any showers on-site? Yes No

Describe any other water uses. None

Attachment 2
Restaurant Letters



April 28, 2008

Mr. Chad Denny, Manager
Applebee's
1560 W. Maloney Ave.
Gallup, New Mexico 87301-5396

Re: Restaurant Water Audit Summary

Dear Mr. Denny:

Daniel B. Stephens & Associates, Inc., the New Mexico Office of the State Engineer Water Use and Conservation Bureau, and the City of Gallup would like to thank you for your participation in the Gallup Commercial Water Audit Project. The goal of this project was to reduce commercial water use; 15 City of Gallup establishments participated in the project. The Gallup project will serve as a pilot for similar programs to be implemented by other New Mexico communities.

Three years of data were evaluated for each participating establishment prior to conducting the site visits. A figure showing Applebee's billed water use for 2005, 2006, and 2007 is enclosed. Annual water use increased by 14 percent between 2005 and 2006, and 10 percent between 2006 and 2007. Average daily water use was 4,991 gallons per day (gpd) in 2005, 5,676 gpd in 2006, and 6,223 gpd in 2007. In 2007, summer use (average of June, July, and August) was 14 percent higher than winter use (average of December, January, and February).

The Applebee's site visit was conducted on February 25, 2008. The existing pre-rinse spray nozzle was not replaced because the existing nozzle already had a low flow rate (1 gallon per minute). However, we suggest that the existing fixture be replaced with the new fixture that was provided because the new fixture will conserve water due to increased wash pressure and reduced wash time. Other recommendations for how Applebee's can conserve water follow.

All of the Applebee's fixtures are relatively new, as this restaurant was built in 2004. All toilets are low flow (1.6 gallons per flush), and all restroom faucets have a 0.5 gallon per minute (gpm) flow rate and have aerators installed. There is no outdoor water use at this restaurant.

The drink station faucet is dripping at a rate of 19 gpd. At this rate, the faucet wastes approximately 6,935 gallons per year. We recommend that this faucet be fixed.

Food was being thawed under running water in the food preparation area during our site visit, at a flow rate of 6 gpm. At this flow rate, the sink uses 360 gallons per hour. We recommend that Applebee's consider thawing frozen food by soaking it in warm water, not by leaving the water running.

Daniel B. Stephens & Associates, Inc.

6020 Academy NE, Suite 100

505-822-9400

Albuquerque, NM 87109

FAX 505-822-8877

Mr. Chad Denny
April 28, 2008
Page 2

The kitchen handwashing sink had a fast leak, which was reduced to 5 gpd when the faucet bib was removed. A 5-gpd leak amounts to 1,825 gallons lost per year. We recommend that this faucet be fixed.

We also recommend that Applebee's consider mopping the floors each evening, instead of spraying them down with a hose.

Again, we appreciate your involvement in this project. Please contact me at (505) 822-9400 if you have any questions.

Sincerely,

DANIEL B. STEPHENS & ASSOCIATES, INC.

A handwritten signature in cursive script that reads "Amy Ewing".

Amy Ewing
Hydrogeologist

AE/rpf
Enclosure



April 28, 2008

Mr. Stephen Mulvaney, General Manager
Cracker Barrel
1480 W. Maloney Ave.
Gallup, New Mexico 87301-3304

Re: Restaurant Water Audit Summary

Dear Mr. Mulvaney:

Daniel B. Stephens & Associates, Inc., the New Mexico Office of the State Engineer Water Use and Conservation Bureau, and the City of Gallup would like to thank you for your participation in the Gallup Commercial Water Audit Project. The goal of this project was to reduce commercial water use; 15 City of Gallup establishments participated in the project. The Gallup project will serve as a pilot for similar programs to be implemented by other New Mexico communities.

Three years of data were evaluated for each participating establishment prior to conducting the site visits. A figure showing Cracker Barrel's billed water use for 2005, 2006, and 2007 is enclosed. Annual water use decreased by 15 percent between 2005 and 2006, and 7 percent between 2006 and 2007. Average daily water use was 7,124 gallons per day (gpd) in 2005, 6,062 gpd in 2006, and 5,631 gpd in 2007. In 2007, summer use (average of June, July, and August) was 41 percent higher than winter use (average of December, January, and February).

The Cracker Barrel site visit was conducted on February 25, 2008. One of the existing pre-rinse spray nozzles was replaced, reducing the fixture's flow rate from 3 to 1.5 gallons per minute (gpm). The new fixture will conserve water due to increased wash pressure and reduced wash time. Recommendations for how Cracker Barrel can conserve water follow.

The flush volumes of the toilets in each of the employee restrooms are 3.5 gallon per flush (gpf). Cracker Barrel could replace these toilets with 1.6-gpf models, and take advantage of the City's rebate program. Toilet rebates are \$75 for each toilet replaced in the commercial sector, credited to the customer's water bill. Customers are responsible for toilet purchase and installation.

