



# Water Conservation:

*Accelerated Water Savings with  
Cloud Based Software Tools*

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Texas Water 2015



**Frisco, Texas**

- Denton and Collin County
- 70 square miles
- 25 miles northeast of the Dallas-Fort Worth International Airport
- Population 147,000
- Member City of NTMWD

The graphic includes a circular inset of a water tower with 'FRISCO' on it, a star-shaped map of Frisco showing major roads and landmarks like Lake Ray Roberts and Lake Lewisville, and an orange outline of Texas with a white star indicating Frisco's location.

Frisco is one of the nation's top five fastest growing cities, based on data from the Census Bureau. Frisco has grown from 33,714 residents in the year 2000 to approximately 147,000 as of April 1, 2015.

## **Frisco: *Unique Characteristics***

**Rapid Growth**

**Water Usage**

**Water System Expansions**

**Irrigation Systems**



Dr. Pepper Ballpark



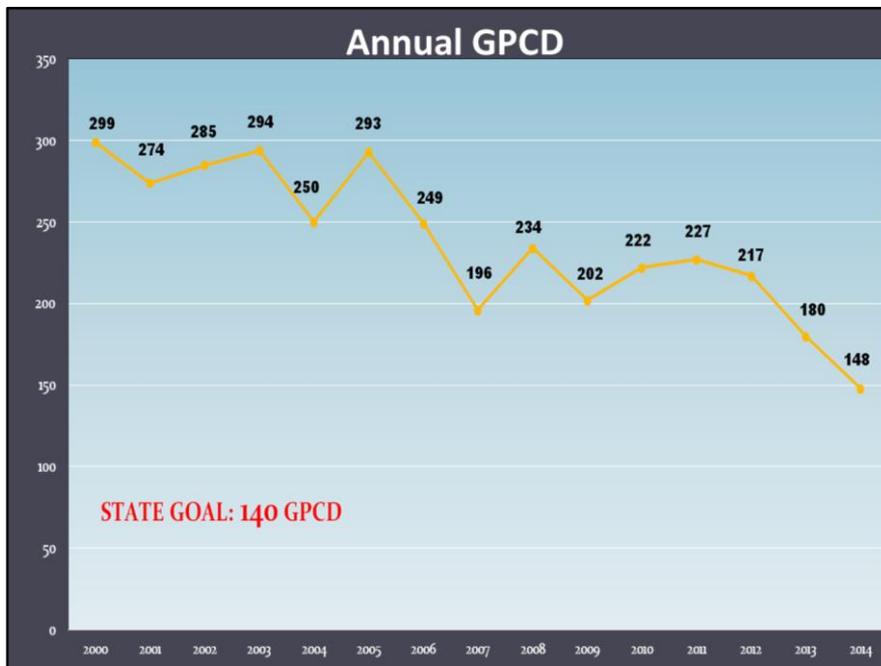
Dallas Cowboys Headquarters



Toyota Soccer Center

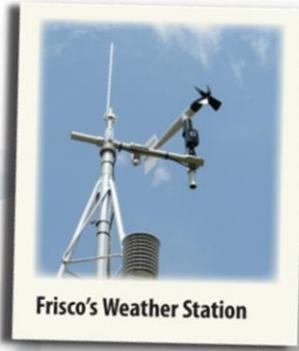
What makes Frisco unique? In addition to rapid growth, it is home to FC Dallas – major league soccer team, the RoughRiders Minor League Baseball, a farm team for the Texas Rangers; & Future Home of The Star – Dallas Cowboys Headquarters.

As one of the fastest growing cities in the U.S., Frisco has needed to balance a population influx with a water-taxed region.

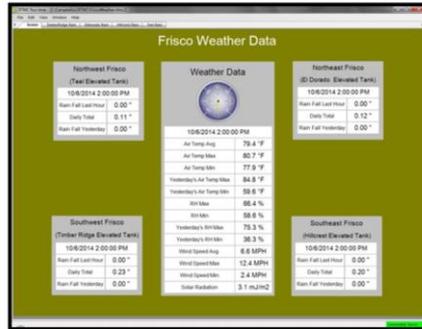


Frisco is comprised of a demographic with historically high outdoor use of water, primarily due to installation of outdoor irrigation systems associated with new construction. Approximately 70 percent of residential water usage is for outdoor purposes. Frisco’s goal is to create conservation programs that encourage residents to make responsible choices about their water use habits voluntarily, rather than simply through mandatory restrictions. Frisco decreased its GPCD from 2000 – 2014, in spite of an increase in population.

## ET Weather Station



- Installed in 2009
- Four Automatic Rain Gauges



The Frisco Water Resources Department intended to take an evidence-based approach to educate water customers and to provide them with a resource to help determine the need to water their lawns and landscapes. In 2009, Frisco installed a Campbell Scientific weather station, which calculates daily evapotranspiration, and four rain gauges.





