

GOLF COURSE IRRIGATION
(based upon number of users)

Note: 26 Courses use multiple sources, but are listed as primary water source

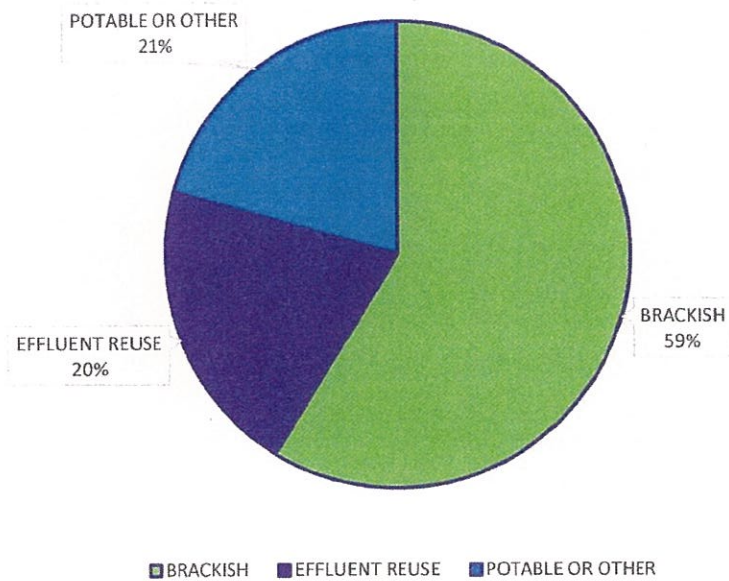
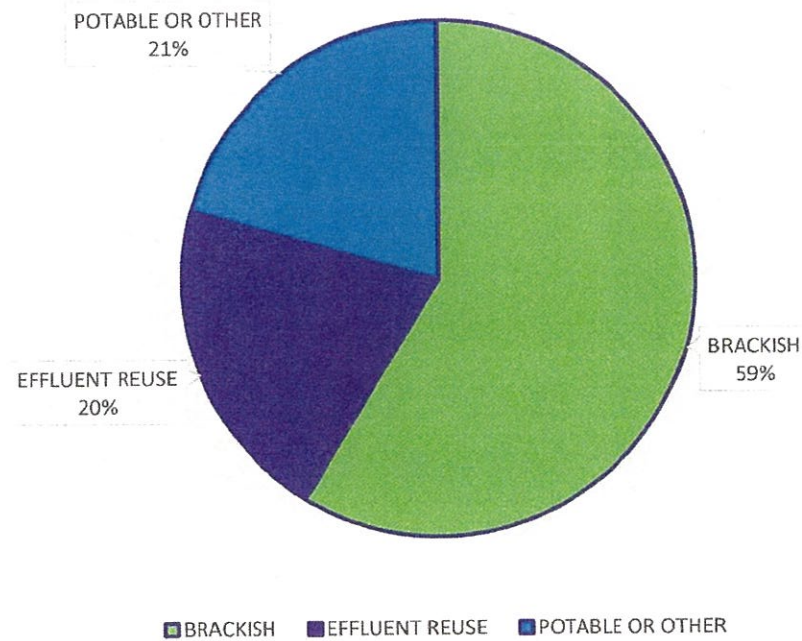


Exhibit 45C

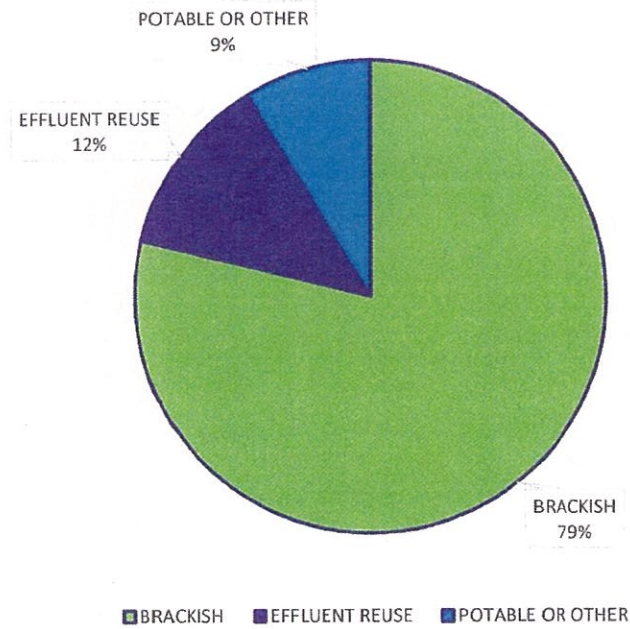
GOLF COURSE IRRIGATION	Percent
BRACKISH	74 58.73%
EFFLUENT REUSE	26 20.63%
POTABLE OR OTHER	26 20.63%
Total	126 100.00%

GOLF COURSE IRRIGATION
(based upon number of users)

Note: 26 Courses use multiple sources, but are listed as primary water source

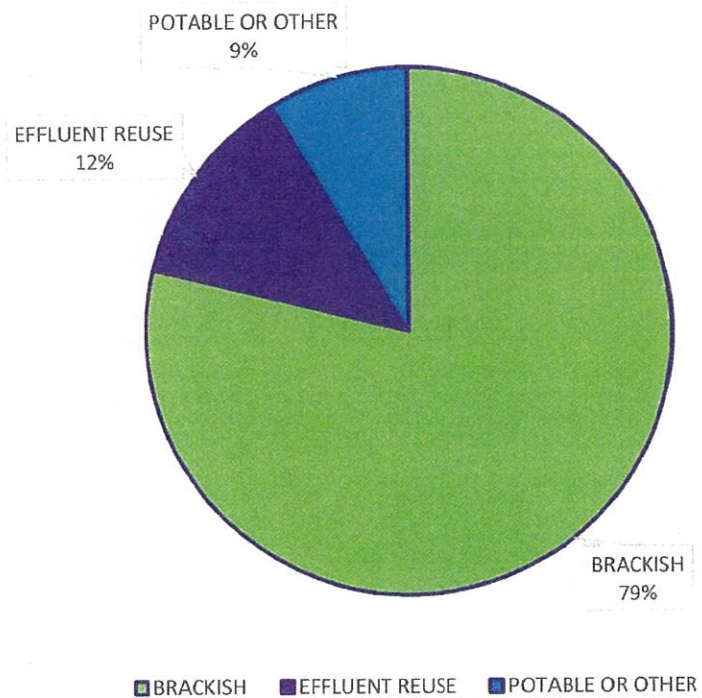


GOLF COURSE IRRIGATION (based upon volume used)

