

**Appendix B
DWSRF Priority List of Projects for SFY 2012**

No.	Points	DWSRF Project No.	Public Water System	Population	Owner	Project (Name and Description)	Green Project Reserve Type	Expected Construction Start Date	Estimated Construction Cost
1	160	DW133-0003	#133 DWS Kukuihaele	492	Hawaii DWS	Kukuihaele Production Well and Supporting Facilities Replacement source for Waiulili Spring, which has atrazine and indication of possible surface water influence.		Jan-12	\$ 1,500,000
2	155	DW130-0003	#130 DWS South Kohala	11,927	Hawaii DWS	Waimea WTP Microfiltration: Microfiltration plant for compliance with Enhanced Surface Water Treatment Rule and Disinfection/Disinfectants Byproducts Rule.		SFY 2012	\$ 10,000,000
3	135	DW103-0001	#103 DWS Ninole	151	Hawaii DWS	Ninole Well "A" (Replace Chaves Spring) Replacement source for Chaves Spring, which has atrazine.		SFY 2012	\$ 2,000,000
4	125	DW247-0004	#247 DWS Lower Kula	3,246	Maui DWS	Piiholo Water Treatment Plant Improvements - Organic Carbon Reduction Reduce total organic carbon levels to help lower disinfection byproducts.		SFY 2012	\$ 6,000,000
5	120	DW214-0008	#214 DWS Lahaina	18,598	Maui DWS	Mahinahina Water Treatment Facility Retrofit: Retrofit WTF from multimedia to membrane filtration to achieve positive barrier to enhance water quality.		SFY 2014	\$ 11,121,000
6	115	DW129-0001	#129 DWS North Kohala	4,822	Hawaii DWS	Halaula Well Development Phase 1: Replacement source for Bond Tunnel to comply with the Lead and Copper Rule. Construction of potable water well, 0.5 MG reservoir, chlorine/control building, electrical and site improvements, and other supporting facilities. <i>(Binding commitment executed)</i>		Jul-10	\$ 2,200,000
7	110	DW106-0001	#106 DWS Pepekeo	1,496	Hawaii DWS	Kulaimano Production Well and Supporting Facilities: Replacement source for Maukaloa Spring, which is contaminated with atrazine.		Sep-11	\$ 3,500,000
8	110	DW335-0011	#335 BWS Waipahu-Ewa-Waianae	175,326	Hon BWS	Waipio Heights Wells and Wells I GAC System: Install granular activated carbon units at Waipahu Wells III and approximately 4,000 linear feet of 16-inch main and appurtenances to connect Waipio Heights Wells and Wells I with Waipahu Wells III facility for water treatment.		SFY 2013	\$ 3,240,000
9	105	DW108-0001	#108 DWS Waiohinu-Naalehu	3,033	Hawaii DWS	Waiohinu Well (Replace Mountain House Tunnel & Hao Spring) Replacement source for Mountain House Tunnel & Hao Springs, which are not reliable during drought & indication of possible surface water influence.		Jul-06	\$ 2,000,000
10	105	DW413-0003	#400 DOW Lihue-Kapaa	27,055	Kauai DOW	Job No. 02-24, WK-02 Akulikuli Tunnel Repairs Repairs to tunnel source, which has possible indication of surface water influence.		SFY 2012	\$ 5,000,000
11	100	DW214-0006	#214 DWS Lahaina	18,598	Maui DWS	Honokahua Well "A" GAC Treatment Installation of Granular Activated Carbon Adsorption System to provide treatment for the removal of DBCP from well serving Mahinahina (Lahaina) system.		SFY 2012	\$ 2,500,000
12	95	DW233-0001	#233 DWS Ualapue	1,031	Maui DWS	Ualapue Well Replacement Installation of replacement source for Ualapue System, which has increasing chloride levels and may be susceptible to becoming a groundwater under the influence of surface water.		SFY 2013	\$ 3,500,000
13	90	DW161-0002	#161 DWS Haina	2,316	Hawaii DWS	Ahualoa-Honokaa Transmission Waterline: Construct a waterline from the proposed Ahualoa production well to the Haina system to help transport the new groundwater source to the system. Replace existing pipeline prone to breaks and leaks.	Water Efficiency	Jan-12	\$ 7,200,000
14	90	DW402-0001	#402 DOW Anini	156	Kauai DOW	ANI-01a, Anini Kalihiwai Pipeline: Replace approximately 10,000 feet of pipeline	Water Efficiency	Oct-11	\$ 4,000,000
15	90	DW160-0001	#160 DWS Lalamilo	1,903	Hawaii DWS	Puako Waterline Replacement: Replace approximately 4,600 LF of 8" diameter waterline, 2,700 LF of 12" diameter waterline, and upsize approximately 3,600 LF of 8" diameter to 12" diameter waterline. Existing waterlines are old, deteriorating, and subject to leakage.	Water Efficiency	SFY 2012	\$ 1,500,000
