



Sprinkler System Waiver Application Packet

According to the City's municipal code, use of sprinklers is conditional upon use of a water budget and the City continues to discourage customers from irrigating landscapes at this time. However, the City has developed an enrollment program for customers to apply for and request permission to irrigate landscapes with the use of sprinklers. A water budget must be followed and overall water use still requires a 25% reduction in use compared to last year's usage.

Please read the *Water Budgets and How to Calculate Them* on the reverse side of this document then:

1) **Register your property** by providing the City with:

a) Water Budget Site Registration form, including your signature

NOTE: If there is any missing information, the application will not be processed

2) **Submit monthly budget tables**. Once the City has acknowledged your Registration (either by e-mail or written letter), you will need to provide the City with a monthly report using the attached Water Use History (Table 1). NOTE: If your account is using a meter that serves as an irrigation meter only, the number of people for your table is zero.

If your application is approved, you will follow the watering schedule currently in effect:

- Odd numbered addresses 7:00pm – 9:00am Wed., Fri., and Sun. No Monday watering.
- Even numbered addresses 7:00pm – 9:00am Tues., Thurs., and Sat. No Monday watering.

On request, the City will provide you with a sign that can be placed on your property identifying yours as one that has been approved for sprinkler use.

The City retains the right to request properties approved under this program to refrain from irrigating when there is a need to reduce overall demands on the water system. If the City requires a suspension of this program, you will be notified when irrigating can resume.

The City sincerely appreciates your efforts conserving water in this drought year. Your efforts, and those of the City and entire community, are critical in maintaining water supply reliability this summer.

Thank you!

Water Budgets and How to Calculate Them

While the drought shortage emergency condition is in effect, the City of Cloverdale has banned turf irrigation by hand watering or with the use of automatic sprinkler systems. Customers submitting an application and agreeing to the conditions may apply for a conditional waiver and if approved, may use automatic sprinkler systems for irrigation.

The use of sprinklers on a timer (or not) must be managed with a Water Budget. A Water Budget is a water efficiency tool that is used to determine the correct amount of water to be applied to a landscaped area. A Water Budget is specific to each property and is calculated using the square footage of irrigated landscape, referencing evapotranspiration (ET_o) and an adjustment factor (ET_{AF}). The formula for the calculation is as follows:

$$\text{Water budget} = \text{square footage of irrigated area} \times ET_o \times ET_{AF} \times 0.62$$

Where: ET_o = Evapotranspiration (inches – from weather data)
 ET_{AF} = ET adjustment factor (0.64 per Municipal Code)
 0.62 = Conversion factor to gallons per square foot

Example: A property owner with 800 square feet (sq ft) of irrigated landscape area needs to calculate the property’s allowed water budget for their Water Use History report for the month of May.

Using Table 2 – Target Water Use, the property owner calculates the amount of watering allowed by a sprinkler system by finding the Lawn Square Footage in the first column then following the line to the right until reaching the May column. In this example, the Target Water Use is 1,969 gallons.

The following is an example of how the owner would enter the example information on Table 2: Water Use History report to determine if the requirements have been met.

		A	B	C	D	E	F	G	H
Month	ET_o Inches	Sq Ft of Turf	Units Shown on Bill	Multiply Col B x 748	Water Budget (from Table 2)	# of People in Home	Multiply Col E x 2,250	Col C minus Col F	Is Col G less than Col D?
May 2014	6.20	800	8	5,984	1,969	2	4,500	1,484	Yes

If Column “H” is NO, then you will need to make adjustments and make up the difference in the next month.

If Column “H” is YES, then you have been successful and met the requirements for your water budget.

$$1 \text{ unit} = 748 \text{ gallons}$$

To find gallons used for Column C above,
 multiply 8 units x 748 = 5,984 gallons

There are CIMIS weather stations in Sonoma County from which ET_o can be obtained. The weather station sites, ET and more information on CIMIS can be found at:

<http://wwwcimis.water.ca.gov/cimis/data.jsp>

**CITY OF CLOVERDALE
WATER BUDGET SITE REGISTRATION APPLICATION**

Use of the property (check any that apply):

Commercial Single Family Residence Multi-family Residence Irrigation Only Meter

Property address: _____

City of Cloverdale water account number: _____

Square footage of turf to be irrigated by sprinklers at this property: _____ sq ft

Owner/Tenant contact name: _____

Owner/Tenant contact phone: _____

Owner/Tenant email address: _____

Number of Occupants: _____ Adults _____ Children

If a landscaper/gardener is responsible for setting your irrigation, please complete the following:

Landscape/Gardener company name: _____

Landscape/Gardener contact name: _____

Landscape/Gardener contact phone: _____

Landscape/Gardener email address: _____

Please read and sign then submit this page – then submit the Water Use Report each new month:

I, _____, am responsible for irrigating and manager the turf area for the water account listed above. I understand the City of Cloverdale Municipal Code Chapter 13.5, during this Stage 2 Water Shortage Emergency, allows the use of sprinkler irrigation for sites that follow a “water budget”.