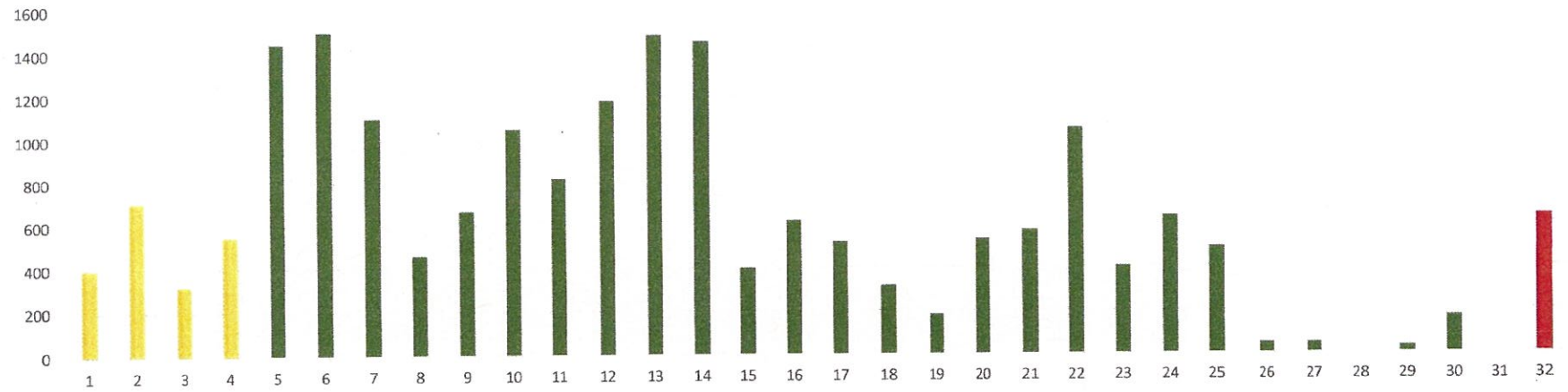


GOLF COURSE IRRIGATION	Percent	
BRACKISH	77.21	78.83%
EFFLUENT REUSE	12.18	12.43%
POTABLE OR OTHER	8.56	8.74%
Total	97.95	100.00%

GOLF COURSE IRRIGATION
(based upon volume used)



Maui County Brackish Golf Course Wells
Salinity Levels



Many irrigation water samples we have seen from Coastal golf courses in South Carolina have salinities that range from 0.75 to 1.25 dS/m and salinities of 2 dS/m are not uncommon. These levels are sufficient to reduce the growth and quality of turf and necessitate additional management to produce high quality turfgrass.

Table 1. USDA Salinity Laboratory's classification of saline irrigation water based on salinity level, potential injury to plants, and management necessary for satisfactory utilization.

Salinity class	Electrical conductivity (dS/m)	Total dissolved salts (ppm)	Potential injury and necessary management for use as irrigation water
Low	<0.25	<150	Low salinity hazard; generally not a problem; additional management is not needed.
Medium	0.25 - 0.75	150 - 500	Damage to salt sensitive plants may occur. Occasional flushing with low salinity water may be necessary.
High	0.75 - 2.25	500 - 1500	Damage to plants with low tolerance to salinity will likely occur. Plant growth and quality will be improved with excess irrigation for leaching, and/or periodic use of low salinity water and good drainage provided.
Very High	>2.25	>1500	Damage to plants with high tolerance to salinity may occur. Successful use as an irrigation source requires salt tolerant plants, good soil drainage, excess irrigation for leaching, and/or periodic utilization of low salinity water.

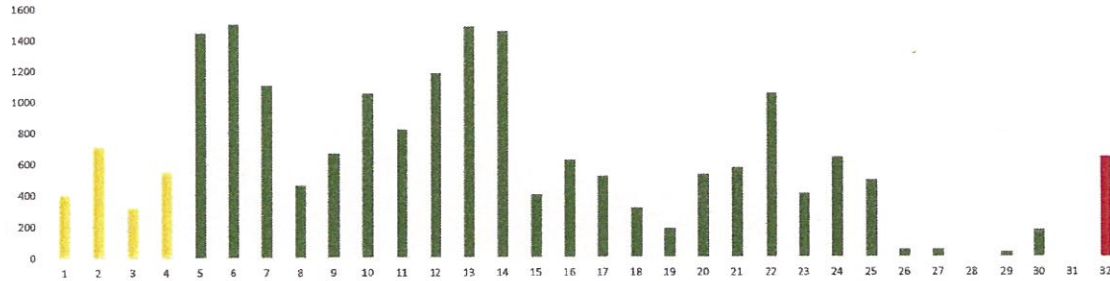
Assessing Soil Salinity

Soils are a key to continued use of saline irrigation water. Good drainage is essential to leach soluble salts through the soil profile. The better the drainage, the better one can keep soluble salts in the rootzone within tolerable limits. Poorly drained soils accumulate salts due to poor drainage. Although sandy soils are usually best suited for saline irrigation because of easy drainage, soil moisture must be maintained near field capacity in order to prevent intolerable salinity levels from occurring.