Based on weather station data, no watering was necessary for 40 weeks in 2014, with an automatic sprinkler system.



## WaterWise Education *Using Water Wisely*

**Sprinkler System Checkups**

**WaterWise Workshops**

**Weekly E-Newsletter & Video**

**Block Captain Program**

**HOA Partnerships**

**Smart Controller Rebates**

**New Home Irrigation Checkups**

**Showerhead Exchange**

**Rain Barrel Sale**

**Texas SmartScape Plant Sales**

**Commercial Irrigation Checks**

**Weather Station Waterer**

Frisco uses the data obtained from the weather station as the basis for its water conservation programs. These programs encourage residents to make responsible choices about their water use habits.

## Challenges

- **Increased Number of Conservation Programs**
- **Increased Requirements for Information**
- **Tracking and Reporting**
- **Static Staff Levels and Increased Time Demands**
- **Inadequate Tools**

## Free Sprinkler System Check-Ups

Year	Annual Checkups
2006	660
2007	515
2008	933
2009	1260
2010	1193
2011	1592
2012	2673
2013	2599
2014	3653



One program which was becoming difficult to manage is Frisco's free sprinkler system checkups, which was launched in 2006. During a checkup, one of four licensed irrigation inspectors will visit a resident's home, identify inefficiencies in the sprinkler system (such as broken or misaligned heads, leaks in the system or non-optimized controller run times) and educate the homeowner how to program their controller using the Cycle & Soak Method.

**FRISCO** Sprinkler System Consultation

This check up form identifies ways to improve your sprinkler system, possibly saving you the expense of a full back wash or cleaning the system if the system gets so clogged.

Name: 13457 Street DR Date: 9-2-15  
 Address: 13457 Street DR City: San Jose  
 Time of Appointment: 1:00 P Phone: 408-551-8095 Email: \_\_\_\_\_  
 Meter: 701 212 504

Zone	Area	G.P.M.	Pre Check up Time	Pre Check up G.P.M.	Post Check up Time	Post Check up G.P.M.	Notes
1	RT DIA	82	0:11	128	7:7		1.500 - clogged PA
2	RT DIA						OK
3	RT DIA	12	0:10	19 L	8:5		OK
4	RT DIA						2:00 200 500 1100
5	RT DIA						2:00 200 500 1100
6	RT DIA						2:00 200 500 1100
7	RT DIA	8	0:10	76	8:5		OK
8	RT DIA	6	0:10	96	12:2		Area (1) 1000's
9	RT DIA	12	0:10	192	5:70		1.500 - clogged PA
10							GOOD
11							REMARKS: Abnormal
12	A 35 - 1800						
13	B 150 - 2000						
14							750 200 1500 5:10
15							FOR 1 TO 2 4000's
16							2:00 200 500 1100
			Total	701	Total	701	

**SUGGESTIONS:**

Recommended Start Times: \_\_\_\_\_ Total Gallons Per Week Pre-Checkup: 701  
 Recommended Days: Su-M-Tu-W-Thu-Fri-Sa Total Gallons Per Week Post-Checkup: 701  
 Notes: 1) 1000's to 1500's 2) 1000's to 1500's  
3) 1000's to 1500's 4) 1000's to 1500's

I, the called Frisco Water Consultant, understand that I am entitled to only one irrigation check up per year. I understand that I am under no obligation to provide any other services or products unless otherwise agreed upon in writing. I warrant that this check up was performed in accordance with the standards of the industry.

Office Use  
 DATE \_\_\_\_\_  
 TIME \_\_\_\_\_  
 BY \_\_\_\_\_  
 FOR \_\_\_\_\_