Cracker Barrel irrigates approximately 1,100 square feet of grass. Although the sprinkler system has a Rainbird control with a rain gauge and only irrigates when needed, we estimate that at least 23,000 gallons of water is used to irrigate this area each year. Cracker Barrel could consider removing some or all of the irrigated grass, and would be eligible for the City's xeriscape program if the grass were replaced with approved xeric landscape. Rebates are \$0.25 per square foot of irrigated turf grass replaced, with the minimum and maximum areas of 500 square feet (\$125) and 12,500 square feet (\$3,125), respectively, for commercial accounts. A 13-page xeric

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Mr. Stephen Mulvaney
April 28, 2008
Page 2

plant list, which identifies 275 low-water use plants recommended for Gallup, is available to the public.

Please contact Elizabeth Barriga with Gallup Joint Utilities at (505) 863-1393 for more information on the toilet and/or xeriscape rebate programs.

Again, we appreciate your involvement in this project. Please contact me at (505) 822-9400 if you have any questions.

Sincerely,

DANIEL B. STEPHENS & ASSOCIATES, INC.

A handwritten signature in cursive script that reads "Amy Ewing".

Amy Ewing
Hydrogeologist

AE/rpf
Enclosure



April 28, 2008

Mr. Ken Turnbow
Furr's
505 N. Hwy 491
Gallup, New Mexico 87301-5351

Re: Restaurant Water Audit Summary

Dear Mr. Turnbow:

Daniel B. Stephens & Associates, Inc., the New Mexico Office of the State Engineer Water Use and Conservation Bureau, and the City of Gallup would like to thank you for your participation in the Gallup Commercial Water Audit Project. The goal of this project was to reduce commercial water use; 15 City of Gallup establishments participated in the project. The Gallup project will serve as a pilot for similar programs to be implemented by other New Mexico communities.

Three years of data were evaluated for each participating establishment prior to conducting the site visits. A figure showing Furr's billed water use for 2005, 2006, and 2007 is enclosed. The November 2006 peak in water use is expected to reflect the sum of use for November and December 2006, and not an increase in actual water use. Annual water use was approximately equal in 2005 and 2006, and decreased by 5 percent between 2006 and 2007. Average daily water use was 7,389 gallons per day (gpd) in 2005, 7,356 gpd in 2006, and 6,956 gpd in 2007. In 2007, summer use (average of June, July, and August) and winter use (average of December, January, and February) were approximately equal.

We met with Brian Blackwell on February 25, 2008. One of the existing pre-rinse spray nozzles was replaced during the site visit; however, it was removed due to an employee's concern that it would not clean dishes well enough. The existing fixture had a flow rate of 3 gallons per minute (gpm), while the replacement fixture has a flow rate of 1 gpm. We recommend reinstalling the replacement fixture, as it will conserve water due to increased wash pressure and reduced wash time. Recommendations for how Furr's can conserve water follow.

One of the fry station faucets has a 10-gpd drip, which amounts to 3,650 gallons lost per year. We recommend that this faucet be fixed. One of the sinks in the women's restroom is leaking from the drain onto the floor; this leak should also be fixed.

Two toilets in the men's restroom and 3 toilets in the women's restroom have 3.5 gallon per flush (gpf) flush volumes. Furr's could replace these toilets with 1.6-gpf models, and take advantage of the City's rebate program. Toilet rebates are \$75 for each toilet replaced in the commercial sector, credited to the customer's water bill. Customers are responsible for toilet

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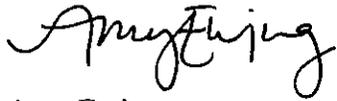
Mr. Ken Turnbow
April 28, 2008
Page 2

purchase and installation. Please contact Elizabeth Barriga with Gallup Joint Utilities at (505) 863-1393 for more information on the toilet rebate program.

Again, we appreciate your involvement in this project. Please contact me at (505) 822-9400 if you have any questions.

Sincerely,

DANIEL B. STEPHENS & ASSOCIATES, INC.

A handwritten signature in cursive script that reads "Amy Ewing".

Amy Ewing
Hydrogeologist

AE/rpf
Enclosure



April 28, 2008

Mr. Ralph Richards, Owner
Earl's
1400 E. Hwy 66
Gallup, New Mexico 87301-4947

Re: Restaurant Water Audit Summary

Dear Mr. Richards:

Daniel B. Stephens & Associates, Inc., the New Mexico Office of the State Engineer Water Use and Conservation Bureau, and the City of Gallup would like to thank you for your participation in the Gallup Commercial Water Audit Project. The goal of this project was to reduce commercial water use; 15 City of Gallup establishments participated in the project. The Gallup project will serve as a pilot for similar programs to be implemented by other New Mexico communities.

Three years of data were evaluated for each participating establishment prior to conducting the site visits. A figure showing Earl's billed water use for 2005, 2006, and 2007 is enclosed. Annual water use was approximately 5 percent more in 2006 than 2005, and approximately equal in 2006 and 2007. Average daily water use was 12,648 gallons per day (gpd) in 2005, 13,290 gpd in 2006, and 13,157 gpd in 2007. In 2007, summer use (average of June, July, and August) was 16 percent higher than winter use (average of December, January, and February).