16	90	DW400-0004	#400 DOW Lihue-Kapaa	27,055	Kauai DOW	Job No. PLH-03, Kahili Horizontal Directional Drilled Well: This project is for the purpose of reducing power costs by developing water that doesn't need electricity to produce potable water. The scope of the project is to drill horizontally into the Ridge on the south side of Iole Stream to develop dike water. This water would come out at the 1100 to 1200 foot elevation with a pressure of up to 1200psi. This pressure would be monitored so the supply is taken at a sustainable rate of an expected 2-5 million gallons per day rate, which would replace existing sources. Eliminating existing source has the potential of reducing the power cost for DOW by 20-40% or about \$0.6-\$1.2 million per year. At this location in the forest reserve there is high expectation of the water having no chemical contaminates or VOC's. Expected cost is \$12 million to drill, case and test the well. Length of the hole would be about 9000 feet and would be 18 inch in diameter if the maximum amount of water is developed. A transmission line to bring the water to the Lihue system would need to travel about 6 miles. Cost would depend on flow rate.	Energy Efficiency (Categorical)	Sep-11	\$ 15,000,000
17	90	DW413-0007	#400 DOW Lihue-Kapaa	27,055	Kauai DOW	Pipeline Replacement, Kapaa Homesteads Wailua-Kapaa Water System; Kapaa, Kauai, HI - Pipeline Replacement - 30,150+LF.	Water Efficiency	Sep-10	\$ 9,000,000

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18	90	DW400-0007	#400 DOW Lihue-Kapaa	27,055	Kauai DOW	WK-11, Upper Wailua Houselots Booster Pump Station and Pipeline Replacements: Construct a 200 gpm booster pump station and the replacement of approximately 3,500 feet of pipeline for the upper Wailua Houselots community.	Water Efficiency	Sep-12	\$ 7,000,000
19	90	DW412-0003	#400 DOW Lihue-Kapaa	27,055	Kauai DOW	Job No. 97-1, PLH-02, Kokolau Intake Facility and Pipeline Replacement: Upgrade of intake facility along with repairs and renovation of the existing 15-in connecting waterline for the Lihue Water System.	Water Efficiency	SFY 2012	\$ 5,000,000
20	90	DW413-0008	#400 DOW Lihue-Kapaa	27,055	Kauai DOW	Job No. 02-15, WK28, Wailua Houselots Main Replacement - Phase I Installation of approximately 11,985 LF of 8-inch and 130 LF of 4-inch waterlines and appurtenances in the Wailua-Kapaa area of Kauai.	Water Efficiency	May-12	\$ 4,000,000
21	90	DW400-0003	#400 DOW Lihue-Kapaa	27,055	Kauai DOW	PLH-26, Isenberg Camp Main Replacements, Lihue: Replace approximately 12,500 feet of pipeline along Fujii, Inouye, Hiraoka, Jerves, Nakamura, Kanakolu, Eha, Eono, Elima, Ekolu Streets, Maalo, Noi, Laukini Roads, Lihue.	Water Efficiency	Sep-12	\$ 3,500,000
22	90	DW400-0006	#400 DOW Lihue-Kapaa	27,055	Kauai DOW	WK-33, Kahuna Road 12" Main Replacement, Kapaa Homesteads: Replace approximately 9,500 feet of 12" pipeline along Kahuna Road for the Kapaa Homesteads community.	Water Efficiency	Sep-12	\$ 3,000,000
23	90	DW412-0002	#400 DOW Lihue-Kapaa	27,055	Kauai DOW	Puhi Well No. 2 & 3 CO2 Removal Installation of forced draftway aeration with the use of existing soda ash system for stabilizing the stripped water (Lead and Copper Rule).		May-12	\$ 305,000
24	90	DW434-0004	#434 DOW Kalahao	13,581	Kauai DOW	LO-08, Koloa Road Main Replacements, Lawai: Replace approximately 1,700 feet of pipeline along Koloa Road (Alaloke Place-Piko Road), Lawai.	Water Efficiency	Sep-12	\$ 4,000,000
25	80	DW112-0001	#112 DWS Olaa-Mountain View	664	Hawaii DWS	Olaa #2 - 0.5 MG Reservoir Replacement Design and construct a new 0.5 MG concrete reservoir to replace the existing 0.2 MG steel Olaa #2 reservoir which is severely deteriorated and potentially poses a health and safety risk.		SFY 2012	\$ 3,000,000
26	80	DW107-0002	#107 DWS Papaikou	2,426	Hawaii DWS	Papaikou Transite & G.I. Pipeline Replacement: Replacement of existing transite and cast iron waterline, which is old and deteriorating. Construction of dedicated pump line from Papaikou Deep well to Papaikou 0.25 MG reservoir to increase contact time.		SFY 2012	\$ 4,200,000
27	80	DW217-0004	#217 DWS Hana	1,134	Maui DWS	Hamao to Koali Waterline Project: Replace 2,000 LF of inadequate and leaking pipeline with 8-in waterline to serve the Koali area of Hana.	Water Efficiency	SFY 2013	\$ 1,000,000
28	80	DW217-0005	#217 DWS Hana	1,134	Maui DWS	Wakiu Well Replacement: Installation of a new well to replace an existing source that has high chloride levels. This source will provide reliability to the Hana water system.		Dec-11	\$ 1,000,000