By signing this application, I am committing to adhering to the water budget for as long as the Stage 2 Water Shortage condition is in effect. I also agree to provide the City with monthly water budget reports (Table 1: Water Use History) before the 20th of each month, and, if requested, will immediately suspend irrigation when the City issues the request.

Signature: _____

Date: _____

Mail or return this application attention to: Craig Scott, PO Box 217, Cloverdale, CA 95425 or drop it off at the Customer Service counter inside City Hall at 124 N. Cloverdale Blvd., Cloverdale, CA 95425; or email to cscott@ci.cloverdale.ca.us.

TABLE 1: WATER USE HISTORY

Applicant Name or Site Manager Name: _____

Date Prepared: _____

Property Address: _____

Date Submitted: _____

	A	B	C	D	E	F	G	H		
City of Cloverdale Billing Cycle	Eto Inches	Sq Ft of Turf	Units Shown on Bill	Multiply Col B x 748	Find Water Budget (from Table 2)	Number of People in Home	Multiply Col E x 2,250	Col C minus Col F	Is Col G less than Col D?	NOTES OR COMMENTS
Example: April to May	6.20	800	8	5,984	1,969	2	4,500	1,484	Yes	Used drip irrigation most of the month
December to January	1.24									
January to February	1.68									
February to March	3.41									
March to April	4.80									
April to May	6.20									
May to June	6.90									
June to July	7.44									
July to August	6.51									
August to September	5.10									
September to October	3.41									
October to November	1.80									
November to December	0.93									

NOTE: If Column H is "no" then you will need to make up for the over use in the next month.

If Column H is "yes" then you have been successful and met the minimum requirements for your water budget.

Mail or return this report before the 20th of each month attention to: Craig Scott, PO Box 217, Cloverdale, CA 95425 or drop it off at the Customer Service counter inside City Hall at 124 N. Cloverdale Blvd., Cloverdale, CA 95425; or email to cscott@ci.cloverdale.ca.us.