Customer Name: \_\_\_\_\_ Date: 9-2-15

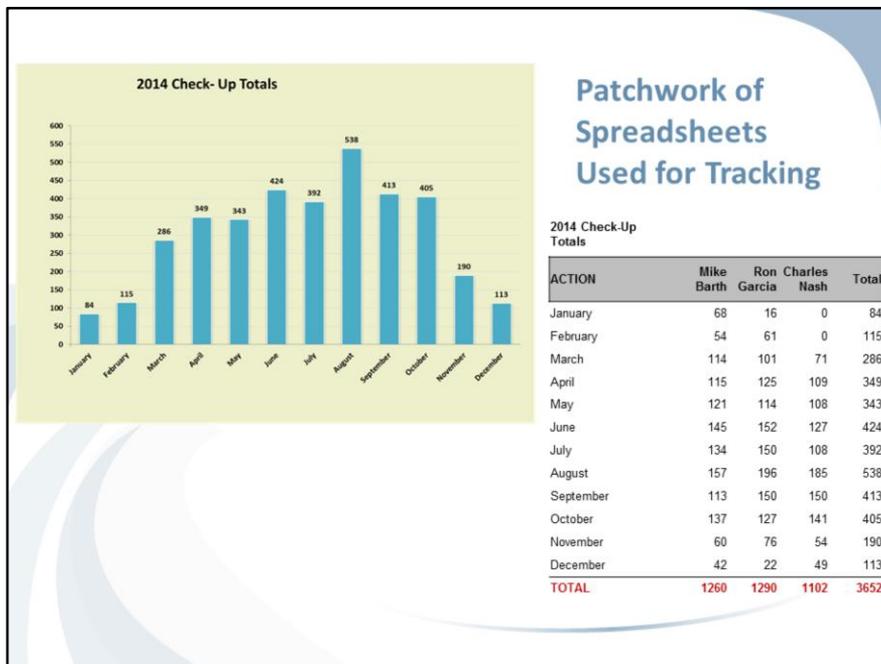
During the checkup, the irrigation inspector provides the homeowner with a sprinkler system consultation evaluation. Effective programs require extra information management, such as contact information, water usage, interactions with customers and follow up. Previously the consultation forms were scanned in and linked to an Excel spreadsheet. Data was extracted from the consultation forms and manually entered into Excel.

# Outlook Calendar

The screenshot displays the Outlook Calendar interface for the week of March 29 to April 4, 2015. The interface is set to 'Month Schedule' view. Three calendars are visible: Mike Bath, Charles Nash, and Ronald Garcia. The calendar grid shows various appointments, with several yellow bars indicating 'Start' times for events. The appointments are color-coded and include names and phone numbers.

Calendar	Day	Time	Appointment
Mike Bath	MON	7:00 AM	Start at 7:00 AM
Mike Bath	TUE	7:00 AM	Start at 7:00 AM
Mike Bath	WED	7:00 AM	Start at 7:00 AM
Mike Bath	THU	7:00 AM	Start at 7:00 AM
Mike Bath	FRI	7:00 AM	Start at 7:00 AM
Mike Bath	SAT	7:00 AM	Start at 7:00 AM
Charles Nash	MON	7:00 AM	Start at 7:00 AM
Charles Nash	TUE	7:00 AM	Start at 7:00 AM
Charles Nash	WED	7:00 AM	Start at 7:00 AM
Charles Nash	THU	7:00 AM	Start at 7:00 AM
Charles Nash	FRI	7:00 AM	Start at 7:00 AM
Charles Nash	SAT	7:00 AM	Start at 7:00 AM
Ronald Garcia	MON	7:00 AM	Start at 7:00 AM
Ronald Garcia	TUE	7:00 AM	Start at 7:00 AM
Ronald Garcia	WED	7:00 AM	Start at 7:00 AM
Ronald Garcia	THU	7:00 AM	Start at 7:00 AM
Ronald Garcia	FRI	7:00 AM	Start at 7:00 AM
Ronald Garcia	SAT	7:00 AM	Start at 7:00 AM

Sprinkler checkup appointments were scheduled using the Outlook Calendar.



Inadequate tools resulting in a patchwork of spreadsheets and databases end up costing excessive staff time and still did not provide required reporting.