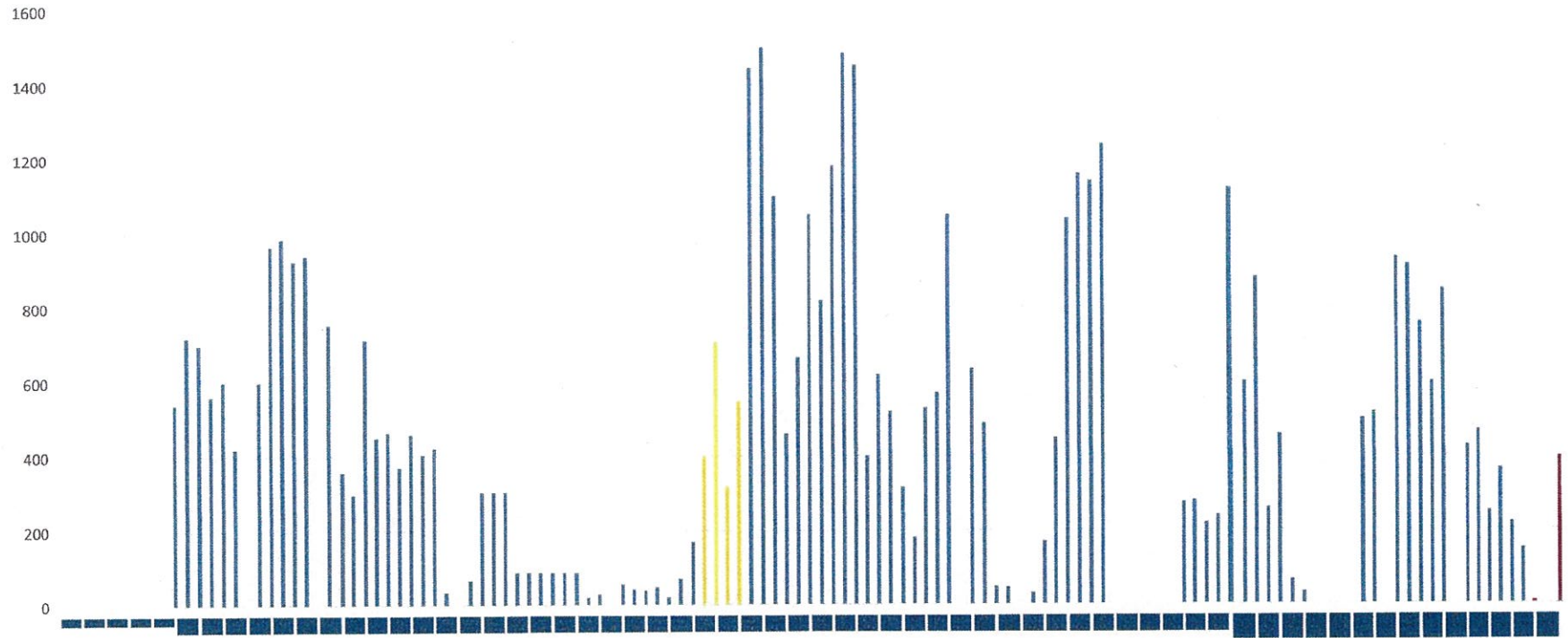
Soluble salts are measured in soils by the same basic method as water samples. A conductivity instrument measures electrical conductivity (EC) either from a saturated paste extract or from a soil:water dilution ratio. Electrical conductivity readings from these two methods are not comparable. Using the saturated paste extract, soils with EC readings of 2.0 to 4.0 dS/m are considered to have low salt levels (**Table 2**). Soils with EC readings of 4.0 to 12.0 dS/m have medium levels. When soil readings are above 12.0 dS/m, soils are considered to have high salt levels

Well No.	Pump GPM	Well Owner/User	Well Use	Year Drill	Longitude	Latitude	Island	Well Name	Init. Chlorides	Test Date	Test GPM	Draw Down	Test Chlorides	Pump MGD	Pump EL	Pump Set Depth	TMK	Aquifer Code
5-4854-001	300	Manele Golf Course	IRRG	1990	-156.914	20.81082	Lanai	Lanai 9	400	7/20/1990	336	105.1	400	0.432	451	951 (2)	4-9-002	50102
5-4854-002	350	Manele Golf Course	IRRG	1995	-156.908	20.79771	Lanai	Lanai 14	700	12/15/2003	300	32.7	710	0.504	351	833 (2)	4-9-002	50102
		Manele Golf Course	IRRG	1992			Lanai	Lanai 1	340				320	0.305				
		Manele Golf Course	IRRG	2012			Lanai	Lanai 15	375				550	0.417				
6-3826-001	400	Makena Golf Course	IRRG	1978	-156.436	20.64047	Maui	Seibu 2		3/20/1978	300		1445	0.576		(2)	2-1-005	60304
6-3826-002	400	Makena Golf Course	IRRG	1978	-156.435	20.64281	Maui	Seibu 3		6/20/1978	400		1500	0.576		(2)	2-1-005	60304
6-3826-003	400	Makena Golf Course	IRRG	1978	-156.436	20.64623	Maui	Seibu 4	1100	11/16/1978	400	0.6	1100	0.576		(2)	2-1-005	60304
6-3926-002	240	Makena Golf Course	IRRG	1977	-156.434	20.65538	Maui	Makena 1		9/6/1977	440		460	0.576	-6.42	196 (2)	2-1-008	60304
6-3926-003	350	Wailea Golf LLC	IRRG	1976	-156.434	20.66	Maui	Wailea 8	666	2/26/1976	400	15	666	0.504		(2)	2-1-008	60304
6-3926-004	400	Makena Golf Course	IRRG	1984	-156.434	20.65307	Maui	Seibu 5		9/5/1984	500		1050	0.576		(2)	2-1-008	60304
6-3926-005	400	Makena Golf Course	IRRG	1984	-156.434	20.65409	Maui	Seibu 6	668	11/13/1984	400	0.5	819	0.576		(2)	2-1-008	60304
6-3926-006	300	Makena Golf Course	IRRG	1988	-156.434	20.65082	Maui	Seibu 8		3/10/1988	300	1	1182	0.432	-4.16	245 (2)	2-1-008	60304
6-3926-008		Makena Golf Course	IRRG	1988	-156.434	20.648	Maui	Seibu 10		4/12/1988	350	1	1485			(2)	2-1-008	60304
6-3926-009	300	Makena Golf Course	IRRG	1988	-156.434	20.6495	Maui	Seibu 11		10/25/1988	250	0.7	1454	0.288	-4.76	262 (2)	2-1-008	60304
6-4026-004	700	Wailea Golf LLC	IRRG	1972	-156.438	20.67556	Maui	Wailea 4	363	8/25/1972	380	11.7	400	1.008	-10	189 (2)	2-1-008	60304
6-4026-006	700	Wailea Golf LLC	IRRG	1975	-156.437	20.66556	Maui	Wailea 7	620	10/30/1975	700	2	620	1.008	-16	200 (2)	2-1-008	60304
6-4026-007	375	Wailea Golf LLC	IRRG	1994	-156.435	20.67056	Maui	Wailea 6A	460	3/29/1994	714	23.5	520	0.54	-6	258 (2)	2-1-008	60304
6-4125-001	500	Kauapea Papaya, LLC	IRRG	1991	-156.423	20.69056	Maui	Wailea 670 1		3/4/1991	350	0.7	316	0.72	-32	532 (2)	2-1-008	60304
6-4125-002	500	Kauapea Papaya, LLC	IRRG	1991	-156.424	20.68889	Maui	Wailea 670 2		11/25/1991	420	2	182	0.72	-9	532 (2)	2-1-008	60304
6-4126-002	700	Wailea Golf LLC	IRRG	1969	-156.436	20.68806	Maui	Wailea 2	490	7/5/1969	682	1.1	530	1.008	-7	188 (2)	2-1-008	60304
6-4126-003	750	Wailea Golf LLC	IRRG	1969	-156.437	20.6825	Maui	Wailea 3	555	11/20/1969	460	1.2	571	1.08	-8	161 (2)	2-1-008	60304
6-4226-012	250	Wailea Golf LLC	IRRG	1972	-156.437	20.69722	Maui	Wailea 5	1050	6/29/1972	800	1.8	1050	0.36	-19	198 (2)	2-1-008	60304
6-4226-013	400	Wailea Golf LLC	IRRG	1989	-156.437	20.70444	Maui	Wailea 9		11/7/1989	405	7.9	405	0.576	-13	21 (2)	2-1-008	60304
6-4226-014	700	Wailea Golf LLC	IRRG	1990	-156.436	20.70194	Maui	Wailea 10	600	7/9/1990	700	3.2	636	1.008	-5	239 (2)	2-1-008	60304
6-5021-001	1000	Pukalani Country Club, LLC	IRRG	1972	-156.355	20.83389	Maui	Pukalani Golf	400		800	3	490	1.44	-38	1116 (2)	2-3-057	60303
6-5229-002	700	Maui Lani Partners	IRRG	1980	-156.49	20.87193	Maui	Maui Lani 1		11/2/2004	492	3.6	49	1.008	-34	176 (2)	3-8-007	60301
6-5229-003	700	Maui Lani Partners	IRRG	1980	-156.49	20.87283	Maui	Maui Lani 2		11/2/2004	499	0.61	48	1.008	-24	176 (2)	3-8-007	60301
6-5423-001		Maui Country Club	IRRG	1899	-156.391	20.90889	Maui	Kailua Gulch	0		0		0					60302
6-5529-002	390	Department of Parks and Recreation, Central Maui, MDP	IRRG	1967	-156.496	20.92688	Maui	Waiehu Golf Course - P	32		190	0.3	32	0.561		(2)	3-2-013	60102
6-5530-004	300	Department of Parks and Recreation, Central Maui, MDP	IRRG	1995	-156.5	20.92583	Maui	Waiehu Golf Course - 13	80	9/20/1995	320	22.9	170	0.432	-42	119 (2)	3-2-013	60102
Average													638.666667	18.815				