29	80	DW133-0002	#133 DWS Kukuihaele	463	Hawaii DWS	Kapulena Well Development Phase 1: Construct well to replace Waiulili Springs (a GWUDI source) and the existing Kukuihaele Well (low sustainable yield ~ 50 gpm and high total chloride levels) with a new groundwater source. Project includes new 0.3 MG reservoir and new waterlines to connect the Kapulena Well with the existing Kukuihaele reservoir (0.1 MG) and also provide fire protection. <i>(Binding commitment executed)</i>		Sep-09	\$ 4,584,500
30	80	DW403-0002	#403 DOW Hanalei	988	Kauai DOW	H-08, (west) Hanalei Tank, Well #2 and Connecting Pipeline: Construct a 0.5 MG storage tank and drilling, testing and development of a 300 gpm potable water well with approximately 10,000 feet of pipeline and access road.		Oct-12	\$ 10,000,000
31	80	DW415-0004	#415 DOW Haena-Wainiha	1,010	Kauai DOW	HW-11, Haena 0.2 MG 144' Tank and Connecting Pipeline: Construct a two hundred thousand gallon storage tank and approximately 5,000 feet of connecting pipeline and access road at Haena.		Oct-12	\$ 7,000,000
32	80	DW415-0003	#415 DOW Haena-Wainiha	1,010	Kauai DOW	HW-13, Wainiha 0.1 MG 217' Tank and Connecting Pipeline: Construct a one-hundred thousand gallon storage tank and approximately 5,000 feet of connecting pipeline at Wainiha.		Oct-12	\$ 7,000,000
33	80	DW415-0005	#415 DOW Haena-Wainiha	1,010	Kauai DOW	HW-12, Wainiha Well #4: Drill, test, and develop Wainiha Well #4 (100 gpm).		Oct-12	\$ 1,500,000
34	80	DW403-0003	#403 DOW Hanalei	988	Kauai DOW	H-07, Replacement of Hanalei (Princeville) Tank, Hanalei: Demolish and construct a 150,000 gallon storage tank at Princeville, Hanalei.		Oct-12	\$ 1,000,000
35	80	DW129-0002	#129 DWS North Kohala	4,914	Hawaii DWS	Kynnersley #1 - 0.3 MG Reservoir Replacement: Design and construct a new 0.3 MG concrete reservoir to replace the existing 0.1 MG steel Kynnersley #1 reservoir which is severely deteriorated and potentially poses a health and safety risk.		SFY 2012	\$ 2,000,000
36	80	DW366-0001	#366 BWS Waialeale-Sunset Beach	4,219	Hon BWS	Kamehameha Highway-Sunset Beach Water System Improvements: 16-inch Main, Pupukea Road to Waialeale, Part I Install 16" mains & appurtenances along Kamehameha Highway from F.H. C-6 (300' north of Kaunala Street) to vicinity 600 feet south of Paumalu Stream (Sunset Beach 206 Reservoir Access Road) - approx. 5,300 lin. ft.		SFY 2013	\$ 3,500,000

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37	80	DW366-0002	#366 BWS Waialeale-Sunset Beach	4,219	Hon BWS	COMSAT Access Road Water System Improvements, Phase B: Install 3" mains & appurtenances along Comsat Access Rd - approx 2,450 LF & two 4" electrical conduits & appurtenances - approx 1,750 LF.		SFY 2011	\$ 1,000,000
38	80	DW404-0004	#404 DOW Hanapepe - Eleele	4,457	Kauai DOW	Job No. HE-03a, Hanapepe (Town) Well #1 Repair and Renovations: Replace submersible motor and pump assembly, replace control building, and motor control center; improvements to site drainage and repair access road.		Jun-12	\$ 1,000,000
39	80	DW215-0008	#215 DWS Upper Kula	6,918	Maui DWS	Kamaole Water Tank Replacement: This project will replace the existing 0.50 MG tank. The existing tank is a steel tank that is corroded with many leak patches. The replacement 0.50 MG tank will eliminate the leaking and corrosion problem.	Water Efficiency	Sep-13	\$ 2,000,000
40	80	DW215-0004	#215 DWS Upper Kula	6,918	Maui DWS	Olinda Water Treatment Plant - Relining of the 8.5 MG Sedimentation Basin: Replace the existing leaking lining of the sedimentation basin. Joints along the concrete floor and walls will be repaired.	Water Efficiency	SFY 2012	\$ 1,500,000
41	80	DW215-0007	#215 DWS Upper Kula	6,918	Maui DWS	Upper Kimo Drive Waterline Replacement, Phase 1: This project will replace 3,000 feet of old, inadequate and leaking 6-inch and 4-inch waterlines with a new 8-inch waterline.	Water Efficiency	SFY 2012	\$ 600,000
