

Ordinance No. 14-02

AN ORDINANCE TO ESTABLISH A WATER CONSERVATION PLAN AND DROUGHT CONTINGENCY PLAN FOR THE CITY OF SKY VALLEY

Whereas, the City of Sky Valley is required to develop and implement effective water conservation programs and a drought contingency plan in accordance with accepted standards and which address rules established by the Georgia Board of Natural Resources; and

Whereas, the City of Sky Valley wishes to promote long-term efficient use of water resources; and

Whereas, the City of Sky Valley wishes to adhere to sound management practices in the operation of their water system to insure that maximum beneficial use is obtained from the permitted withdrawal.

Therefore, the Council of the City of Sky Valley hereby ordains:


- I. That the Water Conservation Plan, attached hereto and designated as Exhibit "A" and the Drought Contingency Plan, attached hereto and designated as Exhibit "B" be adopted by the City of Sky Valley.
- II. SHOULD ANY SECTION OR PROVISION OF THIS ORDINANCE BE DECLARED BY A COURT OF COMPETENT JURISDICTION TO BE UNCONSTITUTIONAL OR INVALID SUCH DECLARATION SHALL NOT AFFECT THE VALIDITY OF THE ORDINANCE AS A WHOLE OR ANY PART THEREOF OTHER THAN THE PART SO DECLARED TO BE UNCONSTITUTIONAL OR INVALID. ALL RESOLUTIONS AND ORDINANCES AND PARTS OF RESOLUTIONS AND ORDINANCES IN CONFLICT WITH THE PROVISIONS OF THIS ORDINANCE ARE HEREBY REPEALED.

It is so ordained and approved by vote of the City Council of the City of Sky Valley this 25th day of March, 2014.

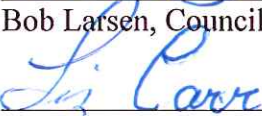
Approved:



Hughel Goodgame, Mayor



Bob Larsen, Council President



Liz Carr, Councilor

Martin Greene, Councilor

Neil Howard, Councilor

David K. Whatley

David Whatley, Councilor

Attest:

Mandi Cantrell

Mandi Cantrell, City Clerk

First reading approved by City Council on the _____ day of _____, 2014.

Second reading approved by City Council on the _____ day of _____, 2014.

or

Second reading waived by unanimous vote
of all council members present



EXHIBIT "A"

WATER CONSERVATION PLAN

CITY OF SKY VALLEY, GEORGIA

As adopted by the City Council

March 25, 2014

INTRODUCTION

Conservation planning is an integral part of resource management, which emphasizes a balanced consideration of supply-management and demand-management options that, when implemented, meet the needs of a water system.

The purpose of this *Water Conservation Plan* is to promote long-term efficient use of water resources. The City of Cornelia plans to adhere to sound management practices in the operation of their water system to insure that maximum beneficial use is obtained from the permitted withdrawal.

SECTION 1.0 SYSTEM MANAGEMENT

1.1 Reduction and Management of Unaccounted for Water (UAW)

The key to any water conservation plan is a continued effort to manage and reduce unaccounted for water. Unaccounted for water is the difference between the total amount of water pumped into the water distribution system and the amount of metered use by the customers of the water system. This difference is expressed as a percentage of the total water pumped into the system.

$$\text{UAW}(\%) = 100[1 - (\text{metered use})/(\text{water pumped into distribution system from source})]$$

The following table shows the water loss percentages (UAW %) for the City of Sky Valley for a recent 24-month period.

TABLE 1:
CITY OF SKY VALLEY
Unaccounted for Water (UAW)

Year Ending	Pumped	Metered Billed	Metered Unbilled	Unmetered Unbilled	Total Consumed	UAW (sold/produced)
Jan, 2012	2,425,000.00	936,740.00	113,300.00		1,050,040	0.61
Feb, 2012	1,674,000.00	674,410.00	146,000.00		820,410	0.60
Mar, 2012	1,470,000.00	868,384.00	138,000.00		1,006,384	0.41
Apr, 2012	1,583,000.00	1,131,216.00	62,990.00		1,194,206	0.29
May, 2012	1,915,000.00	1,193,210.00	61,000.00		1,254,210	0.38
Jun, 2012	2,185,000.00	1,657,770.00	28,500.00		1,686,270	0.24
Jul, 2012	2,574,000.00	2,031,044.00	38,000.00		2,069,044	0.21
Aug, 2012	2,182,000.00	1,621,126.00	85,000.00		1,706,126	0.26
Sep, 2012	1,906,000.00	1,451,460.00			1,451,460	0.24
Oct, 2012	2,303,000.00	1,529,950.00	99,000.00		1,628,950	0.34
Nov, 2012	1,755,000.00	1,079,810.00	25,000.00		1,104,810	0.38
Dec, 2012	1,340,000.00	893,110.00	69,000.00		962,110	0.33
Jan, 2013	1,193,000.00	676,660.00	25,000.00		491,340.00	0.43