Maui County Brackish Golf Course Wells Salinity Levels



Golf Course Irrigation Statewide Salinity Levels



Well No.	Pump GPM	Well Owner/User	Well Use	Year Drill	Longitude	Latitude	Island	Well Name	Init. Chlorides	Test Date	Test GPM	Draw Down	Test Chlorides	Pump MGD	Aquifer Code
2-5820-001	350	Kauai Lagoons Golf Course and Resort	IRRG	1987	-159.3467	21.97278	Kauai	Well 3		5/20/1987	400	33.2		0.504	
2-5821-003	400	Kauai Lagoons Golf Course and Resort	IRRG	1987	-159.3531	21.97306	Kauai	Well 1						0.576	
2-5821-004	350	Kauai Lagoons Golf Course and Resort	IRRG	1987	-159.3481	21.97139	Kauai	Well 2		6/30/1987	500	30		0.504	
2-5821-005	200	Kauai Lagoons Golf Course and Resort	IRRG	1987	-159.3478	21.96556	Kauai	Well 4						0.29	
2-5821-006	200	Kauai Lagoons Golf Course and Resort	IRRG	1987	-159.3492	21.96583	Kauai	Well 5						0.288	
3-1646-001	600	Waialae Country Club	IRRG	1881	-157.7783	21.27639	Oahu	Waialae Golf						0.864	
3-1646-004		Waialae Country Club	IRRG	1970	-157.7728	21.27639	Oahu	Waialae Golf			72	21.6			
3-1649-018	300	Honolulu DPR - Ala Wai G. C.	IRRG	1934	-157.8153	21.27667	Oahu	Ala Wai Pit 2						0.432	
3-1900-002	1760	Hawaii Prince Golf Club	IRRG	1930	-158.0083	21.3275	Oahu	EP 22						2.534	
3-1900-016		Ewa Beach Golf Club	IRRG	1988	-157.9994	21.32272	Oahu	New Ewa Intl G C		3/18/1988	350	3.7	540		
3-1900-017	300	Hawaii Prince Golf Club	IRRG	1990	-158.0103	21.32439	Oahu	Haw Prince Irr 2		12/7/1989	210	0.3	720	0.432	
3-1900-018	210	Hawaii Prince Golf Club	IRRG	1990	-158.007	21.32456	Oahu	Haw Prince Irr 3		1/12/1990	210	0.8	700	0.302	
3-1900-019	210	Hawaii Prince Golf Club	IRRG	1990	-158.0048	21.32531	Oahu	Haw Prince Irr 4		1/15/1990	210	1.7	560	0.302	
3-1900-020	210	Hawaii Prince Golf Club	IRRG	1990	-158.0038	21.32644	Oahu	Haw Prince Irr 5		1/17/1990	210	0.5	600	0.302	
3-1900-021	180	Ewa Beach Golf Club	IRRG	1991	-158.003	21.32419	Oahu	New Ewa Intl G C		4/3/1991	250	4.1	420	0.259	
3-1900-022		Ewa Beach Golf Club	IRRG	1988	-157.9978	21.32367	Oahu	Dug C					0		
3-1901-003	290	Hawaii Prince Golf Club	IRRG	1990	-158.0131	21.32375	Oahu	Haw Prince Irr 1		1/19/1990	210	0.3	600	0.417	
3-1901-006	200	Haseko (Ewa) Inc.	IRRG	2005	-158.0277	21.32156	Oahu	Ocean Pointe 4	930	2/18/2005	250	0.15	965	0.288	
3-1902-009	200	Haseko (Ewa) Inc.	IRRG	2005	-158.0337	21.31886	Oahu	Ocean Pointe 1	925	3/14/2005	200	0.08	985	0.288	
3-1902-010	200	Haseko (Ewa) Inc.	IRRG	2005	-158.0328	21.31892	Oahu	Ocean Pointe 2	890	2/17/2005	250	0.5	925	0.288	
3-1902-011	200	Haseko (Ewa) Inc.	IRRG	2005	-158.0304	21.3205	Oahu	Ocean Pointe 3	880	2/17/2005	250	0.5	940	0.288	
3-1959-008		Ewa Beach Golf Club	IRRG	1988	-157.9967	21.32472	Oahu	Dug D					0		
3-2001-012	430	Coral Creek Golf Course	IRRG	1999	-158.0224	21.34406	Oahu	Keaunui Area 30		4/15/1999	300	0.2	755	0.619	
3-2002-015	800	Coral Creek Golf Course	IRRG	1997	-158.0362	21.33378	Oahu	Coral Creek 1	110	7/16/1997	1008	1.8	358	1.152	
3-2002-017	800	Coral Creek Golf Course	IRRG	1998	-158.0355	21.33508	Oahu	Coral Creek 2	110		800	3.6	298	1.152	
3-2002-019	800	Coral Creek Golf Course	IRRG	1998	-158.0342	21.33108	Oahu	Lake A	715				715	1.152	
3-2003-001	350	Kapolei Golf Course	IRRG	1991	-158.0571	21.33658	Oahu	Kapolei Irr A	465	6/18/1991	700	0.7	450	0.504	
3-2003-002	350	Kapolei Golf Course	IRRG	1991	-158.0566	21.3365	Oahu	Kapolei Irr B	424	9/4/1991	500	2	464	0.504	
3-2003-004	500	Kapolei Golf Course	IRRG	1991	-158.0615	21.33106	Oahu	Kapolei Irr D	370	9/24/1991	360	1	370	0.72	
3-2003-005	150	Kapolei Golf Course	IRRG	1991	-158.0591	21.33853	Oahu	Kapolei Irr E	450	6/3/1991	150	12.6	460	0.216	
3-2003-007	500	Kapolei Golf Course	IRRG	1994	-158.0584	21.33358	Oahu	Kapolei Irr C-1	405	10/31/1994	500	0.1	405	0.72	
3-2006-013	840	Ko Olina Resort & Golf Course	IRRG	1986	-158.1059	21.33691	Oahu	Ko Olina	530	2/4/1986	722	1.2	422	1.209	
3-2050-001	300	Oahu Country Club	IRRG	1993	-157.8397	21.33889	Oahu	Oahu C C Irr.	35	4/26/1995	400	11.6	35	0.432	
3-2145-004	110	Hawaii RHGC LLC, Royal Hawaiian Golf Club	IRRG	1988	-157.7626	21.34803	Oahu	Well 4		7/19/1988	49	43.8	0	0.158	
3-2154-001	400	Honolulu Country Club, LLC	IRRG	1909	-157.9014	21.35417	Oahu	Honolulu International C	67				67	0.576	
3-2201-003	2300	Honolulu DES - Ted Makalena G. C.	IRRG	1891	-158.0286	21.37306	Oahu	EP 2	304				304	3.312	
3-2201-004		Honolulu DES - Ted Makalena G. C.	IRRG	1891	-158.0286	21.37306	Oahu	EP 2	304				304		
3-2201-007		Honolulu DES - Ted Makalena G. C.	IRRG	1921	-158.0288	21.37272	Oahu	EP 2	304				304		
3-2301-001	1800	Waikole Golf Club, Inc.	IRRG		-158.0164	21.39639	Oahu	Waipahu WP1	88				88	2.592	
3-2301-002		Waikole Golf Club, Inc.	IRRG		-158.0164	21.39639	Oahu	Waipahu WP1	88				88		
3-2301-003		Waikole Golf Club, Inc.	IRRG		-158.0164	21.39639	Oahu	Waipahu WP1	88				88		
3-2301-004		Waikole Golf Club, Inc.	IRRG		-158.0164	21.39639	Oahu	Waipahu WP1	88				88		
3-2301-005	1000	Waikole Golf Club, Inc.	IRRG		-158.0164	21.39639	Oahu	Waipahu WP1	88				88	1.44	
3-2301-006		Waikole Golf Club, Inc.	IRRG		-158.0164	21.39639	Oahu	Waipahu WP1	88				88		
3-2347-002	350	Koolau Golf Course	IRRG	1988	-157.792	21.38322	Oahu	Koolau GC 1		5/5/1988	300	4.4	21	0.504	
3-2347-003	350	Koolau Golf Course	IRRG	1988	-157.7927	21.38167	Oahu	Koolau GC 2	30	5/26/1988	400	6	30	0.504	
3-2356-054	700	Pearl Country Club	IRRG	1966	-157.9317	21.39556	Oahu	Pearl C C Golf			450		0	1.008	
3-2401-007	1250	Royal Kunia Country Club	IRRG	1996	-158.0291	21.40933	Oahu	Royal Kunia C C	57	10/29/1996	1420	0.9	57	1.8	
3-2603-001	300	Hawaii Country Club	IRRG	1961	-158.0578	21.435	Oahu	Hawaii Country Club	43	6/16/1961	300	80	43	0.432	
3-2811-003	200	Makaha Valley Country Club	IRRG	1989	-158.1959	21.478	Oahu	MVCC Irr 1	60	5/1/1989	200	27.7	40	0.288	
3-2811-004	200	Makaha Valley Country Club	IRRG	1989	-158.1966	21.47794	Oahu	MVCC Irr 2	48	12/20/1989	200	46	48	0.288	
3-2811-007		Kapolei Golf Course	IRRG	2014	-158.1978	21.47795	Oahu	DJ-3	33	11/12/2014	354	40	22	40	
3-4100-001	550	Turtle Bay Mauka Lands, LLC	IRRG	1978	-157.9976	21.69614	Oahu	Mauka Agriculture	71		2000	11.1	71	0.792	
3-4158-014	700	Turtle Bay Resort LLC	IRRG	1990	-157.9779	21.695	Oahu	Kuilima 1	352	2/15/1990	704	12.9	170	1.008	
5-4854-001	300	Manele Golf Course	IRRG	1990	-156.914	20.81082	Lanai	Lanai 9	400	7/20/1990	336	105.1	400	0.432	
5-4854-002	350	Manele Golf Course	IRRG	1995	-156.9079	20.79771	Lanai	Lanai 14	700	12/15/2003	300	32.7	710	0.504	
		Manele Golf Course	IRRG	1992			Lanai	Lanai 1	340				320	0.305	
		Manele Golf Course	IRRG	2012			Lanai	Lanai 15	375				550	0.417	
6-3826-001	400	Makena Golf Course	IRRG	1978	-156.4358	20.64047	Maui	Seibu 2		3/20/1978	300		1445	0.576	
6-3826-002	400	Makena Golf Course	IRRG	1978	-156.4351	20.64281	Maui	Seibu 3		6/20/1978	400		1500	0.576	

