STATE WATER PROJECTS PLAN

Hawaii Water Plan

VOLUME 2

SWPP for Island of Hawaii

For the:
Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii

February 2003

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4. SWPP STATE WATER DEVELOPMENT STRATEGY

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ABBREVIATIONS

AWUDP	Agriculture Water Use and Development Plan
BWS	Board of Water Supply
CIP	Capital Improvements Project
Commission	Commission on Water Resource Management
CWRM	Commission on Water Resource Management
DBEDT	Department of Business Economic Development & Tourism
DHHL	Department of Hawaiian Home Lands
DHS	Department of Human Services
DLNR	Department of Land and Natural Resources
DOA	Department of Agriculture
DOH	Department of Health
DOT	Department of Transportation
DPS	Department of Public Safety
DWS	Department of Water
EXSS	Existing State or Private Sources
EXSWS	Existing State Water Systems
gpd	gallons per day
gpm	gallons per minute
HOST	Hawaii Ocean, Science and Technology Park
HRS	Hawaii Revised Statutes
KSBE	Kamehameha Schools Bishop Estate
HWP	Hawaii Water Plan
LHD	Lower Hamakua Ditch
MOU	Memorandum of Understanding
NELHA	Natural Energy Laboratory of Hawaii Authority
NEWSS	New/Planned State Wells
NEWSWS	New State Water Systems
OWMP	Oahu Water Management Plan
PLANPS	Planned Private Sources
SWAP	Source Water Assessment Program
SWPP	State Water Projects Plan
UH	University of Hawaii
UHD	Upper Hamakua Ditch
USEPA	United States Environmental Protection Agency
WIS	Waimea Irrigation System
WQP	Water Quality Plan
WRPP	Water Resource Protection Plan
WUDP	Water Use and Development Plans

1.1. BACKGROUND

1.1.1. Legislative History

The State Constitution, Article XI Section 7, mandates that the State of Hawaii is responsible to protect, control, and regulate the use of Hawaii's water resources for the benefit of its people. Pursuant to this mandate, Act 45, the Fourteenth Legislature signed the State Water Code, into law on July 1, 1987. The Act is now codified as Chapter 174C, Hawaii Revised Statutes (HRS).

1.1.2. State Water Code

The State Water Code as described in Chapter 174C, HRS, is divided into nine parts. The code outlines administration structure, regulation of water use, water resources planning and water rights. The State Water Code policies insure the maximum beneficial uses of State water for Hawaii residents. The code mandates a program of comprehensive water resource planning to maintain the supply, conservation, and quality of State waters. The State Water Code calls for the establishment of a six member Commission on Water Resource Management (CWRM) to have exclusive jurisdiction and final authority relating to the implementation and administration of the Code. To guide the Commission in executing its general powers, duties, and responsibilities, the Code requires the formulation of a Hawaii Water Plan.

1.1.3. Hawaii Water Plan

The Hawaii Water Plan serves as a continuing long-range guide for water resource management. The plan consists of five component parts:

1) Water Resources Protection Plan (WRPP)
2) Water Quality Plan (WQP)
3) State Water Projects Plan (SWPP)
4) State Agriculture Water Use and Development Plan (AWUDP) (Per modification of Section174-31, HRS, Act 101)
5) Water Use and Development Plans (WUDP) for each County

The Hawaii Water Plan objectives include:

1) The attainment of maximum reasonable-beneficial use of water of the State;
2) The proper conservation and development of the waters of the State;
3) The control of the waters of the State for such purposes as navigation, drainage, sanitation, and flood control;
4) The attainment of adequate water quality as expressed in the State Water Resources Protection Plan and Water Quality Plan;
5) The implementation of water resource policies of the State Water Code, as expressed in section 174C-2.

By statute, Section 174C-32, HRS, the Hawaii Water Plan was completed and adopted by the commission in 1990. The maintenance and coordination of current water related information requires the CWRM to periodically update components of the plan. The status and schedules for the individual plans are shown on **Table 1.1**.