Feb, 2013	863,000.00	519,980.00	15,300.00	327,720.00	0.40
Mar, 2013	1,084,000.00	755,570.00	10,300.00	318,130.00	0.30
Apr, 2013	1,137,000.00	812,000.00	0.00	325,000.00	0.29
May, 2013	1,660,000.00	1,195,910.00	21,100.00	442,990.00	0.28
Jun, 2013	1,938,000.00	1,670,580.00	38,600.00	228,820.00	0.14
Jul, 2013	2,347,000.00	1,843,250.00	28,000.00	475,750.00	0.21
Aug, 2013	1,906,000.00	1,419,440.00	12,500.00	474,060.00	0.26
Sep, 2013	1,563,000.00	1,267,440.00	1,700.00	293,860.00	0.19
Oct, 2013	1,982,000.00	1,493,920.00	16,000.00	472,080.00	0.25
Nov, 2013	1,495,000.00	1,157,390.00	4,300.00	333,310.00	0.23
Dec. 2013	1,569,000.00	936,500.00	500.00	632,000.00	0.40
Total	42,049,000	28,816,870	1,039,090	20,749,080	0.32

As shown in the table above, the City's average UAW over the 24-month period was 32%.

1.2 Inventory of existing facilities, production & water use:

1.2.1 Surface Water Treatment: Sky Valley does not currently operate a surface water treatment facility. The City is currently permitted to withdraw a monthly average capacity of 0.25 MGD from the Mud Creek Impoundment. The initial plans for construction of a surface water treatment plant were done in 1987, but the City's wells have continued to provide the necessary water needed by its citizens thus far. Depending on the growth of the full-time resident population and future commercial development, the City will continue to monitor how quickly we may need to implement plans for a treatment plant.

1.2.2 Existing Wells:

	GPM	GPD
Well #3	80	96,000
Well #4	37.5	14,400
Well #5	12	7,680
Well #6	18.5	15,840
Well #7	25	13,500
Well #8	125	120,000
	SUBTOTAL	267,420
WINDING RIDGE		
Well #1	2.1	3020
Well #2	1.4	2000
	SUBTOTAL	5,020

1.2.3 Existing Storage Tanks:

	Capacity
Alex Mountain Tank	108,000
Sky High Tank	108,000
Shonberg Tank	65,000
Wild Bird Tank	68,000
Bayberry Tank	68,000
Southern Breeze Tank - WR	108,000

1.2.4 **Metering of Water Production:** Each of the city's wells has a water meter. Each of the meters provides continuous read-out of water pumping operations. The water meter readings are compared to customer billing records each month to quantify losses in distribution, metering and billing.

1.2.5 **Interconnections with Other Systems:** Sky Valley's water distribution system currently has no interconnections with any other systems.

SECTION 2.0 IDENTIFICATION OF WATER CONSERVATION MEASURES

The human population continues to grow, but available water resources are finite. Therefore, society must conserve water through efficient use and active loss control if it is to sustain this precious resource.

2.1 **Current Programs to reduce UAW:** The City of Sky Valley is working on several programs to help manage and reduce UAW. These programs are discussed below and will be continued as part of the current Water Conservation Plan and include the following:

2.1.1 **Leak Detection and Elimination Program:** The water department has for many years employed a full time maintenance person responsible for making distribution system repairs as required. The city logs every reported leak as a work order and tracks those work orders to ensure that repair is accomplished. In addition to citizen reports of leaks, all operating departments of the City, including the police department, report any leaks observed during their normal operating function. All reported leaks from whatever source are investigated and prioritized for repair. Major leaks are repaired immediately with overtime work as necessary. Leak detection equipment is available for personnel to locate leaking pipes that are not visible on the surface. Personnel have been trained to operate the leak detection equipment.

- 2.1.2 **System Maps:** Maps of the City water system have been created and include all facilities in existence as of 2013.
- 2.1.3 **Line and Hydrant Flushing:** Flushing of mains is practiced whenever water supply reserves are adequate. The program is designed to periodically and systematically remove oxidation byproducts that accumulate in the mains. Valve and hydrant maintenance are a part of the flushing program. Currently, flushed water is metered or estimated and is deducted from our UAW figures
- 2.1.4 **Unauthorized Use:** All unauthorized users of city water are immediately given notice to cease and are advised to apply for service.
- 2.1.5 **Unmetered Service Connections:** City of Sky Valley policy requires that all service connections be metered. The system has no known unmetered service connections. Currently bulk water purchases are estimated and paid for accordingly. Bulk water usage has been deducted from our UAW figures.
- 2.2 **Other Water Conservation Measures Planned:** Recommended Improvements to Reduce UAW: A goal of 15% UAW is considered minimum industry standard. It is believed that recently initiated programs (complete meter replacement program, leak detection program, and updating of water system maps) may result in Sky Valley helping to meet this goal, but it will likely take additional measures to reach this and future goals.
- 2.2.1 **Flushing Water Usage:** It is recommended that water used for flushing be accounted for. The best method is using portable fire hydrant flow meters to measure water usage during routine flushing of water mains. In circumstances where metering is not feasible, operations personnel can maintain a log of hydrant flushing time and estimated rate of flow. This data should be stored and totaled on a monthly basis. With the planned purchase of a hydrant meter, the City will be able to determine the exact amount of water used and reduce it from our UAW
- 2.2.2 **Meter Maintenance, Testing and Replacement:** In 2011, Sky Valley intensified its efforts with respect to water meter maintenance. All new radio read meters were installed throughout the entire water system. Some meters had been close to 30 years old. An intensified effort of performing meter maintenance, testing and replacement is expected to result in lower unaccounted for water.
- 2.2.3 **Prevention of Tank Overflows:** Sky Valley has also implemented a plan to have water levels in Sky Valley's main pressure zone water tanks continuously monitored with SCADA equipment. The SCADA system will report an alarm if a water level reaches an overflow condition. Operating personnel will utilize the