6-3826-003	400 Makena Golf Course	IRRCG	1978	-156.4358	20.64623	Maui	Seibu 4	1100	11/16/1978	400	0.6	1100	0.576
6-3926-002	240 Makena Golf Course	IRRCG	1977	-156.4338	20.65538	Maui	Makena 1		9/6/1977	440		460	0.576
6-3926-003	350 Wailea Golf LLC	IRRCG	1976	-156.4342	20.66	Maui	Wailea 8	666	2/26/1976	400	15	666	0.504
6-3926-004	400 Makena Golf Course	IRRCG	1984	-156.434	20.65307	Maui	Seibu 5		9/5/1984	500		1050	0.576
6-3926-005	400 Makena Golf Course	IRRCG	1984	-156.4339	20.65409	Maui	Seibu 6	668	11/13/1984	400	0.5	819	0.576
6-3926-006	300 Makena Golf Course	IRRCG	1988	-156.4336	20.65082	Maui	Seibu 8		3/10/1988	300	1	1182	0.432
6-3926-008	Makena Golf Course	IRRCG	1988	-156.4343	20.648	Maui	Seibu 10		4/12/1988	350	1	1485	
6-3926-009	300 Makena Golf Course	IRRCG	1988	-156.4343	20.6495	Maui	Seibu 11		10/25/1988	250	0.7	1454	0.288
6-4026-004	700 Wailea Golf LLC	IRRCG	1972	-156.4375	20.67556	Maui	Wailea 4	363	8/25/1972	380	11.7	400	1.008
6-4026-006	700 Wailea Golf LLC	IRRCG	1975	-156.4367	20.66556	Maui	Wailea 7	620	10/30/1975	700	2	620	1.008
6-4026-007	375 Wailea Golf LLC	IRRCG	1994	-156.4347	20.67056	Maui	Wailea 6A	460	3/29/1994	714	23.5	520	0.54
6-4125-001	500 Kauapea Papaya, LLC	IRRCG	1991	-156.4233	20.69056	Maui	Wailea 670 1		3/4/1991	350	0.7	316	0.72
6-4125-002	500 Kauapea Papaya, LLC	IRRCG	1991	-156.4236	20.68889	Maui	Wailea 670 2		11/25/1991	420	2	182	0.72
6-4126-002	700 Wailea Golf LLC	IRRCG	1969	-156.4364	20.68806	Maui	Wailea 2	490	7/5/1969	682	1.1	530	1.008
6-4126-003	750 Wailea Golf LLC	IRRCG	1969	-156.4367	20.6825	Maui	Wailea 3	555	11/20/1969	460	1.2	571	1.08
6-4226-012	250 Wailea Golf LLC	IRRCG	1972	-156.4372	20.69722	Maui	Wailea 5	1050	6/29/1972	800	1.8	1050	0.36
6-4276-013	400 Wailea Golf LLC	IRRCG	1989	-156.4367	20.70444	Maui	Wailea 9		11/7/1989	405	7.9	0	0.576
6-4276-014	700 Wailea Golf LLC	IRRCG	1990	-156.4361	20.70194	Maui	Wailea 10	600	7/9/1990	700	3.2	636	1.008
6-5021-001	1000 Pukalani Country Club, LLC	IRRCG	1972	-156.3547	20.83389	Maui	Pukalani Golf	400		800	3	490	1.44
6-5229-002	700 Maui Lani Partners	IRRCG	1980	-156.4901	20.87193	Maui	Maui Lani 1		11/2/2004	492	3.6	49	1.008
6-5229-003	700 Maui Lani Partners	IRRCG	1980	-156.49	20.87283	Maui	Maui Lani 2		11/2/2004	499	0.61	48	1.008
6-5423-001	Maui Country Club	IRRCG	1899	-156.3914	20.90889	Maui	Kailua Gulch					0	
6-5529-002	390 Department of Parks and Recreation, Central Maui, MDPR	IRRCG	1967	-156.4964	20.92688	Maui	Waiehu Golf Course - Po	32		190	0.3	32	0.561
6-5530-004	300 Department of Parks and Recreation, Central Maui, MDPR	IRRCG	1995	-156.4999	20.92583	Maui	Waiehu Golf Course - 13	80	9/20/1995	320	22.9	170	0.432
8-3056-001	700 The Club at Hokuili'a G. C.	IRRCG	1993	-155.9353	19.51194	Hawaii	Hokukano 1	300	2/12/1993	840	5.3	450	1.008
8-3156-001	600 The Club at Hokuili'a G. C.	IRRCG	2000	-155.9375	19.51944	Hawaii	Hokukano Irr 2	900	12/19/2000	600	3.93	1040	0.864
8-3357-004	470 Kona Country Club, Inc.	IRRCG	1990	-155.9517	19.55028	Hawaii	Keauhou-Kona C C		10/12/1990	430	0.2	1160	0.677
8-3457-001	600 Kona Country Club, Inc.	IRRCG	1956	-155.9617	19.57556	Hawaii	Keauhou 1		1/1/1965	600	13.2	1140	0.864
8-3457-003	500 Kona Country Club, Inc.	IRRCG	1985	-155.9573	19.57097	Hawaii	Keauhou Irr 3		1/29/1985	705	2.4	1240	0.72
8-4161-004	250 Kohanaiki Shores, LLC	IRRCG	2007	-156.0339	19.70077	Hawaii	Kohanaiki 3		7/14/2008	231		0	0.36