# Sprinkler Checkup Actual Savings Report

Case #	Phase	Location ID	Account Number	Name	Street #	Dr	Street Name	Street Suffix	Selected Date Range	Pre A/C Case (G/Gal)	Post A/C Case (G/Gal)	Water Savings (G/Gal)	Water Savings (G/Gal)	ShipName
68802	OT 2022 Sprinkler Checkup	32 2089	32 2089-02		7462		PEBBL KAZADONY		6/29/2022	4.32	38.82	-34.50	None	85 Performance Co
68803	OT 2022 Sprinkler Checkup	38 8992	38 8992-02		3662		SHERRY GARDENWY		6/29/2022	26.38	48.98	-22.60	None	85 Performance Co
68804	OT 2022 Sprinkler Checkup	38 8995	38 8995-02		3233A		STYRNEHULL DR		6/29/2022	27.98	37.98	-10.00	None	85 Performance Co
68805	OT 2022 Sprinkler Checkup	34 7942	34 7942-02		10882		DRAWBRIDGE DR		6/12/2022	17.48	52.84	-35.36	None	85 Performance Co
68806	OT 2022 Sprinkler Checkup	33 9613	33 9613-02		4822		VALLEY BRIDGCR		6/8/2022	22.00	23.12	-11.12	None	85 Performance Co
68807	OT 2022 Sprinkler Checkup	32 4822	32 4822-02		6188		SAGEBRUSH DRW		6/8/2022	22.24	42.92	-20.68	None	85 Performance Co
68808	OT 2022 Sprinkler Checkup	35 2482	35 2482-02		8882		SOUTHERN HILLS		6/8/2022	6.72	32.27	-25.55	None	85 Performance Co
68809	OT 2022 Sprinkler Checkup	42 6289	42 6289-02		8720		NORLE OAKLAND		6/22/2022	22.12	52.34	-30.22	None	85 Performance Co
68810	OT 2022 Sprinkler Checkup	42 2822	42 2822-02		388		PEBBLE BRANCHDR		6/29/2022	6.87	28.23	-21.36	None	85 Performance Co
68811	OT 2022 Sprinkler Checkup	42 2822	42 2822-02		392		PEBBLE BRANCHDR		6/29/2022	28.83	15.48	13.35	None	85 Performance Co
68812	OT 2022 Sprinkler Checkup	42 2842	42 2842-02		7623		PALMER COUNTRY		6/29/2022	23.28	36.26	-12.97	None	85 Performance Co
68813	OT 2022 Sprinkler Checkup	42 2922	42 2922-02		286		BIRCH HILLSDR		6/24/2022	8.92	39.84	-30.92	None	85 Performance Co
68814	OT 2022 Sprinkler Checkup	42 3922	42 3922-02		7248		MALDEN VALLEYDC		6/29/2022	22.72	36.26	-13.54	None	85 Performance Co
68815	OT 2022 Sprinkler Checkup	42 4282	42 4282-02		7482		SAGEBRUSH DRW		6/29/2022	22.92	32.78	-9.86	None	85 Performance Co
68816	OT 2022 Sprinkler Checkup	42 5274	42 5274-02		2428		TRONN DRLE		6/8/2022	6.87	17.47	-10.60	None	85 Performance Co
Grand Total										Total	28882.48	144722.87	-115840.39	
										Average	29.98	12.48	-9.28	

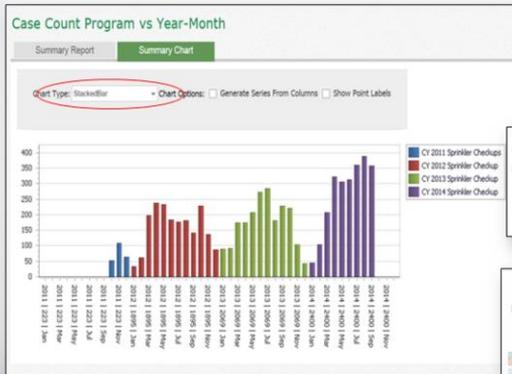
All information from the Sprinkler Checkup Reports is now consolidated into one system. We have been able to configure custom templates with drop boxes for ease of entering data & accessing information.

The process to quantify gallons of water saved vs. pre-checkup gallons used is streamlined. Through the use of drop boxes, we can now select phases for monthly, annual, multi-year cumulative, and the entire history of the program with ease.

Previously, we had not been able to easily compile data for water savings. No longer do we need to use pivot tables to capture multiple years worth of data.

# Sprinkler Checkup Reporting Charts

## Basic Case Count Cross Tab Report By Phase, Year, and Month



### Features

- Charts are updated with cross tab table
- Many chart types available
- Copy/paste images



The new water conservation software has provided ease in extracting top notch visuals for targeted data. Information is easily extrapolated and manipulated into charts and presentations which can be used for HOA presentations, development of UB inserts, and materials for Block Captain volunteers. Charts and graphs are more meaningful to our water customers than presenting raw data.

## Water Waste in Frisco

### Tracking Watering Violations



**Watering hard surfaces**  
ex: streets, sidewalks



**Watering flowing away**  
from property



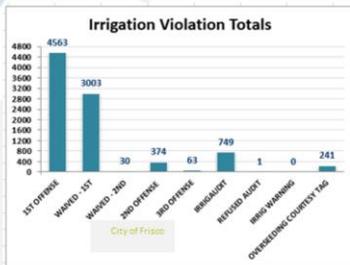
**System in need of repair**



**Watering during rain**  
or below 40 degrees

The City of Frisco issued 5,000 water violations in 2014. We were in critical need of a cloud-based customer relationship management system which provided the entire Water Resources team constant access to data.