TABLE 2: TARGET WATER USE IN GALLONS

Lawn Square Footage	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
0	-	-	-	-	-	-	-	-	-	-	-	-
25	12	17	34	48	62	68	74	65	51	34	18	9
50	25	33	68	95	123	137	148	129	101	68	36	18
75	37	50	102	143	185	205	222	194	152	102	54	28
100	49	67	135	191	246	274	295	258	202	135	71	37
125	62	83	169	238	308	342	369	323	253	169	89	46
150	74	100	203	286	369	411	443	388	304	203	107	55
175	86	117	237	333	431	479	517	452	354	237	125	65
200	98	133	271	381	492	548	591	517	405	271	143	74
225	111	150	305	429	554	616	665	582	456	305	161	83
250	123	167	338	476	615	685	738	646	506	338	179	92
275	135	183	372	524	677	753	812	711	557	372	197	102
300	148	200	406	572	738	822	886	775	607	406	214	111
325	160	217	440	619	800	890	960	840	658	440	232	120
350	172	233	474	667	861	959	1,034	905	709	474	250	129
375	185	250	508	715	923	1,027	1,108	969	759	508	268	138
400	197	267	542	762	985	1,096	1,181	1,034	810	542	286	148
425	209	283	575	810	1,046	1,164	1,255	1,098	860	575	304	157
450	222	300	609	858	1,108	1,233	1,329	1,163	911	609	322	166
475	234	317	643	905	1,169	1,301	1,403	1,228	962	643	339	175
500	246	333	677	953	1,231	1,370	1,477	1,292	1,012	677	357	185
525	258	350	711	1,000	1,292	1,438	1,551	1,357	1,063	711	375	194
550	271	367	745	1,048	1,354	1,507	1,625	1,421	1,114	745	393	203
575	283	384	778	1,096	1,415	1,575	1,698	1,486	1,164	778	411	212
600	295	400	812	1,143	1,477	1,644	1,772	1,551	1,215	812	429	222
625	308	417	846	1,191	1,538	1,712	1,846	1,615	1,265	846	447	231
650	320	434	880	1,239	1,600	1,781	1,920	1,680	1,316	880	464	240
675	332	450	914	1,286	1,661	1,849	1,994	1,745	1,367	914	482	249
700	345	467	948	1,334	1,723	1,918	2,068	1,809	1,417	948	500	258
725	357	484	981	1,382	1,785	1,986	2,141	1,874	1,468	981	518	268
750	369	500	1,015	1,429	1,846	2,054	2,215	1,938	1,519	1,015	536	277
775	382	517	1,049	1,477	1,908	2,123	2,289	2,003	1,569	1,049	554	286
800	394	534	1,083	1,524	1,969	2,191	2,363	2,068	1,620	1,083	572	295
825	406	550	1,117	1,572	2,031	2,260	2,437	2,132	1,670	1,117	590	305
850	418	567	1,151	1,620	2,092	2,328	2,511	2,197	1,721	1,151	607	314
875	431	584	1,185	1,667	2,154	2,397	2,584	2,261	1,772	1,185	625	323
900	443	600	1,218	1,715	2,215	2,465	2,658	2,326	1,822	1,218	643	332
925	455	617	1,252	1,763	2,277	2,534	2,732	2,391	1,873	1,252	661	342
950	468	634	1,286	1,810	2,338	2,602	2,806	2,455	1,923	1,286	679	351
975	480	650	1,320	1,858	2,400	2,671	2,880	2,520	1,974	1,320	697	360
1000	492	667	1,354	1,906	2,461	2,739	2,954	2,584	2,025	1,354	715	369
1025	505	684	1,388	1,953	2,523	2,808	3,028	2,649	2,075	1,388	732	378
1050	517	700	1,421	2,001	2,584	2,876	3,101	2,714	2,126	1,421	750	388
1175	578	784	1,591	2,239	2,892	3,219	3,471	3,037	2,379	1,591	840	434
1200	591	800	1,625	2,287	2,954	3,287	3,544	3,101	2,430	1,625	858	443
1225	603	817	1,658	2,334	3,015	3,356	3,618	3,166	2,480	1,658	875	452
1250	615	834	1,692	2,382	3,077	3,424	3,692	3,231	2,531	1,692	893	462
1275	628	850	1,726	2,430	3,138	3,493	3,766	3,295	2,581	1,726	911	471
1300	640	867	1,760	2,477	3,200	3,561	3,840	3,360	2,632	1,760	929	480
1325	652	884	1,794	2,525	3,261	3,630	3,914	3,424	2,683	1,794	947	489
1350	665	900	1,828	2,573	3,323	3,698	3,987	3,489	2,733	1,828	965	498
1375	677	917	1,861	2,620	3,384	3,767	4,061	3,554	2,784	1,861	983	508
1400	689	934	1,895	2,668	3,446	3,835	4,135	3,618	2,835	1,895	1,000	517