8-4161-005	250 Kohanaiki Shores, LLC	IRRCG	2007	-156.033	19.69937	Hawaii	Kohanaiki 4			214		0	0.36
8-4161-006	250 Kohanaiki Shores, LLC	IRRCG	2007	-156.0321	19.69788	Hawaii	Kohanaiki 5					0	0.36
8-4161-007	250 Kohanaiki Shores, LLC	IRRCG	2007	-156.0314	19.69672	Hawaii	Kohanaiki 6					0	0.36
8-4161-008	250 Kohanaiki Shores, LLC	IRRCG	2007	-156.0304	19.69532	Hawaii	Kohanaiki 7					0	0.36
8-4262-002	250 Kohanaiki Shores, LLC	IRRCG	2007	-156.0346	19.70156	Hawaii	Kohanaiki 2		7/14/2008	219		0	0.36
8-4757-001	350 Hualalai Investors LLC	IRRCG	1991	-155.9588	19.79489	Hawaii	Kaupulehu Irr 1	250	3/25/1991	445	28.7	275	0.504
8-4757-002	550 Hualalai Investors LLC	IRRCG	1990	-155.9587	19.79485	Hawaii	Kaupulehu Irr 2		12/4/1990	500	5.8	280	0.792
8-4757-003	550 Nanea Golf Club, Inc.	IRRCG	2001	-155.9545	19.796	Hawaii	Kaupulehu Irr 3	220	1/10/2001	655	6.37	220	0.792
8-4759-001	540 Kukio Golf & Beach Club	IRRCG	2002	-155.9508	19.79673	Hawaii	Kaupulehu Irr 4	240	3/28/2002	615	11.2	240	0.792
8-4759-002	500 Kukio Golf & Beach Club	IRRCG	1990	-155.9872	19.79194	Hawaii	KI-1	590	11/13/1990	620	1.3	1121	0.778
8-4759-003	560 Kukio Golf & Beach Club	IRRCG	1992	-155.985	19.79306	Hawaii	KI-2	460	2/25/1991	500	4.4	600	0.72
8-4856-001	590 Hualalai Investors LLC	IRRCG	2001	-155.9468	19.79739	Hawaii	KI-3	720	5/14/1992	500	8.1	880	0.806
8-4856-002	550 Hualalai Investors LLC	IRRCG	2006	-155.9429	19.79821	Hawaii	Kaupulehu Irr 5	250	1/15/2001	700	13.9	260	0.849
8-4950-001	736 Mason Maikui (Big Island Country Club)	IRRCG	1992	-155.8417	19.82056	Hawaii	Kaupulehu Irr 6	447	2/27/2006	550	2.1	458	0.792
8-4950-002	700 Mason Maikui (Big Island Country Club)	IRRCG	1995	-155.8378	19.82222	Hawaii	Big Island C C 1	43	3/6/1996	646		67	1.059
8-5206-007	Vijay Singh	IRRCG		-155.1144	19.87961	Hawaii	Big Island C C 2		10/3/2005	720	20	34	1.008
8-5452-001	900 Waikoloa Golf Course	IRRCG	1980	-155.88	19.9125	Hawaii	Tee Box #2					0	
8-5452-002	350 Waikoloa Golf Course	IRRCG	1980	-155.8753	19.91028	Hawaii	Nursery					0	1.29
8-5452-003	350 Waikoloa Golf Course	IRRCG	1988	-155.8714	19.91278	Hawaii	Fifty-One Ft STP					0	0.5
8-5547-001	700 Waikoloa Village Golf Course	IRRCG	2007	-155.7922	19.93028	Hawaii	Resort 1					0	0.5
8-5548-001	400 Hawaii Water Service Company Inc.	IRRCG	1968	-155.7978	19.92639	Hawaii	WVA 1	400	5/29/2007	800	0.77	500	1.008
8-5552-001	700 Hawaii Water Service Company Inc.	IRRCG	1988	-155.8441	19.91792	Hawaii	Parker 1			400	1.8	518	0.576
8-5650-001	250 Mauna Lani Resort, Inc.	IRRCG	1991	-155.8433	19.93556	Hawaii	Resort Irr 2					0	1
8-5650-002	350 Mauna Lani Resort, Inc.	IRRCG	1991	-155.84	19.93917	Hawaii	Entrance	910	5/23/1991	250	9	935	0.36
8-5651-001	425 Mauna Lani Resort, Inc.	IRRCG	1988	-155.8486	19.9325	Hawaii	Culvert	875	2/4/1991	540	0.5	915	0.504
8-5749-001	450 Mauna Lani Resort, Inc.	IRRCG	1991	-155.8256	19.96083	Hawaii	Highway		11/11/1988	475	4.6	760	0.612
8-5750-003	425 Mauna Lani Resort, Inc.	IRRCG	1988	-155.8339	19.95	Hawaii	North	600	6/10/1991	540	4	600	0.64
8-5750-004	Mauna Lani Resort, Inc.	IRRCG		-155.84	19.94722	Hawaii	Fire Station		7/25/1988	600	0.1	848	0.612
8-5849-002	550 Mauna Lani Resort Operations	IRRCG	1999	-155.8225	19.97028	Hawaii	STP					0	
8-5849-003	450 Mauna Lani Resort Operations	IRRCG	1999	-155.8217	19.96917	Hawaii	Mauna Lani 8		11/15/1999	600	6.5	427	0.792
							Mauna Lani 9		11/15/1999	600	4.5	469	0.648