Irrigation Violation Totals		
ACTION	12/29 to 01/04	for 2014
1ST OFFENSE	4	4563
WAIVED - 1ST	4	3003
WAIVED - 2ND	0	30
2ND OFFENSE	0	374
3RD OFFENSE	0	63
IRRIGAUDIT	1	749
REFUSED AUDIT	0	1
IRRIIG WARNING	0	0
OVERSEEDING COURTESY TAG	0	241
<b>TOTAL</b>	<b>4</b>	<b>5000</b>



Address	Level	Date
10708 SWEETWATER DRIVE	1STOFFENSE	10/1/2014
4625 ELDORADO PKWY	1STOFFENSE	10/1/2014
3691 BARKWOOD LN	1STOFFENSE	10/1/2014
4623 NEWCASTLE DR	1STOFFENSE	9/27/2014
15022 ROBINCREEK LN	1STOFFENSE	10/1/2014
15174 WOODBLUFF DR	1STOFFENSE	10/2/2014
9302 MIRROR FOUNTAIN CIR	1STOFFENSE	9/29/2014
3014 APPALACHIAN LN	1STOFFENSE	10/3/2014
11491 NEWBERRY DR	1STOFFENSE	9/30/2014
11462 STILL HOLLOW DR	1STOFFENSE	9/27/2014
12098 VIA BELLO CT	1STOFFENSE	10/2/2014
7891 RAINTREE WAY	1STOFFENSE	10/3/2014
7128 CHINQUAPIN DR	1STOFFENSE	10/3/2014
11139 SNIFFER DR	1STOFFENSE	9/30/2014
11775 HARRISBURG DR	1STOFFENSE	10/2/2014
5508 HILL HAVEN CT	1STOFFENSE	9/27/2014
10041 DANBURY DR	1STOFFENSE	9/27/2014
2719 FOREST MANOR DR	1STOFFENSE	10/2/2014
4710 Preston Rd	1STOFFENSE	9/30/2014
5288 SPICEWOOD LN	1STOFFENSE	10/2/2014
11608 PENICK WAY	1STOFFENSE	10/2/2014
4528 FLORENCE DR	1STOFFENSE	9/29/2014
5151 MAVASU DR	1STOFFENSE	9/30/2014
14586 PENSHAM DR	1STOFFENSE	10/1/2014
60 SECLUDED POND DR	1STOFFENSE	10/3/2014
9815 HONEYSUCKLE DR	2NDOFFENSE	9/30/2014
12475 HERRINGTON DR	2NDOFFENSE	9/29/2014
3601 BARKWOOD LN	2NDOFFENSE	9/29/2014
10411 LOVING TRAIL DR	2NDOFFENSE	9/27/2014
3030 HOLLOWBROOK LN	2NDOFFENSE	10/3/2014
11232 BLANCHARD DR	2NDOFFENSE	10/2/2014
1074 SAHALLEE DR	2NDOFFENSE	10/1/2014
8777 PARKER CREEK PL	2NDOFFENSE	10/1/2014
4944 PRESTON RD	2NDOFFENSE	9/30/2014
3303 WAYCROSS LN	2NDOFFENSE	10/2/2014
6649 SUNDOWN TRL	2NDOFFENSE	10/2/2014
6001 DRIPPING SPRINGS DR	2NDOFFENSE	10/2/2014
5681 ARBANTA AVE	2NDOFFENSE	10/2/2014
5459 WIDGEON WAY	2NDOFFENSE	9/30/2014
4408 HEARTHSTONE DR	2NDOFFENSE	10/1/2014
4802 RIDGELAND DR	2NDOFFENSE	10/1/2014
2028 SPINLETOP TRL	2NDOFFENSE	10/2/2014
12508 FOLSOM DR	2NDOFFENSE	9/29/2014
12013 ASHAWAY LN	2NDOFFENSE	9/29/2014
1484 BENT TREE DR	2NDOFFENSE	10/1/2014
5371 CREE DR	3RDANDUPOFFENSE	9/29/2014
1335 BLUE LAKE DR	3RDANDUPOFFENSE	9/30/2014
8198 MISTY SHORES LN	3RDANDUPOFFENSE	10/1/2014

The Water Resources team is responsible for providing reports for the City Manager's Office & the Department Director, who, in turn share info with our City Council. Reports must quantify programs and resources. In addition, our team compiles monthly billing reports to the Utility Billing Department for water violation fees. Fees for watering violations are assessed on the water customer's utility bill.

## All Programs and Data in One DB

ConserveTrack

Program: 3.1 Water Watch -Phase: WW 2015 -Current Step: 40 Multi-Violation Fine Letter Sent - 1547 EMERALD WOODS AVE

Updating Case: 64820

General Information | Events/History | **Previous Cases** | Results

Total violations for this property: 6 | Total violations in the last 3 years: 4

Case #	Phase	Case Status	Start Date	End Date	Contact Name	Contact Phone	Type	Dir
66223	WW 2015	115 Mini MIL Case Completed	3/2/2015		KAREN PAGLIARO-MOHAMMADI		AVE	
65448	WW 2015	40 Multi-Violation Fine Letter	2/4/2015		KAREN PAGLIARO-MOHAMMADI		AVE	

- View All 'Past Cases' for any account
- This is important for:
  - Determining eligibility for rebates
  - Setting Violation Fine Amounts

All data is now stored in one place. The process to determine which fee should be added to a customer's water bill is streamlined.