We met with Mario Trejo on February 25, 2008. One of the existing pre-rinse spray nozzles was replaced at Earl's, reducing the fixture's flow rate from 1.5 to 1 gallon per minute (gpm). This new fixture will conserve water due to increased wash pressure and reduced wash time. A second new fixture was given to Earl's to replace a second nozzle that has a 2.5-gpm flow rate; this nozzle will be installed by a plumber (we were unable to remove the existing nozzle). This fixture's replacement will lead to further water savings. Recommendations for how Earl's can conserve water follow.

One of the sinks in the men's restroom does not have an aerator, and uses 3 gpm more water than the other sink in this restroom. An aerator should be installed.

The office toilet has a 3.5 gallon per flush (gpf) flush volume, and would qualify for the City of Gallup toilet rebate if it were replaced with a lower flow model. Toilet rebates are \$75 for each toilet replaced in the commercial sector, credited to the customer's water bill. Customers are responsible for toilet purchase and installation. Please contact Elizabeth Barriga with Gallup Joint Utilities at (505) 863-1393 for more information on the toilet rebate program.

Daniel B. Stephens & Associates, Inc.

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Albuquerque, NM 87109

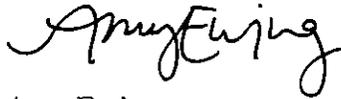
FAX 505-822-8877

Mr. Ralph Richards
April 28, 2008
Page 2

Again, we appreciate your involvement in this project. Please contact me at (505) 822-9400 if you have any questions.

Sincerely,

DANIEL B. STEPHENS & ASSOCIATES, INC.

A handwritten signature in cursive script that reads "Amy Ewing".

Amy Ewing
Hydrogeologist

AE/rpf
Enclosure



April 28, 2008

Mr. Darrell Pettee, District Manager
Denny's
4762 N. Stewart Mountain
Golden Valley, Arizona 86413-6975

Re: Restaurant Water Audit Summary

Dear Mr. Pettee:

Daniel B. Stephens & Associates, Inc., the New Mexico Office of the State Engineer Water Use and Conservation Bureau, and the City of Gallup would like to thank you for your participation in the Gallup Commercial Water Audit Project. The goal of this project was to reduce commercial water use; 15 City of Gallup establishments participated in the project. The Gallup project will serve as a pilot for similar programs to be implemented by other New Mexico communities.

Three years of data were evaluated for each participating establishment prior to conducting the site visits. A figure showing Denny's East billed water use for 2005, 2006, and 2007 is enclosed. Annual water use increased by 8 percent between 2005 and 2006, and decreased by 4 percent between 2006 and 2007. Average daily water use was 4,593 gallons per day (gpd) in 2005, 4,981 gpd in 2006, and 4,796 gpd in 2007. In 2007, summer use (average of June, July, and August) was 30 percent higher than winter use (average of December, January, and February).

We met with Keri Hanley on February 26, 2008. The existing Denny's East pre-rinse spray nozzle was replaced, reducing the fixture's flow rate from 3.5 to 1 gallon per minute (gpm). This new fixture will conserve water due to increased wash pressure and reduced wash time. Recommendations for how Denny's East can conserve water follow.

Aerators are missing from one of the handwashing sinks on the front line and one of the handwashing sinks in the kitchen. The flow rates of these sinks were 4 and 5 gpm, respectively. These rates could be halved or better by installing aerators. None of the restaurant fixtures are in need of replacement, and there were no leaks at this restaurant.

Again, we appreciate your involvement in this project. Please contact me at (505) 822-9400 if you have any questions.

Sincerely,

DANIEL B. STEPHENS & ASSOCIATES, INC.

Amy Ewing
Hydrogeologist

AE/rpf
Enclosure
cc: Keri Hanley, Denny's East

Daniel B. Stephens & Associates, Inc.

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505-822-9400

Albuquerque, NM 87109

FAX 505-822-8877



April 28, 2008

Mr. Darrell Pettee, District Manager
Denny's
4762 N. Stewart Mountain
Golden Valley, AZ 86413-6975

Re: Restaurant Water Audit Summary

Dear Mr. Pettee:

Daniel B. Stephens & Associates, Inc., the New Mexico Office of the State Engineer Water Use and Conservation Bureau, and the City of Gallup would like to thank you for your participation in the Gallup Commercial Water Audit Project. The goal of this project was to reduce commercial water use; 15 City of Gallup establishments participated in the project. The Gallup project will serve as a pilot for similar programs to be implemented by other New Mexico communities.

Three years of data were evaluated for each participating establishment prior to conducting the site visits. A figure showing Denny's North billed water use for 2005, 2006, and 2007 is enclosed. Annual water use decreased by 21 percent between 2005 and 2006, and increased by 7 percent between 2006 and 2007. Average daily water use was 5,801 gallons per day (gpd) in 2005, 4,559 gpd in 2006, and 4,899 gpd in 2007. In 2007, summer use (average of June, July, and August) was 15 percent higher than winter use (average of December, January, and February).

We met with Brenda Ramos on February 26, 2008. The existing Denny's North pre-rinse spray nozzle was replaced, reducing the fixture's flow rate from 3 to 1.5 gallons per minute (gpm). This new fixture will conserve water due to increased wash pressure and reduced wash time. Recommendations for how Denny's North can conserve water follow.