tank level monitoring data to regulate water output and avoid overflow of tanks. The city is optimistic that this operating plan will prove very effective in prevention of tank overflows in the Sky Valley system.

2.2.4 Replacement of galvanized pipes and blue poly lines: Sky Valley's water system had a considerable amount of galvanized steel water pipes and blue poly lines in the older areas of town. As galvanized pipe ages, it is prone to develop leaks that are often difficult to locate. Also, the inside of the pipe corrodes, causing "rusty water" complaints and increases the need to flush the system. The blue poly lines have proven to be inferior in quality. Sky Valley has made major improvements in replacing galvanized and blue poly pipes in its system. The city will continue to try to locate and replace any remaining pipes made of these materials.

2.3 Identification of other water conservation efforts

2.3.1 Audit of Metering and Billing Records: Every system needs to occasionally audit its metering and billing records to ensure that no water customers are being overlooked in the billing and accounting system. Such an audit should also review the procedure by which new accounts are established such as monthly reports and cross-checks with building permits, etc.

2.3.2 Rate Making Policies: Water conservation by customers can be encouraged through a system's rate policy. With the ever-increasing demands upon water resources, it is becoming more important to establish water rates that encourage water conservation by customers. The following areas should be considered by governing officials when adopting water rate policy:

2.3.2(a) Meter and bill all service connections: Sky Valley's policy has been that all service connections are metered and billed; the city intends to continue this policy. For the year beginning January 1, 2014, the breakdown of customer usage, based on metered water volume was 1% Municipal, 4% Commercial and 95% Residential.

2.3.2(b) Annual Review: Rates to customers are reviewed annually by city staff and adjusted by the City Council as needed to maintain financial goals of the system.

- 2.3.3 **Statements of Self-Supporting Water System:** Sky Valley's policy is that the water system generate sufficient revenue from water rates and tap-on fees to pay all obligations of the water system including renewal and extensions of the system. The water system is not subsidized by ad valorem taxes or general fund revenue sources other than customer fees. Sky Valley has financed improvements to the system with GEFA low interest loans and SPLOST revenues.
- 2.3.4 **Plumbing Ordinance and Codes:** The City of Sky Valley has adopted the International Plumbing Code, which stipulates ultra-low flow plumbing fixtures complying with current Georgia law for new construction.
- 2.3.5 **Recycle-Reuse:** Currently recycling or reuse of treated wastewater within the water system is not being conducted.

SECTION 3.0 DROUGHT CONTINGENCY PLAN

The City of Sky Valley has developed a *Drought Contingency Plan*, attached hereto, which will be used to determine drought severity. This plan also includes a water use priority program and restrictions on lower priority uses. Under normal conditions, the City of Sky Valley does not restrict the use of water for irrigation, but does charge full price for such water. During drought or periods of shortage the city does invoke restrictions on non-essential use of water in accordance with its Drought Contingency Plan.

SECTION 4.0 IMPLEMENTATION OF WATER CONSERVATION MEASURES

Implementing water conservation measures will ensure a reduction of UAW. The measures below are adopted by Sky Valley as ways to prevent water loss and to conserve water.

- 4.1 **Leak Detection and Elimination:** Water audits shall be carried out as necessary. UAW shall be recorded and monitored on a monthly basis. Leaks reported to the City of Sky Valley or identified by city personnel shall be responded to and treated as urgent job orders.
- 4.2 **System Maps:** Maps of the City water system have been created to include all facilities in existence as of 2013.
- 4.3 **Line and Hydrant Flushing:** In circumstances where metering is not feasible, operations personnel will maintain a log of hydrant flushing time and estimated rate of flow.
- 4.4 **Meter Maintenance, Testing and Replacement:** The groundwater well meters will be calibrated annually. Records of calibration and any other maintenance on the meters shall

be maintained at the City Hall. Sky Valley upgraded the entire metering system to radio read meters in 2011.

4.5 **Prevention of Tank Overflows:** Sky Valley's main water tanks will be continuously monitored with SCADA equipment.

4.6 **Replacement of galvanized pipes and blue poly lines:** Sky Valley has recently completed an extensive replacement of all known galvanized and blue poly lines.

SECTION 5.0 ANALYSIS OF BENEFITS AND COSTS

Conserving water and implementing the measures adopted by the City means there will be expenses involved. Sky Valley has spent approximately Four Million Dollars in water system improvements over the last four years. The City will continue to monitor any needs and budget accordingly.