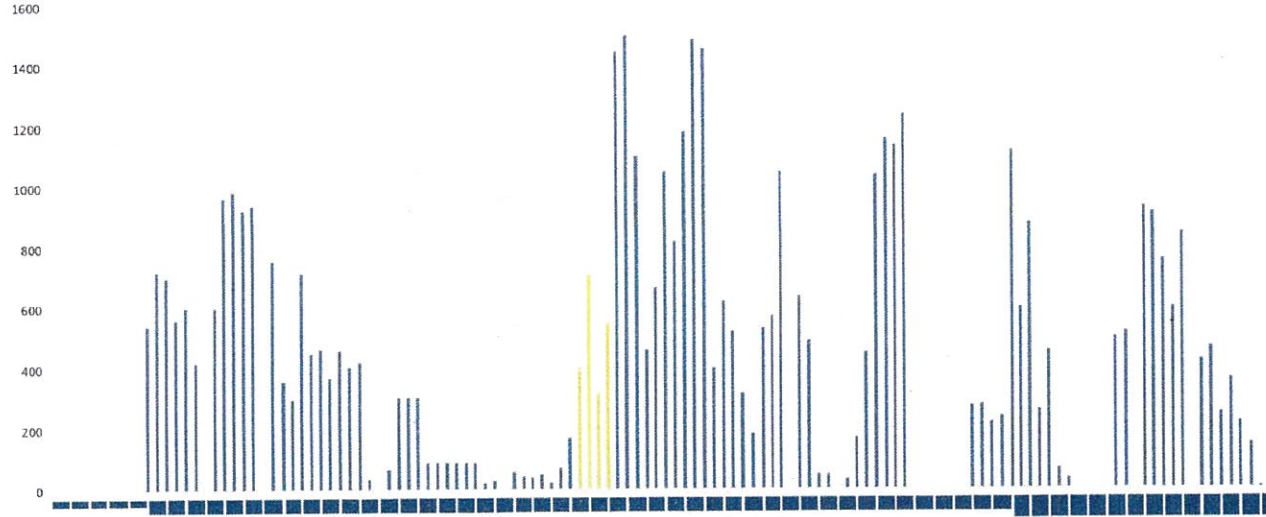
8-6047-001 450 Aina Ho'onaea LLC
 8-6047-002 450 Aina Ho'onaea LLC
 8-6047-004 450 Aina Ho'onaea LLC
 8-6047-005 0 Aina Ho'onaea LLC
 8-6235-001 500 Waimea Country Club