Table 1.1
Scheduled Updates to the Hawaii Water Plan

Hawaii Water Plan	Scheduled Completion Date	Comments
State Water Projects Plan	2003	SWPP Update Complete
State Water Master Plan for Oahu	2004	In Progress
Water Resources Protection Plan	2004	In Progress
Water Quality Plan	No Date Scheduled	Plan Update not Scheduled
Water Use and Development Plan - Maui	No Date Provided	Plan Update Scheduled
Water Use and Development Plan - Kauai	No Date Scheduled	Plan Update not Scheduled
Water Use and Development Plan - Hawaii	No Date Scheduled	Plan Update not Scheduled
Oahu Water Management Plan – Oahu	No Date Provided	Plan Update Scheduled
State Agriculture Water Use and Development Plan	2004	In Progress

1.2. OBJECTIVE OF THE SWPP

The primary objective of the SWPP is to provide a framework for the planning and implementation of Water Development Strategy for future State projects. Other objectives include:

1) Inventory State water resources including State wells, stream diversions, and State water systems;
2) Inventory State Projects and their water requirements. The State project demands to be incorporated within respective County Water Use and Development Plans for comprehensive water planning. State projects on Oahu to be used to justify source development and water use permits or water reservations from CRWM;
3) Inventory State department water conservation programs;
4) Develop a Water Development Strategy to meet the needs of proposed State projects;
5) Incorporation of the Agricultural Water Use and Development Plans; and
6) Consistency with the Water Resources Protection Plan and the Water Quality Plan, and coordination with the Counties' Water Use and Development Plans.

1.3. SWPP DOCUMENT FORMAT

The SWPP has been organized into five separate volume reports. The five volumes include: SWPP technical document and four individual island SWPP reports. The SWPP technical document contains statewide department project water planning, methodology, procedures, project demand summaries and water development strategies. Individual island SWPP reports focus on island project demands and strategies to meet project demands. The SWPP volume structure includes:

Volume 1: State Water Projects Plan, Technical Document
Volume 2: State Water Projects Plan, Island of Hawaii
Volume 3: State Water Projects Plan, Island of Kauai
Volume 4: State Water Projects Plan, Island of Lanai/Maui/Molokai
Volume 5: State Water Projects Plan, Island of Oahu

1.4. ELEMENTS OF STUDY – Volume 2: SWPP Island of Hawaii

1.4.1. Inventory of Existing Water Resources

A compilation of available information of existing State wells, stream diversions and water systems owned and/or operated by the State of Hawaii on the island of Hawaii was performed. An inventory of existing State water resources were taken to assess the extent of the State's current water-related operations.

1.4.2. Inventory of Proposed State Projects

Each State department was surveyed to inventory future water requirements associated with proposed State sponsored projects. Using a 20-year planning horizon, future State projects were identified by State departments for the period between 2001 and 2020 based on estimated construction schedules. Water demand requirements were tabulated for 2001 and in one-year increments to 2005, then in five-year increments until the year 2020.

1.4.3. Assessment of Future Water Requirements

Upon completion of the State project inventory, an assessment of the future water requirements was performed. Estimated water demands were determined using the best available information. It should be noted that these demands are based on the projected future water requirements and the values derived herein should be reevaluated as the specific projects become better defined.

1.4.4. SWPP Water Development Strategy

The SWPP Water Development Strategy was developed to identify, evaluate and recommend source development options to meet the forecasted State project water demands. Strategy options and recommendations were organized into two periods: Short-term (2001 to 2010) and the Long-term (2011 to 2020). The strategy objective was to provide more effective planning, coordination and development of water resources to meet projected State water demands. The strategy utilized several source development options including, but not limited to, existing and/or planned State water sources/systems, county/private water agreements, and existing master plans, all of which were prioritized and assigned to individual SWPP projects. These strategy options, however, are preliminary in nature and must be further evaluated with regard to scheduling, funding, system reliability, requirements for infrastructure improvements, and other planning considerations. DLNR will initiate discussions with County of Hawaii, Department of Water on the availability and feasibility of County water systems accommodating SWPP project demands. In the event County water systems are unable to supply SWPP project demands, DLNR will assist to develop additional source or system capacity.