42	80	DW333-0002	#333 BWS Wahiawa	24,547	Hon BWS	Wahiawa Water System Improvements, Part I: Install 12-inch mains and appurtenances along California Avenue from Maalo Street to Mahele Street - approx. 2,100 lin. ft. Install 8-inch mains and appurtenances along California Avenue from Maalo Street to Auhili Place, Kaalalo Place, Lei Awapuhi Place, Lei Aloalo Place, Longley Place, Kukui Street, Olive Street from Kamehameha Highway to Cypress Avenue, Ohai Street, Ohai Place, Milikana Place, Koale Way, Kilani Avenue from Lehua Street to Holoku Place, Kamehameha Highway from California Avenue to Avocado Street, and along Nihuiwai Place and Hiwi Place - approx. 15,950 lin. ft.		SFY 2014	\$ 7,060,000
43	80	DW332-0005	#332 BWS Waiailua	13,067	Hon BWS	Kamehameha Highway Water System Improvements, Part I (Haleiwa): Part I: Install 8-inch mains and appurtenances along Kamehameha Highway from 625 feet northeast of Fire Hydrant #C-49 to 10 feet northeast of Fire Hydrant #C-41 and along Pohaku Loa Way from Kamehameha Highway to Kamehameha Highway - approx. 6,600 lin. ft. Install 8-inch and 4-inch mains and appurtenances along a private road (TMK: 6-1-12:40) from Kamehameha Highway to end of road across of Fire Hydrant #C-501, along Punalau Place from Kamehameha Highway to end, along Ikuwai Place from Kamehameha Highway to end, along Ikuwai Way from Kamehameha Highway to end, and along various side streets - approx. 2,700 lin. ft. Install 2-inch mains along TMK 6-1-11:10, TMK 6-1-11:1, TMK 6-1-11:2, and TMK 6-1-11:15 - approx 1,150 lin. ft.		SFY 2016	\$ 7,000,000
44	80	DW332-0006	#332 BWS Waiailua	13,067	Hon BWS	Kamehameha Highway Water System Improvements, Part II (Haleiwa): Install 12-inch main and appurtenances along Kamehameha Highway from Papailoa Road to approximately 300 linear feet northwest of Kawailoa Drive - approx. 2,400 lin. ft. Install 8-inch main and appurtenances along Kamehameha Highway from 16-inch main interconnection near Fire Hydrant #C-59 to approximately 550 linear feet northeast of Fire Hydrant #C-56 - approx. 4,900 lin. ft.		SFY 2017	\$ 4,900,000
45	80	DW400-0009	#400 DOW Lihue-Kapaa	27,055	Kauai DOW	WK-01, Rehabilitate Moalepe Tunnel and Pipeline: Rehabilitate Moalepe Tunnel and approximately 5,000 feet of pipeline, Wailua Homesteads.		Sep-12	\$ 10,000,000
46	80	DW400-0008	#400 DOW Lihue-Kapaa	27,055	Kauai DOW	WK-10 & WK-21, (upper) Wailua Homesteads 1.0 MG 538' Tank, Well and Connecting Pipeline: Construct a one million gallon storage tank and drilling, testing and development of a 500 gpm potable water well with approximately 5,000 feet of pipeline and access road for the upper Wailua Homesteads community.		Jun-13	\$ 7,000,000
47	80	DW400-0005	#400 DOW Lihue-Kapaa	27,055	Kauai DOW	PLH-38, Hanamaulu Tank and Connecting Pipeline: Construct a one million gallon storage tank with approximately 500 feet of pipeline and access road.		Jun-13	\$ 5,000,000
48	80	DW400-0010	#400 DOW Lihue-Kapaa	27,055	Kauai DOW	PLH-36, Expansion to Grove Farm's Surface Water Treatment Plant at Hanamaulu: Expand the Grove Farm surface water treatment plant by one million gallons per day.		Jun-12	\$ 1,000,000
49	80	DW213-0008	#213 DWS Makawao	27,642	Maui DWS	Kamole Water Treatment Plant High Lift Pumps: Replace four pumps and electrical equipment to provide a reliable pumping system to Makawao and Upcountry areas.	Energy Efficiency	Dec-10	\$ 5,500,000
50	80	DW213-0009	#213 DWS Makawao	27,642	Maui DWS	Kaupakalua Road Waterline Improvements Phase 1: This project will replace 3,000 feet of old, inadequate and leaking 6-inch water line with a new 8-inch waterline.	Water Efficiency	SFY 2013	\$ 600,000
51	80	DW212-0009	#212 DWS Wailuku	68,054	Maui DWS	Wailuku Well Development: Installation of a new well to replace an existing well that will be abandoned. This source will provide reliability to the Central and South Maui areas. Installation of a pump and motor along with electrical controls and transmission waterlines to connect to the existing water distribution system.	Energy Efficiency	Jun-11	\$ 3,600,000

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52	80	DW212-0004	#212 DWS Wailuku	68,054	Maui DWS	Maui Meadows No. 17 Booster Pump Station Improvements: Replace three existing booster pumps and electrical equipment and improve efficiency by integrating pump controls with adjacent pump station.	Energy Efficiency	Jun-11	\$ 2,000,000