The outdoor wall hydrant is leaking at a rate of 10 gpd. This rate will lead to an annual loss of 3,650 gallons per year, and should be fixed. None of the restaurant fixtures are in need of replacement, and there were no inside leaks at this restaurant.

Again, we appreciate your involvement in this project. Please contact me at (505) 822-9400 if you have any questions.

Sincerely,

DANIEL B. STEPHENS & ASSOCIATES, INC.

Amy Ewing
Hydrogeologist

AE/rpf
Enclosure
cc: Brenda Ramos, Denny's North

Daniel B. Stephens & Associates, Inc.

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505-822-9400

Albuquerque, NM 87109

FAX 505-822-8877



April 28, 2008

Mr. Sean Baca, Plant Supervisor
Gallup-McKinley County Schools
700 S. Boardmen Ave.
Gallup, NM 87301-4707

Re: Restaurant Water Audit Summary

Dear Mr. Baca:

Daniel B. Stephens & Associates, Inc., the New Mexico Office of the State Engineer Water Use and Conservation Bureau, and the City of Gallup would like to thank you for your participation in the Gallup Commercial Water Audit Project. The goal of this project was to reduce commercial water use; 15 City of Gallup establishments participated in the project. The Gallup project will serve as a pilot for similar programs to be implemented by other New Mexico communities.

Three years of data were evaluated for each participating establishment prior to conducting the site visits. A figure showing Roosevelt Elementary School's billed water use for 2005, 2006, and 2007 is enclosed. Annual water use was approximately 2 percent less in 2006 than 2005, and 2 percent less in 2007 than 2006. Average daily water use was 1,203 gallons per day (gpd) in 2005, 1,185 gpd in 2006, and 1,160 gpd in 2007. In 2007, summer use (average of June, July, and August) was 54 percent lower than winter use (average of December, January, and February).

We met with you and Vivian Armenta on February 26, 2008. The existing pre-rinse spray nozzle in the Roosevelt Elementary School kitchen was replaced, reducing the fixture's flow rate from 3 to 1 gallon per minute (gpm). This new fixture will conserve water due to increased wash pressure and reduced wash time. Recommendations for how Roosevelt Elementary School can conserve water follow.

The school has a total of 13 toilets with flush volumes of 3.5 gallon per flush (gpf); these toilets could be replaced with 1.6-gpf models, taking advantage of the City's rebate program. Toilet rebates are \$75 for each toilet replaced in the commercial sector, credited to the customer's water bill. Customers are responsible for toilet purchase and installation. Please contact Elizabeth Barriga with Gallup Joint Utilities at (505) 863-1393 for more information on the toilet rebate program.

Of the 11 restroom sinks, 9 have aerators; aerators should be installed on the 2 faucets that are missing them (1 each in the second girl's and second boy's restrooms). The flow rates of these 2 sinks are low considering that they lack aerators, but the aerators should still be replaced.

Daniel B. Stephens & Associates, Inc.

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Albuquerque, NM 87109 FAX 505-822-8877

Mr. Sean Baca
April 28, 2008
Page 2

The mop/utility closet faucet leaks when it is turned on, and it has a hose taped at its connection. We recommend that this faucet be fixed.

Again, we appreciate your involvement in this project. Please contact me at (505) 822-9400 if you have any questions.

Sincerely,

DANIEL B. STEPHENS & ASSOCIATES, INC.

A handwritten signature in black ink that reads "Amy Ewing". The signature is written in a cursive, flowing style.

Amy Ewing
Hydrogeologist

AE/rpf
Enclosure
cc: Vivian Armenta, Roosevelt Elementary School



April 28, 2008

Ms. Gigi Garcia, Owner
Genero's
P.O. Box 1100
Gallup, New Mexico 87305-1100

Re: Restaurant Water Audit Summary

Dear Ms. Garcia:

Daniel B. Stephens & Associates, Inc., the New Mexico Office of the State Engineer Water Use and Conservation Bureau, and the City of Gallup would like to thank you for your participation in the Gallup Commercial Water Audit Project. The goal of this project was to reduce commercial water use; 15 City of Gallup establishments participated in the project. The Gallup project will serve as a pilot for similar programs to be implemented by other New Mexico communities.

Three years of data were evaluated for each participating establishment prior to conducting the site visits. A figure showing Genero's billed water use for 2005, 2006, and 2007 is enclosed. Annual water use increased by 27 percent between 2005 and 2006, and decreased by 79 percent between 2006 and 2007, as a result of the replacement of the leaking water-cooled ice machine. Average daily water use was 4,622 gallons per day (gpd) in 2005, 5,858 gpd in 2006, and 1,226 gpd in 2007. In 2007, summer use (average of June, July, and August) was 72 percent less than winter use (average of December, January, and February), again likely affected by the ice machine's replacement.

We met with you and Bailey Padilla on February 26, 2008. A pre-rinse spray nozzle was not changed out because Gereno's did not have an existing fixture; however, we left a low-flow nozzle to be installed with a new fixture later that week. Recommendations for how Genero's can conserve water follow.