IRRGC 1990 -155.7921 20.00747 Hawaii Ouli C
 IRRGC 1991 -155.7937 20.00381 Hawaii Ouli D
 IRRGC 2003 -155.7928 20.00942 Hawaii Hapuna 3
 IRRGC 2006 -155.7923 20.01169 Hawaii Hapuna 4
 IRRGC 1991 -155.5964 20.04363 Hawaii Waimea C C

	11/13/1990	745	4.6	250	0.64
	7/5/1991	630	11.2	364	0.64
200	5/29/2003	454	1.2	220	0.648
	8/21/2006	475	2.1	150	
12	11/19/1991	540	0.7	8	0.72

395.8730159 2.0127

Golf Course Irrigation
 Statewide Salinity Levels



Golf Course Name using Effluent Reuse Water	Volume (MGPD)	Type	Comments
Kauai County			
Kauai Lagoons Resort	0.65	R-1	Blend with Brackish undiluted
Wailua Golf Course	0.55	R-2	Blend with Brackish undiluted
Princeville Makai G. C.	0.60	R-2	Supplement with rain water
Puakea Golf Course	0.40	R-1	Blend with Stream Water
Kiahuna Golf Course	0.30	R-1	Blend with Stream Water
Poipu Bay Resort & Golf Course	0.10	R-2	Blend with Stream Water
In Addition many Landscape Irrigation uses in Kauai County			
Maui County			
Experience at Koele	0.15	R-1	Blend with rain water
Challenge at Manele	0.08	R-1	Blend with Brackish Water
Elieair Maui Golf Club	0.56	R-1	Undiluted
Kaanapali Resort Golf Course	0.89	R-1	Blend with Brackish Water
Pukalani Golf Course	0.25	R-1	Blend with Potable Water
Kaluakoi Resort and Golf Course	0.04	R-2	Blend with Potable & Brackish Water
Makena South Golf Course	0.08	R-1	Blend with Brackish Water
In Addition many Landscape Irrigation users in Maui County			
Hawaii County			
Kona Country Club	0.30	R-2	Undiluted
Mauna Kea Resort	0.18	R-1	Blend with Brackish Water
Mauna Lani Resort	0.30	R-2	Blend with Brackish Water
Waikoloa Beach Resort Golf Course	0.50	R-1	Blend with Brackish Water
In Addition many Landscape Irrigation users in Hawaii County			
Honolulu County			
Barbers Point Golf Course	0.50	R-1	Undiluted
Coral Creek Golf Course	1.00	R-1	Blend with Brackish Water
Ewa Beach Golf Course	0.45	R-1	Blend with Brackish Water
Hawaii Prince Golf Course	1.00	R-1	Blend with Brackish Water
Ewa Villages Golf Course	1.00	R-1	Blend with Rain Water
West Loch Golf Course	0.90	R-1	Blend with Brackish Water
Turtle Bay Resort and Golf Course	0.20	R-2	Blend with Brackish Water

MCBH Klipper Golf Course

0.60

R-2

Undiluted

Hoakalei Country Club

0.60

R-1

Blend with Brackish Water

In Addition many Landscape Irrigation users in Honolulu County

12.18



Golf Course Name using Potable or Other Water Sources	Volume (MGPD)	Type	Comments
Kauai County			
Kukui'ula Resort and Golf Course	1.20	Ditch	Using Ditch Water former Ag Sources
Kukuiolono Golf Course	0.20	Potable	Uses Kauai DWS water & rain
Anaina Hou Mini Golf	0.01	Well	Potable well water - minimal use
Maui County			
Hana Maui Par-3 Golf Course	0.10	Potable	Potable supplemented by Rain
Waiehu Golf Course	0.25	Blend	Blend of Potable and Brackish
Hawaii County			
Hilo Municipal Golf Course	0.05	Potable	Potable supplemented by Rain
Naniloa Golf Course	0.05	Potable	Potable supplemented by Rain
Seamountain Golf Course	0.20	Potable	Blend of Potable and Brackish Ag water
Waikoloa Beach Resort Golf Course	0.50	R-1	Blend with Brackish Water
In Addition many Landscape Irrigation users in Hawaii County			
Honolulu County			
Oahu Country Club	0.25	Potable	Honolulu BWS mixed with well water
Mid-Pacific Country Club	0.60	Potable	Honolulu BWS system
Hawaii Kai Country Club	0.80	Potable	Honolulu BWS system
Bayview Golf Links	0.25	Potable	Honolulu BWS system blended with stream water
Hickam Mamala Bay Golf Course	0.60	Potable	Honolulu BWS system
Hickam Kealahi Golf Course	0.25	Potable	Honolulu BWS system
Navy-Marine Golf Course	0.60	Potable	Honolulu BWS system
Olomana Golf Course	0.25	Potable	Honolulu BWS system
Moanalua Golf Course	0.20	Potable	Honolulu BWS system
Kuhuku Golf Course (C&C of Honolulu)	0.10	Potable	Honolulu BWS system
Pearl Country Club	0.10	Potable	Honolulu BWS system mixed with well water
Mililani Golf Course	0.60	Ditch	Waiahole Ditch Water (former Ag water)
Leilehua Golf Course	0.60	Potable	Army Water System (R-1 in future)
Pali Golf Course	0.25	Potable	Honolulu BWS System
Ala Wai Golf Course	0.30	Potable	Blended with Brackish water
Walter Nagorski Golf Course	0.25	Potable	Honolulu BWS System
Estimated minimum Potable Usage	8.56		