53	80	DW212-0011	#212 DWS Wailuku	68,054	Maui DWS	Maui Meadows Booster Pump Station #18 Improvements: This project will replace the two existing booster pumps and its electrical equipment. The existing pumps and electrical equipment are near the end of its service life. The project will provide a reliable pumping system to its service area.	Energy Efficiency	Sep-13	\$ 1,500,000
54	80	DW212-0010	#212 DWS Wailuku	68,054	Maui DWS	Uluniu Road and Ewa Place Waterline Replacement: This project will replace 2,800 feet of old, inadequate and leaking 4-inch and 1-1/2 inch waterlines with a new 12-inch waterline.	Water Efficiency	Apr-11	\$ 800,000
55	80	DW212-0012	#212 DWS Wailuku	68,054	Maui DWS	Nani, Loke, Wailani and Kaniela Streets Waterline Improvements: This project will replace 2,300 feet of old 4-inch and 6-inch waterlines. The old, inadequate and leaking waterlines will be replaced with a new 8-inch waterline. The new 8-inch waterline will provide adequate fire protection and reliable service to the existing customers in the project area.	Water Efficiency	Feb-12	\$ 600,000
56	80	DW212-0008	#212 DWS Wailuku	68,054	Maui DWS	Kanoa Street, Oihana Street, and Pikake Lane Waterline Improvements: Replace 1,800 feet of old, inadequate and leaking 6-inch, 4-inch, 3-inch, and 2-inch waterlines with a new 8-inch waterline.	Water Efficiency	Dec-11	\$ 400,000
57	80	DW434-0005	#434 DOW Kalaheo	13,581	Kauai DOW	KP-05, Poipu 1.0 MG 245' Tank and Connecting Pipeline: Construct a one million gallon storage tank at Poipu.		Oct-13	\$ 3,000,000
58	80	DW434-0002	#434 DOW Kalaheo	13,581	Kauai DOW	Job No. 09-01, K-01, Phase I Kalaheo Nursery Tank Replacement and Booster Pump Station (2-200 GPM): Refurbish leaking and deteriorating tank, reroof, repair interior and exterior walls and floor.		Jan-12	\$ 1,000,000
59	80	DW335-0010	#335 BWS Waipahu-Ewa-Waianae	175,326	Hon BWS	Puhawai Road, Kuwale Road, Puuhulu Road Water System Improvements: Install 8-inch mains and appurtenances along Puhawai Road from Puuhulu Road to Paheehee Road, along Wikolia Place from Puhawai Road to end, along Puuhulu Road from Puhawai Road to Kuwale Road, along Kuwale Road from Puuhulu Road to Paheehee Road, along Haama Place from Puuhulu Road to end, along Puululu Place from Puuhulu Road to end, and along the side street from Kuwale Road to end – approx. 10,780 lin. ft.		SFY 2014	\$ 4,200,000
60	80	DW335-0009	#335 BWS Waipahu-Ewa-Waianae	175,326	Hon BWS	Kahuaailani Street Water System Improvements: Install 12-inch mains and appurtenances along Mokuola Street from Waipahu Street to 70 feet beyond Nalii Street - approx. 500 lin. ft. Install 8-inch mains and appurtenances along Kahuaailani Street from Hikimoe Street to end, along Puamano Place from Waipahu Street to end, along Kahiki Place from Puamano Place to end and along Hikimoe Street from Waipahu Depot Street to FH L4002 – approx. 4,020 lin. ft. Install 4-inch mains and appurtenances along the side street from Hikimoe Street to end - approx. 115 lin. ft.		SFY 2015	\$ 1,810,000
61	80	DW335-0008	#335 BWS Waipahu-Ewa-Waianae	175,326	Hon BWS	Barbers Point 215 Reservoir Nos. 1, 2 and 3: Rehabilitation of failing post-tensioning system for Reservoir No. 1 and repair of other reservoir deficiencies as identified in Sanitary Survey and Reservoir Assessment Study.		SFY 2011	\$ 1,700,000
62	80	DW335-0007	#335 BWS Waipahu-Ewa-Waianae	175,326	Hon BWS	Ewa Beach Water System Improvements, Part II: Install 8-inch mains and appurtenances along Koalipehu Street from Paaloha Street to Aikanaka Road, along Aikanaka Road from Paaloha Street to Koalipehu Street, along Ihipehu Street Aikanaka Road to Pohakupuna Road and along Peeone Place from Pohakupuna Road to end- approx. 2,700 lin. ft. Install 4-inch mains and appurtenances along the two side streets on Ihipehu Street and along the side street on Koalipehu Street- approx. 235 lin. ft.		SFY 2014	\$ 1,040,000
63	80	DW331-0022	#331 BWS Honolulu-Windward-Pearl Harbor	665,735	Hon BWS	Waialae 180 Reservoir Replacement (3.0 MG): Demolish existing 1.0 MG reservoir and replace with 3.0 MG reservoir.		Unknown	\$ 9,000,000
64	80	DW331-0044	#331 BWS Honolulu-Windward-Pearl Harbor	665,735	Hon BWS	Anoi Road Water System Improvements: Install 8-inch main and appurtenances along Anoi Road from end to end; along Keaahala Road from Kamehameha Highway to Keaahala Place; along Kamehameha Highway from Kahuhipa Street to Keole Street and along Luana Place from Paleka Road to end - approx. 5,850 lin. ft.		SFY 2013	\$ 6,560,000