SECTION 6.0 EDUCATION EFFORTS

Sky Valley experienced severe water supply shortages due to drought conditions during the summers of 2006 and 2007. These conditions led the city to institute public awareness and education campaigns related to water conservation. On-going educational programs adopted by Sky Valley include:

- Placing signs around town with messages related to water restrictions.
- Distribution (via e-mail) of educational materials and public awareness information on water conservation and outdoor water use restrictions. This is a current, on-going practice.
- Sky Valley's website includes a link to water conservation tips that can be employed by water customers.
- Emergency communication calls can be made to all phone numbers in the City's database to notify of urgent situations.

SECTION 7.0 DEMAND FORECAST

Long Range Planning: Sky Valley is working on a long-range water supply plan that when fully implemented will enable the city to meet water supply needs for the next twenty years. That plan is being prepared on the basis of a careful analysis of alternatives and with consideration of water conservation. Based on preliminary information, the table on the following page analyzes Sky Valley's demand forecast. Sky Valley will continue to evaluate its growth with these projections and this long range plan.

MAX DAY
1.75

YEAR	CITY POP. W/ 5 ANNUAL GROWTH (PERSONS)	HIST. TIP MO. Q. AVG. MO. (GPM)	HIST. TIP DAILY Q. MAX DAY (GPD)	HIST. TIP DAILY Q. MAX DAY (GPD)	NO. OF CITY CONN.(2)	RES. 625			COMM. 9			CONDO 163			TOTAL CITY		
						DEMAND ADF (GPD)	DEMAND MDF (GPD)	DEMAND GPD	DEMAND ADF (GPD)	DEMAND MDF (GPD)	DEMAND GPD	DEMAND ADF (GPD)	DEMAND MDF (GPD)	DEMAND GPD	DEMAND ADF (GPD)	DEMAND MDF (GPD)	DEMAND GPD
2006	222	2,792,100	51,544	160,202	797	40,531	70,930	5885	3420	11007	19262	54858	20,059,761				
2007	233	2,831,705	86,121	168,213	837	42,558	74,476	6284	3691	11557	20225	57708	21,062,249				
2008	245	3,078,250	100,978	176,623	879	44,886	78,200	3771	3598	12135	22236	60591	22,115,887				
2009	257	3,232,205	105,974	185,454	923	46,920	82,110	3959	3771	12742	22936	63621	23,221,881				
2010	270	3,393,815	111,273	194,727	969	49,265	86,275	4157	3959	13379	23413	66802	24,382,765				
2011	283	3,563,505	116,895	204,463	1017	51,729	90,526	4365	4054	14048	24584	70142	25,601,903				
2012	298	3,741,681	122,678	214,687	1068	54,316	95,063	4583	4204	14750	25813	73645	26,881,959				
2013	312	3,928,765	128,812	225,421	1121	57,032	99,805	4812	4421	15488	27104	77332	28,225,069				
2014	328	4,125,203	135,253	236,692	1176	59,883	104,795	5053	4643	16262	28459	81186	29,637,403				
2015	344	4,331,464	142,015	248,527	1236	62,877	110,035	5306	4885	17075	29882	85258	31,119,274				
2016	362	4,548,037	149,115	260,953	1298	66,021	115,537	5571	5129	17929	31376	89521	32,675,237				
2017	380	4,776,439	156,572	274,001	1363	69,322	121,314	5848	5371	18768	32845	93697	34,308,869				
2018	399	5,014,210	164,400	287,701	1431	72,788	127,380	6142	5629	19757	34692	98697	36,024,449				
2019	419	5,264,921	172,620	302,086	1503	76,428	133,748	6449	5885	20755	36322	103632	37,825,672				
2020	440	5,528,167	181,251	317,190	1578	80,249	140,436	6771	6142	21793	38138	108814	39,716,955				
2021	462	5,804,575	190,314	333,049	1657	84,262	147,458	7110	6421	22853	40045	114254	41,702,803				
2022	485	6,094,804	199,830	349,702	1740	88,475	154,831	7465	6704	24027	42074	119967	43,787,943				
2023	509	6,399,544	209,821	367,187	1827	92,868	162,572	7839	7048	25228	44149	125965	45,977,340				