CHAPTER 2
EXISTING STATE WATER RESOURCES

2.1. GENERAL

The vast majority of existing State facilities including schools, office buildings, airports, harbors, housing projects and institutions are served by water systems owned and operated by the respective Counties. The County water departments are specifically organized to manage, maintain and operate water systems and are usually more capable of efficiently providing water service. However, in areas where the Counties do not have distribution systems, other purveyors, including State, Federal or private agencies, provide water service to their respective facilities.

An inventory of existing State owned and operated water systems was conducted to assess the extent of the State's current water-related operations, and are discussed in Section 2.4 below. Information on existing water uses and sources registered by the State were also compiled and are presented herein.

2.2. STATE WATER RESOURCES

2.2.1. Wells

A "Well" is defined as "any excavation or opening in the ground, or an artificial enlargement of a natural opening drilled, tunneled, dug, or otherwise constructed for the location, exploration, development, injection, or recharge of ground water and by which ground water is drawn or is capable of being withdrawn or made to flow." The State currently owns 195 existing wells. There are 49 existing State wells located on the island of Hawaii, shown on **Figure 2.1**. A listing of the State owned wells located on the island of Hawaii are included in **Appendix A**. State well data and location was referenced from CWRM databases.

Water from the State wells is used for various applications. Principal uses include potable water supply and irrigation. Miscellaneous uses include cooling water, landscaping, aquaculture, and wetland maintenance.

2.2.2. Stream Diversions

A "Stream Diversion" is defined as "the act of diverting, pumping or otherwise removing water from a stream into a channel, ditch, pipeline, or other conduit." Based on registered stream diversion records with CWRM, the State of Hawaii currently owns and/or operates 54 stream diversions. There are 21 existing stream diversions located on the island of Hawaii, shown in **Figures 2.2**. A listing of the State owned/operated diversions is included in **Appendix A**. The water collected from existing State diversion works is used primarily for agricultural operations. Other uses include potable water supply, generally for remote areas, e.g. parks and recreation areas. Since diversion works involve surface water sources, the collected water generally requires treatment before it is considered safe for human consumption.