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65	80	DW331-0047	#331 BWS Honolulu-Windward-Pearl Harbor	665,735	Hon BWS	Kalihi Water System Improvements, Part III: Install 8-inch and 4-inch mains and appurtenances along Bannister Place from Bannister Street to dead end. Install 8-inch mains and appurtenances along Bannister Street from Laumaka Street to North King Street; along Gulick Avenue from Wilcox Lane to North King Street; along Kopke Street from Wilcox Lane to North King Street; along Factory Street from Stanley Street to North King Street; along Puuhale Road from Dillingham Boulevard to North King Street; along Wilcox Lane from Bannister Street to Puuhale Road; along Stanley Street from Bannister Street to Puuhale Road; along Waterhouse Street from Bannister Street to Puuhale Road; along Mokauea Street from Democrat Street to Kananui Street; and along Industrial Road from Waterhouse Street to Puuhale Road - approx. 9,650 lin. ft.		SFY 2011	\$ 5,310,000
66	80	DW331-0056	#331 BWS Honolulu-Windward-Pearl Harbor	665,735	Hon BWS	Pensacola Street Water System Improvements: Install 12-inch main and appurtenances along Pensacola Street from Kapiolani Boulevard to Young Street - approx. 2,550 lin. ft. Install 8-inch main and appurtenances along Pensacola Street from Young Street to existing 8-inch main (TMK 2-4-033:028) - approx. 3,540 lin. ft. Install 8-inch and 4-inch mains and appurtenances along Piikoi Street from Pensacola Street to Lewalani Drive - approx. 430 lin. ft.		SFY 2015	\$ 5,160,000
67	80	DW331-0023	#331 BWS Honolulu-Windward-Pearl Harbor	665,735	Hon BWS	Kalama 400 Reservoir (1.0MG) and Kalama 170 Booster Station: Install reservoir and booster station to balance system.		Unknown	\$ 4,500,000
68	80	DW331-0049	#331 BWS Honolulu-Windward-Pearl Harbor	665,735	Hon BWS	Kona Street 8-Inch Main: Install 8-inch main and appurtenances along Kona Street from Kamakee Street to Atkinson Drive - approx. 4,050 lin. ft.		SFY 2012	\$ 3,850,000
69	80	DW331-0052	#331 BWS Honolulu-Windward-Pearl Harbor	665,735	Hon BWS	Mapunapuna Water System Improvements, Part I: Install 8-inch mains and appurtenances along Ahua Street from Mokumoa Street to Kilihau Street. – approx. 2,300 lin. ft.		SFY 2014	\$ 3,370,000
70	80	DW331-0041	#331 BWS Honolulu-Windward-Pearl Harbor	665,735	Hon BWS	Hahaione Water System Improvements: Install 12-inch mains and appurtenances along Hahaione Street from Ainapo Street to Hahaione Place and along Ainapo Street from Kahena Street to FH M-6334 - approx. 2,900 lin. ft. Install 8-inch mains and appurtenances along Nanahonua Street from Hahaione Street to end; along Puuomao Street from Uwao Street to end; along Puuomao Place from Puuomao Street to end; along Kahena Place from Kahena Street to end; along Uwao Street from Hahaione Street to Nanahonua Street and along Waika Place from Ainapo Street to end - approx. 5,200 lin. ft.		SFY 2012	\$ 3,300,000
71	80	DW331-0048	#331 BWS Honolulu-Windward-Pearl Harbor	665,735	Hon BWS	Kapahulu Water System Improvements, Part I: Install 8-inch mains and appurtenances along Paliuli Street, Mokihana Street, and Olu Street, along Kaimuki Avenue from 4th Avenue to Kapahulu Avenue; along Lincoln Avenue from 4th Avenue to Kapahulu Avenue; along Pahoa Avenue from 4th Avenue to 3rd Avenue; along 3rd Avenue from Kaimuki Avenue to H-1 and from H-1 to Waialae Avenue; along Belser Street from Kaimuki Avenue to H-1 and from H-1 to Harding Avenue; along 2nd Avenue from Lincoln Avenue to FH M-1349 and from H-1 to Waialae Avenue; and along Aloalo Place from Harding Avenue to end - approx. 8,400 lin. ft.		SFY 2014	\$ 3,230,000
72	80	DW331-0043	#331 BWS Honolulu-Windward-Pearl Harbor	665,735	Hon BWS	Diamond Head Water System Improvements, Part II: Install 12-inch mains and appurtenances along 22nd Avenue from Kilauea Avenue to Diamond Head Road, along Diamond Head Road from 22nd Avenue to Kahala Avenue, and along Kulamanu Street from Kahala Avenue to Kulamanu Place - approx. 5,235 lin. ft. Install 8-inch mains and appurtenances along Kulamanu Place from Kulamanu Street to end, along Malapua Place from 22nd Avenue to end, along Ulupua Place from 22nd Avenue to end, along Huanui Street from 22nd Avenue to Huanui Place, along Kaalawai Place from Diamond Head Road to easement, and along Kuine Place from Kulamanu Street to end - approx. 2,270 lin. ft.		SFY 2012	\$ 3,180,000