Many reports associated with Utility Billing had to queue up to run overnight - which was a drain on the computer system. Now, they are auto-fed in the evening and ready to run the next day.

# Components of the Billing Report

Inspection Type	Inspector	Scheduled Date	Time	Completed Date	Time	Result	Duration
1STSTAVD	Female Pater	10/02/2014	19:02:014	APPROVED	0		
RRRAGDCT	Male Barth	10/02/2014	19:10:014	APPROVED	0	00:11	
1STSTPENE	Female Pater	09/29/2014	09:29:014	DISCONNECTED	0		

Address	RRID	Inspector	Scheduled Date	Time	Completed Date	Time	Result	Duration	Notes
FRICK MAIN STREET ADDN	RRRIG15-0024	3644 M O'REILL 233 S PATTERR	1/27/2015	COMM 1STOFF	1/27/2015	ARRG	DISCOF0620	(1/27/2015 9:24 AM JAS2)turned off meter left red tagMeter# 5103072	
FRICK MAIN STREET ADDN	RRRIG15-0024	3644 M O'REILL 233 S PATTERR	1/27/2015	COMM 1STVIA	1/28/2015	HOR	APPROV1610	(1/28/2015 9:16 AM MCR)Manager of O'Reilly Auto called requesting RRRV	
FRICK MAIN STREET ADDN	RRRIG15-0024	3644 M O'REILL 233 S PATTERR	1/27/2015	COMM RRIGGA	1/30/2015	RG	APPROV30 Jan	(1/30/2015 9:16 AM JAS2)we waived	
HERITAGE VILLAGE PH 2	RRRIG15-0026	7939 D DOWNH 7939 DUNAFAN	1/28/2015	RESIDE 1STOFF	1/28/2015	MS2	DISCOF0743	(1/28/2015 3:04 PM JAS2)turned off DCV left white flag & red tag	
PLANTATION RESORT #1A (CFR)	RRRIG15-0023	5320 BI COLFRN C/O CAH MANF	1/26/2015	RESIDE 1STOFF	1/25/2015	HOU	APPROV0734	(1/26/2015 8:35 AM JAS2)left on, staked	
TEEL CROSSING SHOPPING CENTER #	RRRIG14-3812	2660 M HZ RRV 9593 PEWTER	1/2/2015	COMM 1STOFF	12/31/2014	HOR	DISCOF1610	(1/2/2015 9:04 AM JAS2)turned off meter left tagmeter# 70124189 (Gids R)	
TEEL CROSSING SHOPPING CENTER #	RRRIG14-3812	2660 M HZ RRV 9593 PEWTER	1/2/2015	COMM 1STVIA	1/26/2015	APPROVED	APPROV1610	(1/26/2015 11:39 AM MCR)Manager has replaced this rain/freeze sensor	
TEEL CROSSING SHOPPING CENTER #	RRRIG14-3812	2660 M HZ RRV 9593 PEWTER	1/2/2015	COMM RECON	1/26/2015	MS2	APPROV1215	(1/26/2015 3:39 PM JAS2)turn meter onmeter# 70124189	
VILLAGE AT PANTHER CREEK #1 THE (CFR)	RRRIG15-0025	10572 C BEN-PC STERN ORT 10	1/27/2015	RESIDE 1STOFF	1/27/2015	J52	DISCOF1335	(1/27/2015 2:58 PM JAS2)left off DCV. R red tag	
VILLAGE AT PANTHER CREEK #1 THE (CFR)	RRRIG15-0025	10572 C BEN-PC STERN ORT 10	1/27/2015	RESIDE 1STVIA	1/27/2015	APPROVED	APPROVED	(1/27/2015 4:52 PM MCR)resident will make necessary repairs and turn	
WESTFALLS VILLAGE PH 3	RRRIG15-0027	1804 ID MEYER 1804 IDEWILD	1/28/2015	RESIDE 1STOFF	1/28/2015	MS2	DISCOF0810	(1/28/2015 3:06 PM JAS2)turned off DCV left red tag	
WESTFALLS VILLAGE PH 3	RRRIG15-0027	1804 ID MEYER 1804 IDEWILD	1/28/2015	RESIDE RECON	1/29/2015	MS2	COMPL1105	(1/29/2015 2:48 PM JAS2)turned DCV on, no red tagMeter# 77145664	
WESTFALLS VILLAGE PH 3	RRRIG15-0027	1804 ID MEYER 1804 IDEWILD	1/28/2015	RESIDE RRIGGA	4/30/2015	CN	APPROV30 Jan	@ 1400	

Irrigation violations are a prime example why Frisco needed an all-encompassing software system. In the past, violations were entered into the Trakit system. Photos with a time and date stamp used for evidence were uploaded to a Windows shared folder. The photos were then titled per address and uploaded into Trakit. The City of Frisco offers a free sprinkler system checkup as a means to educate the water customer and “waive” the first violation. In an effort to validate the “waived” violation, a manual count was taken from the Microsoft Outlook calendar. Once validated, the checkup was “approved” by an entry in Trakit, and finally, the billing report was “queued up” to populate and run overnight and sent to UB.