2024	534	6,719,522	220,312	385,546	1919	97,543	170,701	8231	7344	26430	46357	132264	48,276,207				
2025	561	7,055,498	231,328	404,824	2014	102,420	179,236	8642	7654	27814	48675	139877	50,690,018				
2026	589	7,408,273	242,894	425,065	2115	107,541	188,198	9074	7980	29205	51108	148592	53,224,518				
2027	618	7,778,688	255,039	446,318	2220	112,919	197,607	9528	8328	30665	53664	158112	55,885,744				
2028	645	8,167,620	267,791	468,634	2331	118,584	207,468	10004	8685	32188	56247	168767	58,660,032				
2029	682	8,576,001	281,180	492,966	2448	124,493	217,862	10505	9048	33808	58974	179606	61,514,033				
2030	716	9,004,602	295,239	518,969	2570	130,717	228,755	11030	9529	35499	62123	191746	64,594,735				
2031	752	9,455,042	310,001	542,302	2699	137,253	240,193	11581	10077	37274	65229	196708	67,829,472				
2032	789	9,927,794	325,501	569,628	2834	144,118	252,203	12160	10621	39137	68480	195414	71,325,945				
2033	829	10,424,183	341,777	598,109	2976	151,322	264,813	12768	11245	41064	71915	205184	74,892,242				
2034	870	10,945,393	358,865	628,014	3124	158,888	278,054	13462	11941	43149	75511	215443	78,536,955				
2035	914	11,492,662	376,809	659,415	3281	166,832	291,956	14077	12635	45306	79356	226216	82,368,587				
2036	959	12,067,295	395,649	692,366	3445	175,174	306,554	14781	13487	47572	83250	237926	86,397,132				
2037	1007	12,670,660	415,431	727,005	3617	183,932	321,662	15520	14460	49950	87413	249403	91,031,989				
2038	1056	13,304,193	436,203	763,355	3796	193,129	337,976	16296	15518	52448	91763	261973	95,586,586				
2039	1111	13,969,403	458,013	801,523	3986	202,785	354,875	17111	16584	55070	96373	274966	100,362,768				
2040	1166	14,667,873	480,974	841,599	4187	212,925	372,618	17966	17666	57824	101191	289715	105,360,306				
2041	1225	15,401,267	504,960	883,679	4396	223,871	391,245	18865	18865	60715	106251	303151	110,649,851				
2042	1286	16,171,330	530,208	927,863	4616	234,750	410,812	19908	20008	63751	111563	318308	116,182,449				
2043	1350	16,979,866	556,718	974,256	4847	246,487	431,352	20798	20798	66838	117142	334223	121,991,571				
2044	1418	17,823,891	584,554	1,022,969	5089	258,811	452,920	21938	21938	70285	122989	350935	128,091,150				
2045	1488	18,720,336	613,781	1,074,118	5344	271,752	475,966	22930	22930	73799	129145	368481	134,495,707				
2046	1563	19,656,352	644,471	1,127,824	5611	285,340	499,344	24077	24077	77469	135606	386905	141,220,483				
2047	1641	20,639,170	676,894	1,184,215	5891	299,607	524,311	25281	25281	81364	142386	406251	148,281,517				
2048	1723	21,671,129	710,529	1,243,425	6186	314,567	550,327	26545	26545	85432	149506	426563	155,669,693				
2049	1809	22,754,665	746,055	1,305,597	6495	330,316	578,053	27872	27872	89703	156913	447891	163,480,373				
2050	1900	23,892,419	783,358	1,370,877	6820	346,832	606,956	29255	29255	94189	164830	470286	171,654,382				
2051	1995	25,087,040	822,526	1,439,420	7161	364,174	637,304	30729	30729	98888	173071	493800	180,237,111				
2052	2094	26,341,392	863,652	1,511,391	7519	382,382	669,169	32265	32265	103843	181725	518490	189,248,967				
2053	2198	27,658,462	906,835	1,588,861	7895	401,501	702,627	33878	33878	109035	190811	544415	198,711,415				
2054	2309	29,041,385	952,177	1,666,309	8290	421,576	737,758	35572	35572	114487	200352	571636	208,646,886				
2055	2425	30,493,454	999,785	1,749,624	8704	442,655	774,647	37351	37351	120211	210369	600217	219,079,335				
2056	2546	32,018,127	1,049,775	1,837,108	9140	464,768	813,379	39219	39219	126222	220888	630228	230,033,302				
2057	2673	33,619,033	1,102,263	1,928,961	9596	488,027	854,048	41179	41179	132533	231932	661740	241,584,967				