73	80	DW331-0030	#331 BWS Honolulu-Windward-Pearl Harbor	665,735	Hon BWS	Kaimuki Water System Improvements, Part I: Install 8-inch mains and appurtenances along Maunaloa Avenue from 16th Avenue to 20th Avenue; along Kaimuki Avenue from 16th Avenue to 21st Avenue; along Pahoa Avenue from 18th Avenue to 150 feet beyond FH M-3591; along 17th Avenue from Kilauea Avenue to Kaimuki Avenue and along 18th Avenue from Kaimuki Avenue to Pahoa Avenue; along 19th and 20th Avenues from Maunaloa Avenue to Pahoa Avenue - approx. 9,850 lin. ft.		SFY 2012	\$ 2,930,000
74	80	DW331-0051	#331 BWS Honolulu-Windward-Pearl Harbor	665,735	Hon BWS	Liliha Water System Improvements, Phase A: Install 12-inch mains and appurtenances along Liliha Street from King Street to School Street - approx. 2,100 lin. ft.		SFY 2012	\$ 2,900,000

**Appendix B
DWSRF Priority List of Projects for SFY 2012**

No.	Points	DWSRF Project No.	Public Water System	Population	Owner	Project (Name and Description)	Green Project Reserve Type	Expected Construction Start Date	Estimated Construction Cost
75	80	DW331-0055	#331 BWS Honolulu-Windward-Pearl Harbor	665,735	Hon BWS	Pacific Heights Water System Improvements, Part II: Install 12-inch main and appurtenances along Pacific Heights Road from Haili Road to Ahekol Street; along Ahekol Street from Pacific Heights Road to Booth Road; and along Booth Road from Ahekol Street to Pololani Street - approx. 3,975 lin. ft. Install 8-inch main and appurtenances along Laniloa Road and Pacific Heights Place from Pacific Heights Road to end; along Hiolani Place from Booth Road to end; and along various side streets - approx. 2,055 lin. ft.		SFY 2016	\$ 2,540,000
76	80	DW331-0039	#331 BWS Honolulu-Windward-Pearl Harbor	665,735	Hon BWS	Kaluauui Wells Renovation: Replace motor control center, electrical conduits, power cables, and wiring.		Jun-09	\$ 2,500,000
77	80	DW331-0040	#331 BWS Honolulu-Windward-Pearl Harbor	665,735	Hon BWS	Kuliouou Line Booster Improvements: Install system improvements at critical line booster station		SFY 2011	\$ 2,500,000
78	80	DW331-0058	#331 BWS Honolulu-Windward-Pearl Harbor	665,735	Hon BWS	Wilhelmina Rise 811 Reservoir Replacement: Replace failing reservoir.		SFY 2013	\$ 2,500,000
79	80	DW331-0033	#331 BWS Honolulu-Windward-Pearl Harbor	665,735	Hon BWS	Kakaako Water System Improvement: Install 8-inch mains and appurtenances along Halekauwila Street from Richards Street to Keawe Street; along Keawe Street from Auahi Street to Queen Street; and along Pohukaina Street from Punchbowl Street to South Street.		Unknown	\$ 2,300,000
80	80	DW331-0050	#331 BWS Honolulu-Windward-Pearl Harbor	665,735	Hon BWS	Liliha Water System Improvements, Part V: Install 8-inch mains and appurtenances along Liliha Street from Wylie Street to end, along Puunui Avenue from Wylie Street to Hawaii Street, along Kauai Street from Liliha Street to Puunui Avenue, along Lanai Street from Wylie Street to Liliha Street and along Hawaii Street from Liliha Street to Puunui Avenue - approx. 5,600 lin.ft.		SFY 2014	\$ 2,160,000
81	80	DW331-0057	#331 BWS Honolulu-Windward-Pearl Harbor	665,735	Hon BWS	Ward Avenue 12-Inch and 8-Inch Water Mains: Install 12-inch and 8-inch mains and appurtenances along Ward Avenue from Kinau Street to Kapiolani Boulevard - approx. 2,400 lin. ft.		SFY 2012	\$ 2,000,000
82	80	DW331-0059	#331 BWS Honolulu-Windward-Pearl Harbor	665,735	Hon BWS	Woodlawn Drive 8-Inch Main: Install 8-inch mains and appurtenances along Woodlawn Drive from Alani Drive to Kahaloa Drive; along Kahaloa Drive from Kalawao Street to Woodlawn Drive; along Lower Road from Woodlawn Drive to end; along Alani Drive from Woodlawn Drive to 150 feet beyond FH1258 and along Waipuna Rise and Emekona Place - approx. 5,900 lin. ft.		SFY 2013	\$ 2,000,000
83	80	DW331-0053	#331 BWS Honolulu-Windward-Pearl Harbor	665,735	Hon BWS	Mapunapuna Water System Improvements, Part II: Install 12-inch mains and appurtenances along Ahua Street from Paa Street to Mokumoa Street, along Kikowaena Street from Ahua Street to Kikowaena Place and along Kikowaena Place from Kikowaena Street to end - approx. 2,685 lin. ft.		SFY 2011	\$ 1,700,000