# Violations Program: QuickCase

**ConserveTrack**

Phases/Steps Programs Quick Case Entry Find By... Reports Admin

### Violation Quick Case Entry

Use this page to quickly create many similar cases. Follow the numbered steps 1, 2, 3 and 4

**1. Configure**  
First select the Program, Phase, Step (in that order, all required fields). All cases will be created in the same phase and step, and with the same device model. Then select a row to start.

Program: 23 Stealing Violations      Pictool: Maly Klen  
 Phase: W/ 2015      Default Violation Date to: 04/09/15 12:00 AM  
 Step: 10 New Violation Reported      Default Violation Type to: HOPPERAB RAIN SENSOR

**2. Select the Property**  
Find the Property (service address) and click the > button. Repeat for as many cases as you like (10 at a time)

[Clear All](#)

	Property	Violation Date/Time*	Violation Type*	Violation Photo Evidence	Details
1	CLEAR 01-0210 - 6827 MAIN STREET >	04/15/15 12:00 A +	EVIDENCE >	<input type="text"/> <a href="#">Browse...</a>	
2	CLEAR 01-0300 - 8732 ELM STREET >	04/15/15 12:00 A +	WARNING >	<input type="text"/> <a href="#">Browse...</a>	
3	CLEAR 03-2002 - 7638 FOSSAL RIDGE DR #16 >	04/02/15 12:00 A +	HOPPERAB >	<input type="text"/> <a href="#">Browse...</a>	
4	CLEAR 03-1800 - 9077 FIFTH STREET >	04/07/15 12:00 A +	NOT A VIOL >	<input type="text"/> <a href="#">Browse...</a>	
5	CLEAR 06-0841 - 2355 BURNBY HUNLANE >	02/12/15 12:00 A +	HOPPERAB >	<input type="text"/> <a href="#">Browse...</a>	
6	CLEAR 25-1003 - WOLATER ROAD BRNG >	04/09/14 12:00 A +	WARNING >	<input type="text"/> <a href="#">Browse...</a>	
7	CLEAR >	>	>	<input type="text"/> <a href="#">Browse...</a>	
8	CLEAR >	>	>	<input type="text"/> <a href="#">Browse...</a>	
9	CLEAR >	>	>	<input type="text"/> <a href="#">Browse...</a>	
10	CLEAR >	>	>	<input type="text"/> <a href="#">Browse...</a>	

[1. Create Cases](#)

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This is a sample of entering violations into our new CRM software. The savings in time is huge and replaces a tedious process. Staff no longer are faced with a manual clean-up of reports because the information is already validated and entered into one template.

# Watering Violations DMS Case

## Also Track Violation Photos

## Features

The screenshot shows a web form for tracking watering violations. At the top, there are three radio button options:  NONCOMPLIANCE,  VIOLATION, and  ILLEGALCON. Below this, the form is divided into two main sections: 'TOHO PHOTO EVIDENCE 1' and 'PHOTO EVIDENCE 2'. Each section has a 'Violation Date / Time' dropdown menu and a 'Patroler' dropdown menu. Under 'TOHO PHOTO EVIDENCE 1', the 'Clear Photo' field contains the text '10004 Richardson Ct 6-18-14\_resize.jpg' and a 'Clear' button. Under 'PHOTO EVIDENCE 2', the 'Clear Photo' field contains '10001 Facet Ct 10-26-09.jpg' and a 'Clear' button. A note below the form states: 'Please check you photo file sizes and set your camera to give file sizes in the range of 50-200KB. Larger files may not upload completely and will fill the server disk faster.' At the bottom of each section, there is a 'Choose File' button and the text 'No file chosen'. Two small thumbnail images of residential properties are displayed at the bottom of the form.