The flush volume of the utility room toilet is 3.5 gallons per flush (gpf). Genero's could replace this toilet with a 1.6-gpf model, and take advantage of the City's rebate program. Toilet rebates are \$75 for each toilet replaced in the commercial sector, credited to the customer's water bill. Customers are responsible for toilet purchase and installation.

Please contact Elizabeth Barriga with Gallup Joint Utilities at (505) 863-1393 for more information on the toilet rebate program. None of the other restaurant fixtures are in need of replacement, and there were no leaks at this restaurant.

Daniel B. Stephens & Associates, Inc.

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Albuquerque, NM 87109 FAX 505-822-8877

Ms. Gigi Garcia
April 28, 2008
Page 2

Again, we appreciate your involvement in this project. Please contact me at (505) 822-9400 if you have any questions.

Sincerely,

DANIEL B. STEPHENS & ASSOCIATES, INC.

A handwritten signature in cursive script that reads "Amy Ewing".

Amy Ewing
Hydrogeologist

AE/rpf
Enclosure



April 28, 2008

Mr. Ramon Rogers
Golden Corral
P.O. Box 2000
Wayzata, MN 55391-0000

Re: Restaurant Water Audit Summary

Dear Mr. Rogers:

Daniel B. Stephens & Associates, Inc., the New Mexico Office of the State Engineer Water Use and Conservation Bureau, and the City of Gallup would like to thank you for your participation in the Gallup Commercial Water Audit Project. The goal of this project was to reduce commercial water use; 15 City of Gallup establishments participated in the project. The Gallup project will serve as a pilot for similar programs to be implemented by other New Mexico communities.

Three years of data were evaluated for each participating establishment prior to conducting the site visits. A figure showing Golden Corral's billed water use for 2005, 2006, and 2007 is enclosed. Annual water use increased by 27 percent between 2005 and 2006, and decreased by 2 percent between 2006 and 2007. Average daily water use was 9,968 gallons per day (gpd) in 2005, 12,619 gpd in 2006, and 12,355 gpd in 2007. In 2007, summer use (average of June, July, and August) was 14 percent higher than winter use (average of December, January, and February).

We met with Colleen Palmer on February 27, 2008. Two pre-rinse spray nozzles were replaced, one of which was not operational before replacing the fixture. Fixture replacement reduced the flow rate from 3.25 to 1 gallon per minute (gpm) in the operational nozzle. The new fixtures will conserve water due to increased wash pressure and reduced wash time. Recommendations for how Golden Corral can conserve water follow.

There are multiple leaks at this restaurant, with a total loss of 778 gpd, or almost 300,000 gallons per year. There is a leaking hose under the steam trays in the bakery area, which discharges into a drain. The hose is leaking at a rate of 19 gpd (6,935 gallons per year). One of the faucets in the dishwashing area is leaking at a rate of 0.5 gpm. This leak amounts to a loss of 720 gallons per day, or over 260,000 gallons per year. Fixing this faucet should be a high priority. Only the hot water is operational on this and one of the other dishwashing faucets, this problem should also be fixed. The outdoor wall hydrant on the west side of the building is leaking at a rate of 39 gpd (over 14,000 gallons per year).

The pedals on two of the foot pedal-operated handwashing sinks need replacement (one pedal is missing in each case, and one of the sinks is difficult to turn off). Aerators should be installed on

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Mr. Ramon Rogers
April 28, 2008
Page 2

the handwashing sinks in the meat room and at the center wait station. One of the handwashing sinks in the men's restroom is missing an aerator; we suggest that one be installed.

Again, we appreciate your involvement in this project. Please contact me at (505) 822-9400 if you have any questions.

Sincerely,

DANIEL B. STEPHENS & ASSOCIATES, INC.

A handwritten signature in cursive script that reads "Amy Ewing".

Amy Ewing
Hydrogeologist

AE/rpf
Enclosure
cc: Colleen Palmer, Manager



April 28, 2008

Mr. and Ms. Martin and Myra Delariva
McDonald's Northside
P.O. Box 2139
Gallup, NM 87305-2139

Re: Restaurant Water Audit Summary

Dear Mr. and Ms. Delariva:

Daniel B. Stephens & Associates, Inc., the New Mexico Office of the State Engineer Water Use and Conservation Bureau, and the City of Gallup would like to thank you for your participation in the Gallup Commercial Water Audit Project. The goal of this project was to reduce commercial water use; 15 City of Gallup establishments participated in the project. The Gallup project will serve as a pilot for similar programs to be implemented by other New Mexico communities.

Three years of data were evaluated for each participating establishment prior to conducting the site visits. A figure showing McDonald's Northside billed water use for 2005, 2006, and 2007 is enclosed. Annual water use decreased by 9 percent between 2005 and 2006, and use was approximately equal in 2006 and 2007. Average daily water use was 3,442 gallons per day (gpd) in 2005, 3,145 gpd in 2006, and 3,187 gpd in 2007. In 2007, summer use (average of June, July, and August) was 33 percent more than winter use (average of December, January, and February).