84	80	DW331-0054	#331 BWS Honolulu-Windward-Pearl Harbor	665,735	Hon BWS	Monsarrat Avenue Water System Improvements Install 16-inch and 8-inch mains and appurtenances along Monsarrat Avenue from Paki Avenue to Campbell Avenue - approx. 3,200 lin. ft.		SFY 2014	\$ 1,670,000
85	80	DW331-0038	#331 BWS Honolulu-Windward-Pearl Harbor	665,735	Hon BWS	Kealakaha Dr., Pooholua Dr., and Waipao Pl 8-in Mains: Install 8-in mains and along the entire length of Pooholua Dr., Kealakaha Dr., and Waipao Pl., approx. 3,750 LF.		SFY 2012	\$ 1,440,000
86	80	DW331-0042	#331 BWS Honolulu-Windward-Pearl Harbor	665,735	Hon BWS	Foster Village Water System Improvements, Part III: Install 8-inch mains and appurtenances along Olino Street from Molehu Drive to Halupa Street, along Puanakau Street from Molehu Drive to Halupa Street, and along Molehu Drive from Olino Street to Halupa Street - approx. 3,230 lin. ft.		SFY 2014	\$ 1,240,000
87	80	DW331-0045	#331 BWS Honolulu-Windward-Pearl Harbor	665,735	Hon BWS	Hui Uliii Street 8-Inch Main: Install 12-inch, 8-inch and 4-inch mains and appurtenances along Hui Uliii Street from Hui Kelu Street to Hui Oi Street - approx. 2,825 lin ft.		SFY 2016	\$ 1,240,000

**Appendix B
DWSRF Priority List of Projects for SFY 2012**

No.	Points	DWSRF Project No.	Public Water System	Population	Owner	Project (Name and Description)	Green Project Reserve Type	Expected Construction Start Date	Estimated Construction Cost
88	80	DW331-0046	#331 BWS Honolulu-Windward-Pearl Harbor	665,735	Hon BWS	Kaiolohia Place and Way 8-Inch Mains: Install 8-inch mains and appurtenances along Kaiolohia Place from Ainahou Street to end and along Kaiolohia Way from Kaiolohia Place to end - approx. 1,210 lin. ft.		SFY 2011	\$ 500,000
89	70	DW234-0003	#234 DWS Kaunakakai	3,489	Maui DWS	Kaunakakai-Kawela System Well 2: New well to replace/supplement shallow well for water quality.		SFY 2013	\$ 2,000,000
90	70	DW234-0004	#234 DWS Kaunakakai	3,489	Maui DWS	Ualapue Tank - Waterline Upgrade: This project will install 1,500 feet of 16-inch waterline between the existing Ualapue Wells and the 1 MG water tank. The new waterline is needed for compliance with the Ground Water Rule.		Jul-13	\$ 500,000
91	70	DW218-0002	#218 DWS Honokohau	42	Maui DWS	Honokohau Water Source Replacement: Installation of a new well or treatment facility to replace source for the Honokohau system.		SFY 2013	\$ 1,500,000
92	70	DW247-0005	#247 DWS Lower Kula	3,246	Maui DWS	Upper Omaopio Road Tank Replacement: Construct a 250,000 gallon tank to replace the undersized 12,000 gallon tank.		Dec-10	\$ 700,000
93	70	DW247-0006	#247 DWS Lower Kula	3,246	Maui DWS	Middle and Lower Omaopio Road Tanks Replacements: Construct a 20,000 gallon and 40,000 gallon tanks to replace existing corroded tanks.		Dec-10	\$ 400,000
94	70	DW215-0003	#215 DWS Upper Kula	6,918	Maui DWS	Waikamoi Flume Repair/Replacement: Repair or replace deteriorated wooden flume from surface water intakes to Waikamoi Dam, approximately 0.5 miles.		SFY 2012	\$ 10,000,000
95	70	DW212-0007	#212 DWS Wailuku	68,054	Maui DWS	Lower Paia Water Tank Replacement: Construct 300,000 gallon tank to replace existing corroded 100,000 gallon tank.		Apr-11	\$ 750,000
96	30	DW213-0010	#213 DWS Makawao	68,054	Maui DWS	Wind Turbine - Kamole Water Treatment Plant: Construct a wind turbine system to generate electricity. The system will produce electrical power for the water treatment plant and the high lift pumps. The system will reduce the department's dependence on Maui Electric Company and fossil fuels.	Energy Efficiency (Categorical)	Jul-12	\$ 2,000,000
97	30	DW213-0011	#213 DWS Makawao	68,054	Maui DWS	Photovoltaic System - Kamole Water Treatment Plant: Construct a photovoltaic system at the Kamole Water Treatment Plant. The system will provide electrical power to the treatment plant. This will reduce the department's dependence on Maui Electric Company and fossil fuels.	Energy Efficiency (Categorical)	Feb-12	\$ 200,000
98	30	DW214-0012	#214 DWS Lahaina	17,967	Maui DWS	Hydro Electric Facility at the Honokowai Tank Site: Construction of a hydroelectric facility. Electric power will be generated from the high pressure waterline that fills the existing 2 MG Honokowai.	Energy Efficiency (Categorical)	Dec-11	\$ 750,000