SECTION 8.0 EVALUATION OF STRATEGY

The City of Sky Valley will submit to the Director, a progress report every 5 years outlining actions and improvements implemented to conserve water and reduce loss. The report will include progress on leak detection, public programs, system management improvement and rate considerations. Current period review information, and projections, will be presented and discussed. The *Water Conservation Progress Report*; attached hereto, shall be completed and submitted to the Director every five years.

An annual Water Use Data Report that includes information on unaccounted for water for the past 12 months will be submitted to the Director pursuant to Georgia Department of Natural Resources, *Rules and Regulations for Water Quality Control, subsection 391-3-6.07(15) Amended*. This report will include an account of water use for the previous calendar year, with monthly average and maximum day use for each month. This annual report shall be submitted to the Director by January 31 of the current year for water use in the previous calendar year.

WATER CONSERVATION PROGRESS REPORT Date: _____

Withdrawal Permit # _____ - _____

Permit User Name _____

Current Address _____

Contact Person _____

Phone Number (____) _____ - _____

Report Year Please Report the most recent 5 Years Year - Month	Highest Monthly Average withdrawal over course of that report year (gallons per day) Monthly Production divided by days in month	Annual Average Withdrawal (gallons per day) Annual Production divided by days in year	Population of Service Area Population	Equivalent Gallons per Capita per Day Annual Average divided by Population

Please provide a brief description of your actions taken to improve water conservation and reduce water loss in the areas of: _____ (attach pages if more room is needed)

1. Leak Detection and/or repair:

2. Meter Installation, calibration or replacement:

3. Summer and/or peak use surcharges:

4. Enforcement of ultra-low flow plumbing fixture requirements:

5. Other water conservation actions:

Signature and title of Authorizing Official

Printed name of Authorizing Official

EXHIBIT "B"

DROUGHT CONTINGENCY PLAN

CITY OF SKY VALLEY, GEORGIA

As adopted by the City Council
_____, 2014

Section I: Declaration of Policy, Purpose, and Intent

In order to conserve the available water supply and protect the integrity of water supply facilities, with particular regard for domestic water use, sanitation, and fire protection, and to protect and preserve public health, welfare, and safety and minimize the adverse impacts of water supply shortage or other water supply emergency conditions, the City of Sky Valley (Sky Valley) hereby adopts the following regulations and restrictions on the delivery and consumption of water. Water uses regulated or prohibited under this Drought Contingency Plan (the Plan) are considered to be nonessential and continuation of such uses during times of water shortage or other emergency water supply conditions are deemed to constitute a waste of water which subjects the offender(s) to penalties as defined in Section XI of this Plan.

Section II: Public Involvement

Opportunity for the public to provide input into the preparation of the Plan was provided by Sky Valley by posting the draft Plan on the Internet, City Hall, and by posting notice of a public council meeting held February 25, 2014, in the City of Sky Valley.

Section III: Public Education

The City of Sky Valley will periodically provide the public with information about the Plan, including information about the conditions under which each stage of the Plan is to be initiated or terminated and the water use restrictions to be implemented in each stage. This information will be provided by means, including but not limited to, public service announcements, internet and e-mail notices, utility bill notices, and educational meeting presentations.

Section IV: Authorization

The City Manager (the Manager) or his/her designee is hereby authorized and directed to implement the applicable provisions of this Plan upon determination that such implementation is necessary to protect public health, safety, and welfare. The Manager or his/her designee shall have the authority to initiate or terminate water shortage or other water supply emergency response measures as described in this Plan.

Section V: Application

The provisions of this Plan shall apply to all persons, customers, and property utilizing water provided by Sky Valley. The terms "person" and "customer" as used in the Plan include individuals, corporations, partnerships, associations, and all other legal entities.

Section VI: Definitions

For the purposes of this Plan the following definitions shall apply:

Aesthetic water use: water use for ornamental or decorative purposes such as fountains, reflecting pools, and water gardens.

Conservation: those practices, techniques, and technologies that reduce the consumption of water, reduce the loss or waste of water, improve efficiency in the use of water or increase the

recycling and reuse of water so that a supply is conserved and made available for future or alternative use.

Customer: any individual, corporation, partnership, association, and any other legal entity utilizing water provided by Sky Valley.

Domestic water use: water use for personal needs or for household or sanitary purposes such as drinking, bathing, heating, cooking, sanitation, or for cleaning a residence, business, industry, or institution.

Landscape irrigation use: water used for the irrigation and maintenance of landscaped areas, whether publicly or privately owned, including residential and commercial lawns, gardens, golf course greens, tees, and fairways, parks, and rights-of-way and medians.

Non-essential water use: water uses that are not essential nor required for the protection of public health, safety, and welfare, including:

- (a) irrigation of landscape areas, including parks, athletic fields, and golf courses, except otherwise provided under this Plan;
- (c) use of water to wash any motor vehicle, motorbike, boat, trailer, airplane or other vehicle;
- (d) use of water to wash down any sidewalks, walkways, driveways, parking lots, tennis courts, or other hard-surfaced areas;
- (e) use of water to wash down buildings or structures for purposes other than immediate fire protection;
- (f) flushing gutters or permitting water to run or accumulate in any gutter or street;
- (g) use of water to fill, refill, or add to any indoor or outdoor swimming pools or jacuzzi-type pools;
- (h) use of water in a fountain or pond for aesthetic or scenic purposes except where necessary to support aquatic life;
- (i) failure to repair a controllable leak(s) within a reasonable period after having been given notice directing the repair of such leak(s)

Section VII: Requirements for Initiation and Termination of Water Shortage Conditions and Implementation of Water Use Restrictions

After official determination by the Manager, or his or her designee, that the public water supply is or will be limited, or that demand is or is projected to exceed supply, the Manager will declare and classify the water shortage condition using the requirements for initiation identified in Drought Contingency Plan Attachment 1. The Manager, or his or her designee, will monitor the water supply on a daily basis and, according to the requirements for initialization for each stage, shall determine that mild, chronic, or acute/emergency water shortage conditions exist. Upon public notice the Manager, or his or her designee, will implement the appropriate water use restrictions found in Drought Contingency Plan Attachment 1.

Section VIII: Wholesale Water Customers

Sky Valley does not contract with anyone to sell water wholesale.