We met with John Begay on February 27, 2008. The existing McDonald's Northside pre-rinse spray nozzle was replaced, reducing the fixture's flow rate from 3 to 1 gallon per minute (gpm). This new fixture will conserve water due to increased wash pressure and reduced wash time. Recommendations for how McDonald's Northside can conserve water follow.

There are two 3.5 gallons per flush (gpf) flush volume toilets in the women's restroom. McDonald's Northside should consider replacing these toilets with 1.6-gpf models, taking advantage of the City's rebate program. Toilet rebates are \$75 for each toilet replaced in the commercial sector, credited to the customer's water bill. Customers are responsible for toilet purchase and installation. Please contact Elizabeth Barriga with Gallup Joint Utilities at (505) 863-1393 for more information on the toilet rebate program.

McDonald's Northside should also consider replacing the high-flow urinal (3 gpf) in the men's restroom.

The faucets in the women's restroom are leaking at rates of 10 and 15 gpd. These leaks combined amount to a loss of 25 gpd, or over 9,000 gallons per year. The leaks should be fixed.

Daniel B. Stephens & Associates, Inc.

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Albuquerque, NM 87109

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Mr. and Ms. Martin and Myra Delariva
April 28, 2008
Page 2

Again, we appreciate your involvement in this project. Please contact me at (505) 822-9400 if you have any questions.

Sincerely,

DANIEL B. STEPHENS & ASSOCIATES, INC.

A handwritten signature in black ink that reads "Amy Ewing". The signature is written in a cursive, flowing style.

Amy Ewing
Hydrogeologist

AE/rpf
Enclosure
cc: John Begay, Manager



April 28, 2008

Mr. Tim Hogsett
Wendy's
4810 Hardware Dr., NE
Albuquerque, NM 87109-2013

Re: Restaurant Water Audit Summary

Dear Mr. Hogsett:

Daniel B. Stephens & Associates, Inc., the New Mexico Office of the State Engineer Water Use and Conservation Bureau, and the City of Gallup would like to thank you for your participation in the Gallup Commercial Water Audit Project. The goal of this project was to reduce commercial water use; 15 City of Gallup establishments participated in the project. The Gallup project will serve as a pilot for similar programs to be implemented by other New Mexico communities.

Three years of data were evaluated for each participating establishment prior to conducting the site visits. A figure showing Wendy's billed water use for 2005, 2006, and 2007 is enclosed. Annual water use increased by 13 percent between 2005 and 2006, and decreased by 18 percent between 2006 and 2007. Average daily water use was 1,877 gallons per day (gpd) in 2005, 2,123 gpd in 2006, and 1,746 gpd in 2007. In 2007, summer use (average of June, July, and August) and winter use (average of December, January, and February) were approximately equal.

We met with Katherine Yepes on February 27, 2008. The existing Wendy's pre-rinse spray nozzle was replaced, reducing the fixture's flow rate from 3 to 1 gallon per minute (gpm). This new fixture will conserve water due to increased wash pressure and reduced wash time. Recommendations for how Wendy's can conserve water follow.

There is one 3.5 gallon per flush (gpf) flush volume toilet located in the men's restroom. Wendy's could replace this toilet with a 1.6-gpf model, and take advantage of the City's rebate program. Toilet rebates are \$75 for each toilet replaced in the commercial sector, credited to the customer's water bill. Customers are responsible for toilet purchase and installation. Please contact Elizabeth Barriga with Gallup Joint Utilities at (505) 863-1393 for more information on the toilet rebate program.

The faucet in the men's restroom does not have aerator, and has a flow rate of 6 gpm. This rate could be halved or better by installing an aerator.

Daniel B. Stephens & Associates, Inc.

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Albuquerque, NM 87109 FAX 505-822-8877

Mr. Tim Hogsett
April 28, 2008
Page 2

Again, we appreciate your involvement in this project. Please contact me at (505) 822-9400 if you have any questions.

Sincerely,

DANIEL B. STEPHENS & ASSOCIATES, INC.

A handwritten signature in black ink that reads "Amy Ewing". The signature is written in a cursive, flowing style.

Amy Ewing
Hydrogeologist

AE/tpf
Enclosure
cc: Katherine Yepes, Manager



April 28, 2008

Ms. Sandy Chavez, Owner
Don Diego's
801 W. Hwy 66
Gallup, NM 87301-6827

Re: Restaurant Water Audit Summary

Dear Ms. Chavez:

Daniel B. Stephens & Associates, Inc., the New Mexico Office of the State Engineer Water Use and Conservation Bureau, and the City of Gallup would like to thank you for your participation in the Gallup Commercial Water Audit Project. The goal of this project was to reduce commercial water use; 15 City of Gallup establishments participated in the project. The Gallup project will serve as a pilot for similar programs to be implemented by other New Mexico communities.

Three years of data were evaluated for each participating establishment prior to conducting the site visits. A figure showing Don Diego's billed water use for 2005, 2006, and 2007 is enclosed. Annual water use decreased by 2 percent between 2005 and 2006, and decreased by 5 percent between 2006 and 2007. Average daily water use was 2,181 gallons per day (gpd) in 2005, 2,126 gpd in 2006, and 2,023 gpd in 2007. In 2007, summer use (average of June, July, and August) was 7 percent less than winter use (average of December, January, and February).