Lawn Square Footage	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
1400	689	934	1,895	2,668	3,446	3,835	4,135	3,618	2,835	1,895	1,000	517
1425	701	950	1,929	2,715	3,507	3,904	4,209	3,683	2,885	1,929	1,018	526
1450	714	967	1,963	2,763	3,569	3,972	4,283	3,747	2,936	1,963	1,036	535
1475	726	984	1,997	2,811	3,631	4,040	4,357	3,812	2,986	1,997	1,054	545
1500	738	1,000	2,031	2,858	3,692	4,109	4,431	3,877	3,037	2,031	1,072	554
1525	751	1,017	2,064	2,906	3,754	4,177	4,504	3,941	3,088	2,064	1,090	563
1550	763	1,034	2,098	2,954	3,815	4,246	4,578	4,006	3,138	2,098	1,108	572
1575	775	1,050	2,132	3,001	3,877	4,314	4,652	4,071	3,189	2,132	1,125	582
1600	788	1,067	2,166	3,049	3,938	4,383	4,726	4,135	3,240	2,166	1,143	591
1625	800	1,084	2,200	3,097	4,000	4,451	4,800	4,200	3,290	2,200	1,161	600
1650	812	1,100	2,234	3,144	4,061	4,520	4,874	4,264	3,341	2,234	1,179	609
1675	825	1,117	2,268	3,192	4,123	4,588	4,947	4,329	3,391	2,268	1,197	618
1700	837	1,134	2,301	3,240	4,184	4,657	5,021	4,394	3,442	2,301	1,215	628
1725	849	1,151	2,335	3,287	4,246	4,725	5,095	4,458	3,493	2,335	1,233	637
1750	861	1,167	2,369	3,335	4,307	4,794	5,169	4,523	3,543	2,369	1,251	646
1775	874	1,184	2,403	3,382	4,369	4,862	5,243	4,587	3,594	2,403	1,268	655
1800	886	1,201	2,437	3,430	4,431	4,931	5,317	4,652	3,644	2,437	1,286	665
1825	898	1,217	2,471	3,478	4,492	4,999	5,390	4,717	3,695	2,471	1,304	674
1850	911	1,234	2,504	3,525	4,554	5,068	5,464	4,781	3,746	2,504	1,322	683
1875	923	1,251	2,538	3,573	4,615	5,136	5,538	4,846	3,796	2,538	1,340	692
1900	935	1,267	2,572	3,621	4,677	5,205	5,612	4,910	3,847	2,572	1,358	701
1925	948	1,284	2,606	3,668	4,738	5,273	5,686	4,975	3,898	2,606	1,376	711
1950	960	1,301	2,640	3,716	4,800	5,342	5,760	5,040	3,948	2,640	1,393	720
1975	972	1,317	2,674	3,764	4,861	5,410	5,834	5,104	3,999	2,674	1,411	729
2000	985	1,334	2,708	3,811	4,923	5,479	5,907	5,169	4,049	2,708	1,429	738
1350	665	900	1,828	2,573	3,323	3,698	3,987	3,489	2,733	1,828	965	498
1375	677	917	1,861	2,620	3,384	3,767	4,061	3,554	2,784	1,861	983	508
1400	689	934	1,895	2,668	3,446	3,835	4,135	3,618	2,835	1,895	1,000	517
1425	701	950	1,929	2,715	3,507	3,904	4,209	3,683	2,885	1,929	1,018	526
1450	714	967	1,963	2,763	3,569	3,972	4,283	3,747	2,936	1,963	1,036	535
1475	726	984	1,997	2,811	3,631	4,040	4,357	3,812	2,986	1,997	1,054	545
1500	738	1,000	2,031	2,858	3,692	4,109	4,431	3,877	3,037	2,031	1,072	554
1525	751	1,017	2,064	2,906	3,754	4,177	4,504	3,941	3,088	2,064	1,090	563
1550	763	1,034	2,098	2,954	3,815	4,246	4,578	4,006	3,138	2,098	1,108	572
1575	775	1,050	2,132	3,001	3,877	4,314	4,652	4,071	3,189	2,132	1,125	582
1600	788	1,067	2,166	3,049	3,938	4,383	4,726	4,135	3,240	2,166	1,143	591
1625	800	1,084	2,200	3,097	4,000	4,451	4,800	4,200	3,290	2,200	1,161	600
1650	812	1,100	2,234	3,144	4,061	4,520	4,874	4,264	3,341	2,234	1,179	609
1675	825	1,117	2,268	3,192	4,123	4,588	4,947	4,329	3,391	2,268	1,197	618
1700	837	1,134	2,301	3,240	4,184	4,657	5,021	4,394	3,442	2,301	1,215	628
1725	849	1,151	2,335	3,287	4,246	4,725	5,095	4,458	3,493	2,335	1,233	637
1750	861	1,167	2,369	3,335	4,307	4,794	5,169	4,523	3,543	2,369	1,251	646
1775	874	1,184	2,403	3,382	4,369	4,862	5,243	4,587	3,594	2,403	1,268	655
1800	886	1,201	2,437	3,430	4,431	4,931	5,317	4,652	3,644	2,437	1,286	665
1825	898	1,217	2,471	3,478	4,492	4,999	5,390	4,717	3,695	2,471	1,304	674
1850	911	1,234	2,504	3,525	4,554	5,068	5,464	4,781	3,746	2,504	1,322	683
1875	923	1,251	2,538	3,573	4,615	5,136	5,538	4,846	3,796	2,538	1,340	692
1900	935	1,267	2,572	3,621	4,677	5,205	5,612	4,910	3,847	2,572	1,358	701
1925	948	1,284	2,606	3,668	4,738	5,273	5,686	4,975	3,898	2,606	1,376	711
1950	960	1,301	2,640	3,716	4,800	5,342	5,760	5,040	3,948	2,640	1,393	720
1975	972	1,317	2,674	3,764	4,861	5,410	5,834	5,104	3,999	2,674	1,411	729
2000	985	1,334	2,708	3,811	4,923	5,479	5,907	5,169	4,049	2,708	1,429	738