Section IX: Public Notification

Informing the Public. Posted signs, public service radio announcements, public meeting announcements, and notices via the city's web site and e-mail distribution list will be made giving customers details of the expected condition, promoting public participation, and advising customers of the possible penalties as appropriate. The city's web site will be utilized for long-range information distribution.

Initiation Procedure. Public service radio announcements, public meeting announcements, and notices via the city's e-mail distribution list will be made that a water shortage condition has been declared. The announcement will detail the conditions and actions to be taken by customers. The public will be kept informed for the duration of the emergency. The city's web site will be utilized for long-range information distribution.

Termination Procedure. Public meeting announcements and notices via the city's web site and e-mail distribution list will be made that a water shortage condition has been rescinded and reclassified as appropriate.

Section X: Variances

The Manager, or his/her designee, may, in writing, grant a temporary variance for existing water uses otherwise prohibited under this Plan if it is determined that failure to grant such variance would cause an emergency condition adversely affecting the health, sanitation, or fire protection for the public or the person requesting such variance and if one or more of the following conditions are met:

1. Compliance with this Plan cannot be technically accomplished during the duration of the water supply shortage or other condition for which the Plan is in effect.
2. Alternative methods can be implemented which will achieve the same level of reduction in water use.

Persons requesting an exemption from the provisions of this ordinance shall file a petition for variance with the Manager after the Plan or a particular water shortage condition response stage has been invoked. All petitions for variances shall be reviewed by the Manager, or his/her designee, and shall include the following:

1. Name and address of the petitioner(s).
2. Purpose of water use.
3. Specific provision(s) of the Plan from which the petitioner is requesting relief.
4. Detailed statement as to how the specific provision of the Plan adversely affects the petitioner or what damage or harm will occur to the petitioner or others if petitioner complies with this Ordinance.
5. Description of the relief requested.
6. Period of time for which the variance is sought.
7. Alternative water use restrictions or other measures the petitioner is taking or proposes to take to meet the intent of this Plan and the compliance date.
8. Other pertinent information.

Variations granted by Sky Valley shall be subject to the following conditions, unless waived or modified by the Manager or his/her designee:

1. Variations granted shall include a timetable for compliance.
2. Variations granted shall expire when the Plan is no longer in effect, unless the petitioner has failed to meet specified requirements.

No variance shall be retroactive or otherwise justify any violation of this Plan occurring prior to the issuance of the variance.

3. Variations can not be granted for uses that would violate the Drought Response Level as indicated by the Georgia Environmental Protection Division.

Section XI: Enforcement

Water customers and other users of Sky Valley's water that do not comply with this ordinance shall be subject to a penalty and fine as set forth herein. First time violators are subject to misdemeanor penalties not to exceed \$100. Second time violators are subject to misdemeanor penalties not to exceed \$500. For a third offense, water service will be terminated and the violator will need to appear in court where the fine will be set in accordance with the maximum penalty allowable pursuant to the City charter. Warnings may be issued to first time violators for the first several days of the restrictions, but afterwards, citations will be issued and fines may be assessed by the City

Section XII: Revisions to the Drought Contingency Plan

The Manager or his/her designee shall review and update, as appropriate, the Plan at least every five (5) years, based on new or updated information, such as the adoption or revision of the regional water plan or changes in law or regulation. All updates will be submitted for approval by the City Council.

Section XIII: Severability

It is hereby declared to be the intention of Sky Valley that the sections, paragraphs, sentences, clauses, and phrases of this Plan are severable, and if any phrase, clause, sentence, paragraph or section shall be declared unconstitutional by the judgment or decree of any court of competent jurisdiction, such unconstitutionality shall not effect any of the remaining phrases, clauses, sentences, paragraphs or sections of this Plan, since the same would have been enacted by the governing body of Sky Valley without the incorporation into this Plan of any such unconstitutional phrase, clause, sentence, paragraph or section.

City of Sky Valley Drought Contingency Plan Attachment 1

Description of Water Shortage Conditions and Water Use Restrictions

Stage 1 Mild Water Shortage Conditions

Requirements for Initiation – Any one of the following requirements is sufficient for initiation of the water use restrictions:

1. Water demand is approaching the maximum safe demand of the water supply system;
2. Supply lake levels are low enough to cause concern for future water supply;
3. Water supplies are adequate but water levels, reservoir capacities, or groundwater supplies are low enough that there is a real possibility that the supply situation may degrade if the drought or emergency condition continues.

Water Use Restrictions

1. City water customers will be asked to voluntarily refrain from or significantly limit water uses defined as aesthetic, domestic, landscape irrigation, and other nonessential uses. The City Manager of the City of Sky Valley (the Manager) will make suggestions on ways to limit such uses.
2. The objective of these water use restrictions is a 5 percent reduction in annual average demand and a 10 percent reduction in peak day demand.
3. All City of Sky Valley operations will adhere to the water use restrictions established by the Manager.
4. The City of Sky Valley will request that all customers and other users of city water practice water conservation measures.
5. The Manager may implement additional water use restrictions as necessary.