We met with you on February 27, 2008 and replaced the existing Don Diego's pre-rinse spray nozzle, reducing the fixture's flow rate from 3.5 to 1.5 gallons per minute (gpm). This new fixture will conserve water due to increased wash pressure and reduced wash time. Recommendations for how Don Diego's can conserve water follow.

The faucet in the bar area is leaking at a rate of 10 gpd, or 3,650 gallons per year. The faucet used for filling the steam trays also has a 10-gpd drip. Aerators need to be installed on the handwashing sink in the kitchen, on the three lavatory sinks that are missing them, and on the handwashing sink in the janitor's closet.

There is one 3.5 gallon per flush (gpf) flush volume toilet in each of the five restrooms. Don Diego's could replace these toilets with 1.6-gpf models and take advantage of the City's rebate program. Toilet rebates are \$75 for each toilet replaced in the commercial sector, credited to the customer's water bill. Customers are responsible for toilet purchase and installation. Please contact Elizabeth Barriga with Gallup Joint Utilities at (505) 863-1393 for more information on the toilet rebate program.

Daniel B. Stephens & Associates, Inc.

6020 Academy NE, Suite 100

505-822-9400

Albuquerque, NM 87109

FAX 505-822-8877

Ms. Sandy Chavez
April 28, 2008
Page 2

Again, we appreciate your involvement in this project. Please contact me at (505) 822-9400 if you have any questions.

Sincerely,

DANIEL B. STEPHENS & ASSOCIATES, INC.

A handwritten signature in cursive script that reads "Amy Ewing".

Amy Ewing
Hydrogeologist

AE/tpf
Enclosure



April 28, 2008

Mr. Adrian Landavazo
El Sombrero
1201 W. Hwy 66
Gallup, NM 87301-6824

Re: Restaurant Water Audit Summary

Dear Mr. Landavazo:

Daniel B. Stephens & Associates, Inc., the New Mexico Office of the State Engineer Water Use and Conservation Bureau, and the City of Gallup would like to thank you for your participation in the Gallup Commercial Water Audit Project. The goal of this project was to reduce commercial water use; 15 City of Gallup establishments participated in the project. The Gallup project will serve as a pilot for similar programs to be implemented by other New Mexico communities.

Three years of data were evaluated for each participating establishment prior to conducting the site visits. A figure showing El Sombrero's billed water use for 2005, 2006, and 2007 is enclosed. Annual water use decreased by 2 percent between 2005 and 2006, and increased by 2 percent between 2006 and 2007. Average daily water use was 2,872 gallons per day (gpd) in 2005, 2,801 gpd in 2006, and 2,853 gpd in 2007. In 2007, summer use (average of June, July, and August) was 12 percent more than winter use (average of December, January, and February).

We met with you on February 28, 2008 and replaced the existing El Sombrero pre-rinse spray nozzle, reducing the fixture's flow rate from 2 to 1.5 gallons per minute (gpm). This new fixture will conserve water due to increased wash pressure and reduced wash time. Recommendations for how El Sombrero can conserve water follow.

Both faucets at the triple sink in the food preparation area are leaking at a combined rate of 25 gpd, and another faucet in the food preparation area has a 2-gpd drip. These leaks total almost 10,000 gallons of water lost per year.

El Sombrero should consider changing to air-cooled ice machines when replacing the existing units in the future, as water-cooled units have the potential to lose a significant amount of water.

All three of the existing toilets have 3.5 gallon per flush (gpf) flush volumes. El Sombrero could replace these toilets with 1.6-gpf models and take advantage of the City's rebate program. Toilet rebates are \$75 for each toilet replaced in the commercial sector, credited to the customer's water bill. Customers are responsible for toilet purchase and installation.

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Mr. Adrian Landavazo
April 28, 2008
Page 2

El Sombrero irrigates over 3,500 square feet of grass; we estimate that at least 73,000 gallons of water is used for irrigation each year. Grass is watered for 5 to 10 minutes every 3 to 4 hours (4 times in 24 hours), 7 days per week between April and October. The City of Gallup water conservation ordinance that went into effect on April 25, 2006 (Ordinance C2006-08) restricts time and day of irrigation. Properties with odd-numbered addresses are allowed to irrigate on Tuesdays, Thursdays, and Saturdays, with no irrigation allowed between the hours of 10 a.m. and 4 p.m. We recommend that El Sombrero revise its irrigation schedule to comply with the City ordinance, and expect that the restaurant will lose less water to evaporation in doing so.

El Sombrero could also consider removing some or all of the irrigated grass, and would be eligible for the City's xeriscape program if the grass were replaced with approved xeric landscape. Rebates are \$0.25 per square foot of irrigated turf grass replaced, with the minimum and maximum areas of 500 square feet (\$125) and 12,500 square feet (\$3,125), respectively, for commercial accounts. A 13-page xeric plant list that identifies 275 low-water use plants recommended for Gallup is available to the public.

Please contact Elizabeth Barriga with Gallup Joint Utilities at (505) 863-1393 for more information on the toilet and/or xeriscape rebate programs.