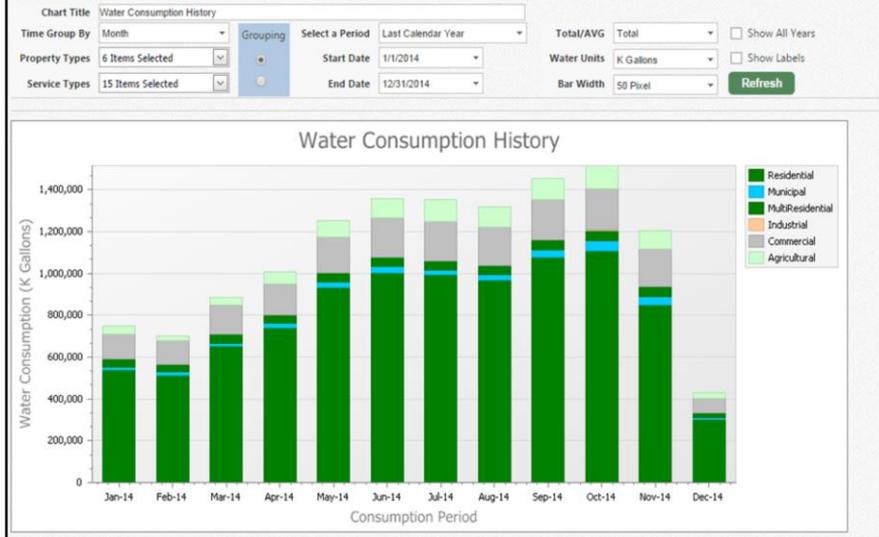
- Photos are uploaded and stored with the Case
- No need to manage photo files
- Photos can be mail merged into violation warning and fine letters

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The time and date stamped evidence photos are also entered into the same template. With the capability to attach photos directly into the template, staff time is significantly streamlined.

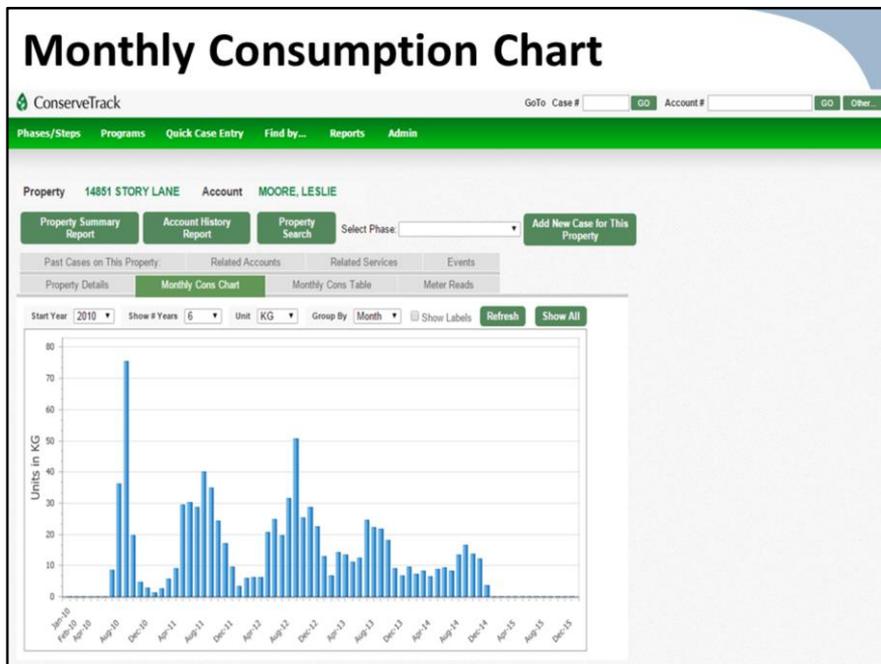
# Interactive Charts

## Water Consumption Interactive Chart



With Frisco's historical data integrated, we have been able to identify new uses for reporting data from our conservation efforts. The Monthly Water Consumption History chart (by usage category) is good example. We anticipate information from such a chart will be helpful when launching a non-residential irrigation inspection program.

More reporting is being requested of municipalities to quantify conservation programs. Reports such as these will help to supply information and will also be beneficial for annual state reports.



We can also narrow the field to track an individual’s water usage. This particular chart illustrates how the easy access to historical data combined with quick access to account and water use data streamlines procedures. By creating a case for each water customer, we can track their involvement in water conservation efforts and the impact it has on their water consumption. Previously, we had not been able to access this information, and now with the capability to interface historical conservation program data with current utility billing data, the information is quickly retrieved.

## Summary

- Using a Water Conservation DMS system drastically enhances water conservation efforts.
- Time savings are very significant, allowing staff to focus educational efforts on saving more water with less effort.
- Many tasks that were not feasible before now become routine.
- Completely new capabilities are also now possible and expansion to add new types of measures is easy.
- Reporting is much faster and many new features are available.



# City of Frisco



## Award Winning for Water Conservation



Municipal Blue Legacy Award  
– 2015 recipient



Texas Environmental Excellence Award  
– 2015 recipient



Bob Derrington Reclamation Award  
- 2015 recipient

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