Conditions for Termination

Stage 1 water restrictions may be rescinded when all initiation conditions have ceased to exist as determined by the Manager.

Stage 2 Chronic Water Shortage Conditions -

Requirements for Initiation – Any one of the following requirements is sufficient for initiation of the water use restrictions:

1. Water demand reaches the maximum safe demand of the water supply system; or
2. Supply levels from lakes, wells, and/or groundwater are low enough and continue to decline to cause concern for future water supply; or have been reduced due to mechanical failure or other means.

Water Use Restrictions

1. Stage 1 restrictions remain in effect.
2. Landscape irrigation will be restricted as follows:
 - a. From 6:00 pm to 10:00 am on designated days,
 - b. Designated water days for all customers are as follows:
 - i. Tuesday and Thursday for even numbered addresses,
 - ii. Monday and Wednesday for odd numbered addresses.
3. Use of city water to wash any motorized vehicle, motorbike, boat, trailer, airplane, motor home, camper, or other vehicle is prohibited except under the following conditions:
 - a. During the hours from 6:00 pm to 10:00 am and using prescribed water use practices,
 - b. Prescribed vehicle water use practices are using a hand-held bucket and hand-held hose with an automatic shutoff nozzle.
 - c. Washing of vehicles to protect the health, safety and welfare of the public; such as, emergency vehicles, garbage trucks, food transport vehicles, etc., are exempt from these restrictions.
4. Recreational use of water is not allowed except on designated water use days (as defined in item 2) where water levels in existing recreational facilities may be maintained. Recreational water use includes, but is not limited to, swimming pools, Jacuzzi's, hot tubs, wading pools, and fountains.
5. Operation of an ornamental fountain or pond for aesthetic or scenic purposes is prohibited except where necessary to support aquatic life or where such fountain or ponds are equipped with a recirculation system.
6. Use of water from fire hydrants shall be limited to fire fighting or other related activities necessary to maintain public health, safety and welfare. Use of water from fire hydrants for construction purposes is allowed under permit by the City of Sky Valley.
7. All restaurants are prohibited from serving water to patrons except upon request,
8. Hotels and motels are required to implement water conserving measures. Such measures include, but are not limited to, the following:
 - a. Changing sheets only when requested by the guest,
 - b. Replacing towels and wash clothes only when requested by the guest.
9. Nonessential use of water is prohibited. Examples of nonessential water uses are as follows:
 - a. Washing down sidewalks, driveways or other impervious areas, except where necessary to remove contaminants from chemical spills,
 - b. Washing down buildings or structures for purposes other than fire fighting,
 - c. Flushing gutters or allowing water to accumulate or flow down any gutter or street,
 - d. Failure to repair a leak within five (5) calendar days after having been made aware of the leak.
10. The City of Sky Valley may reduce water system pressure to conserve water as long as the state required minimum is still available at the meter.
11. The Manager may implement additional water use restrictions as necessary.

Conditions for Termination

Stage 2 water restrictions may be rescinded when all initiation conditions have ceased to exist as determined by the Manager. When Stage 2 is terminated, Stage 1 automatically becomes in effect.

Stage 3 Acute or Emergency Water Shortage Conditions

Requirements for Initiation – Any one of the following requirements is sufficient for initiation of the water use restrictions:

1. Water demand has exceeded the maximum safe supply capability of the water supply or distribution system;
2. Supply lake or groundwater levels are low enough to result in the potential inability to provide further supply;
3. There has been a failure in a major water supply or transmission component; such as, a pumping system, supply line, transmission or distribution pipeline, or storage tank, that causes a severe limit on the ability of the water system to meet the demand.

Water Use Restrictions

1. All Stage 2 water restrictions remain in effect.
2. All outdoor water use is prohibited except where necessary to protect the health, safety, and welfare of the public.
3. No new landscape material may be installed.
4. Operation of ornamental fountains or ponds is prohibited except where necessary to preserve aquatic life.
5. The Manager may implement additional water use restrictions as necessary.

Conditions for Termination

Stage 3 water restrictions may be rescinded when all initiation conditions have ceased to exist as determined by the Manager. Upon cessation of Stage 3, Stage 2 water use restrictions become effective.

Exemptions

- (1) These rules shall not apply to the following outdoor water uses:
 - (a) Capture and re-use of cooling system condensate or storm water in compliance with applicable local ordinances.
 - (b) Re-use of gray water in compliance with applicable local ordinances.
- (2) The following established landscape water uses are exempt from the outdoor water use schedules of this rule.
 - (a) Use of reclaimed wastewater by a designated user from a system permitted by EPD to provide reclaimed wastewater.
 - (b) Irrigation of personal food gardens.
- (3) The following golf course outdoor water uses are exempt from the outdoor water use schedules of these rules.
 - (a) Use of reclaimed wastewater by a designated user from a system permitted by EPD to provide reclaimed wastewater.
 - (b) Irrigation of fairways during times of non-drought and Declared Drought Stage One.
 - (c) Irrigation of tees during times of non-drought and Declared Drought Stages One, Two and Three.
 - (d) Irrigation of greens.