Again, we appreciate your involvement in this project. Please contact me at (505) 822-9400 if you have any questions.

Sincerely,

DANIEL B. STEPHENS & ASSOCIATES, INC.



Amy Ewing
Hydrogeologist

AE/rpf
Enclosure



April 28, 2008

Mr. Kent Contreras
Pizza Hut
5801 Wyoming Blvd. NE, Suite B
Albuquerque, NM 87109-3110

Re: Restaurant Water Audit Summary

Dear Mr. Contreras:

Daniel B. Stephens & Associates, Inc., the New Mexico Office of the State Engineer Water Use and Conservation Bureau, and the City of Gallup would like to thank you for your participation in the Gallup Commercial Water Audit Project. The goal of this project was to reduce commercial water use; 15 City of Gallup establishments participated in the project. The Gallup project will serve as a pilot for similar programs to be implemented by other New Mexico communities.

Three years of data were evaluated for each participating establishment prior to conducting the site visits. A figure showing Pizza Hut's billed water use for 2005, 2006, and 2007 is enclosed. Annual water use decreased by 51 percent between 2005 and 2006, and decreased by 48 percent between 2006 and 2007. Average daily water use was 4,957 gallons per day (gpd) in 2005, 2,424 gpd in 2006, and 1,271 gpd in 2007. In 2007, summer use (average of June, July, and August) was 185 percent more than winter use (average of December, January, and February).

The data comparison for this account suggests that there is a problem with the data. There are no water use readings for January or February 2007, or for September, November, and December 2006, and the readings collected during neighboring months do not seem to cover multiple months of use. In addition, use in 2007 is significantly less than previous years.

We met with Don Clemenson on February 28, 2008. The existing Pizza Hut pre-rinse spray nozzle was replaced, reducing the fixture's flow rate from 2.5 to 1.5 gallons per minute (gpm). This new fixture will conserve water due to increased wash pressure and reduced wash time. Recommendations for how Pizza Hut can conserve water follow.

Both toilets are 3.5 gallon per flush (gpf) flush volume toilets. Pizza Hut could replace these toilets with 1.6-gpf models and take advantage of the City's rebate program. Toilet rebates are \$75 for each toilet replaced in the commercial sector, credited to the customer's water bill. Customers are responsible for toilet purchase and installation. Please contact Elizabeth Barriga with Gallup Joint Utilities at (505) 863-1393 for more information on the toilet rebate program.

The sink in the men's restroom does not have an aerator, and has a flow rate of 3 gpm. The flow rate could be reduced by installing an aerator, and we recommend this action.

Daniel B. Stephens & Associates, Inc.

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Albuquerque, NM 87109

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Mr. Kent Contreras
April 28, 2008
Page 2

Again, we appreciate your involvement in this project. Please contact me at (505) 822-9400 if you have any questions.

Sincerely,

DANIEL B. STEPHENS & ASSOCIATES, INC.

A handwritten signature in black ink that reads "Amy Ewing". The signature is written in a cursive, flowing style.

Amy Ewing
Hydrogeologist

AE/rpf
Enclosure
cc: Don Clemenson, Area Coach



April 28, 2008

Mr. Abner Reed, Supervisor
Sonic Drive-In
1001 N. Hwy 491
Gallup, NM 87301-5355

Re: Restaurant Water Audit Summary

Dear Mr. Reed:

Daniel B. Stephens & Associates, Inc., the New Mexico Office of the State Engineer Water Use and Conservation Bureau, and the City of Gallup would like to thank you for your participation in the Gallup Commercial Water Audit Project. The goal of this project was to reduce commercial water use; 15 City of Gallup establishments participated in the project. The Gallup project will serve as a pilot for similar programs to be implemented by other New Mexico communities.

Three years of data were evaluated for each participating establishment prior to conducting the site visits. A figure showing Sonic Drive-In's billed water use for 2005, 2006, and 2007 is enclosed. Annual water use increased by 29 percent between 2005 and 2006, and decreased by 33 percent between 2006 and 2007. Average daily water use was 1,556 gallons per day (gpd) in 2005, 2,015 gpd in 2006, and 1,341 gpd in 2007. In 2007, summer use (average of June, July, and August) was 13 percent greater than winter use (average of December, January, and February).

We met with you on February 28, 2008 and replaced the existing Sonic Drive-In pre-rinse spray nozzle, reducing the fixture's flow rate from 4 to 1.5 gallons per minute (gpm). This new fixture will conserve water due to increased wash pressure and reduced wash time. Recommendations for how Sonic Drive-In can conserve water follow.

One of the kitchen handwashing sinks has a 19-gpd drip, and one of the dishwashing faucets has a 5-gpd drip. Together, these leaks amount to almost 9,000 gallons of water lost per year. We recommend that these leaks be fixed. None of the restaurant fixtures are in need of replacement.

Again, we appreciate your involvement in this project. Please contact me at (505) 822-9400 if you have any questions.

Sincerely,

DANIEL B. STEPHENS & ASSOCIATES, INC.

Amy Ewing
Hydrogeologist

AE/rpf
Enclosure

Daniel B. Stephens & Associates, Inc.

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