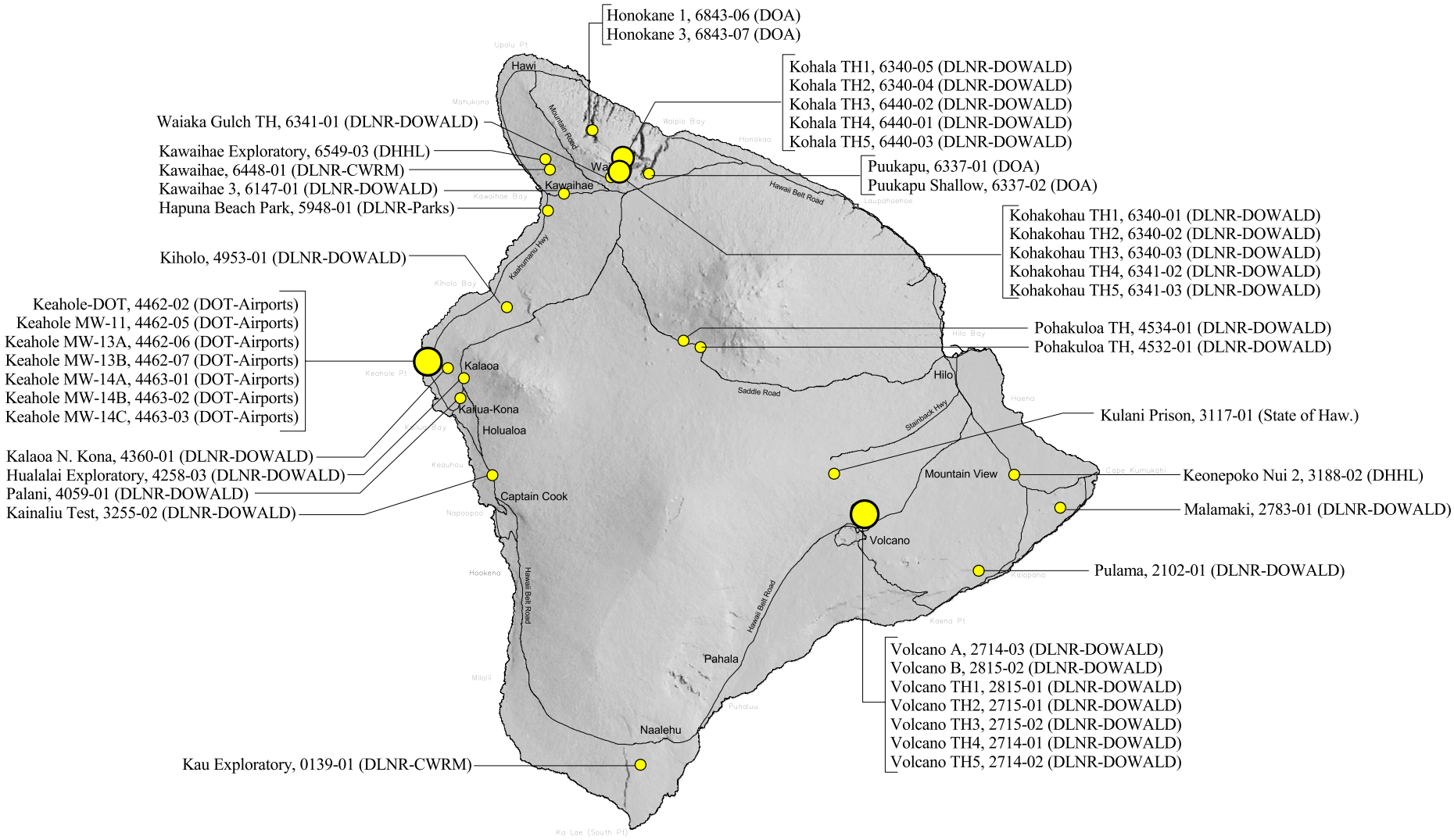
2.2.3. State Owned and/or Operated Water Systems

A State water system is defined as a water system owned and/or operated by the State that provides water service to State projects or facilities; provides source water and treatment of source water; stores water in storage reservoirs; provides booster pump capacity; conveys water through a distribution system and distributes water to service connections. A State water system is also defined when a County or private source supplies a State owned and/or operated water service serving State facilities. The State water systems are listed in **Table 2.1** by State department. Location map of State water systems on the island of Hawaii is shown in **Figures 2.3**. Schematic line diagrams showing water systems components, end users and existing/future water demands are provided in **Appendix A**.

Table 2.1
Water Systems Owned or Operated by the State

Water System Name	State Agency	Island	Primary Use	State Owned	State Operated
Lower Hamakua Ditch	DOA	Hawaii	Irrigation	No, KSBE, & Other Private	Yes
Waimea Irrigation System	DOA	Hawaii	Irrigation	Yes	Yes
NELHA	DBEDT	Hawaii	Potable	Yes, Source provided by County, DWS	Yes
Hapuna SRA	DLNR	Hawaii	Nonpotable	Yes	Yes
Mauna Kea SP	DLNR	Hawaii	Potable	Yes	Yes
Kulani Correctional Center	DPS	Hawaii	Potable	Yes	Yes

Note: * State water system operated by private contractor, managed by the State



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HAWAIIAN ISLANDS

NORTH

0.5 0 0.5 1 1.5 2 2.5 3 3.5 4 4.5 5 5.5 Miles

Scale: 1"=5.5 miles

LEGEND:

- State Wells, State Well No., (State Dept.)
- Major Highways/Roads

State Water Projects Plan
EXISTING REGISTERED STATE WELLS - HAWAII
FIGURE 2.1

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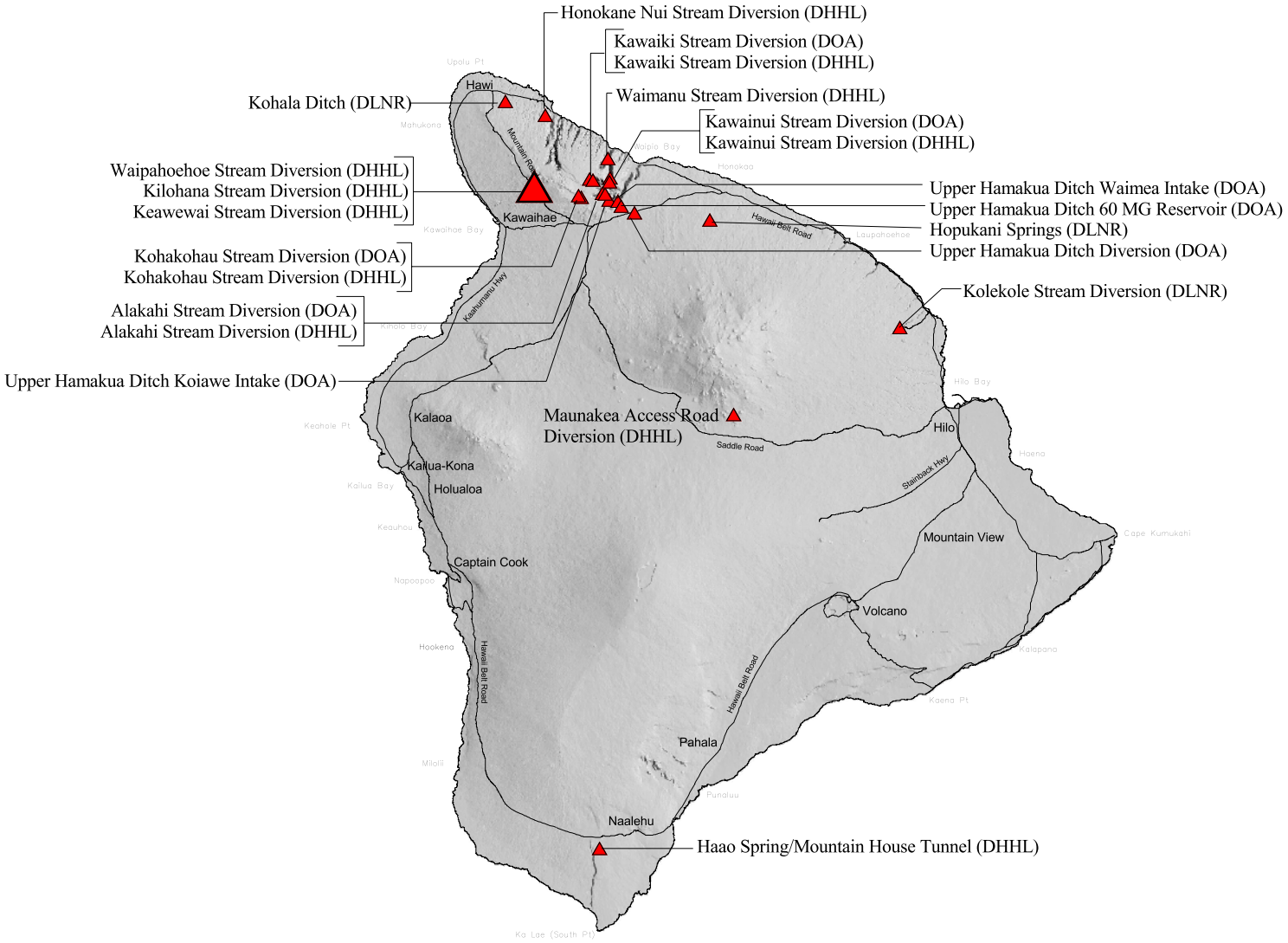

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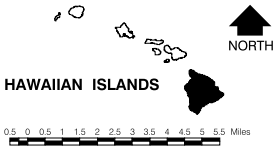

LEGEND:

- State Stream Diversions (State Dept.)
- Major Highways/Roads

State Water Projects Plan
EXISTING STATE STREAM DIVERSIONS - HAWAII
FIGURE 2.2

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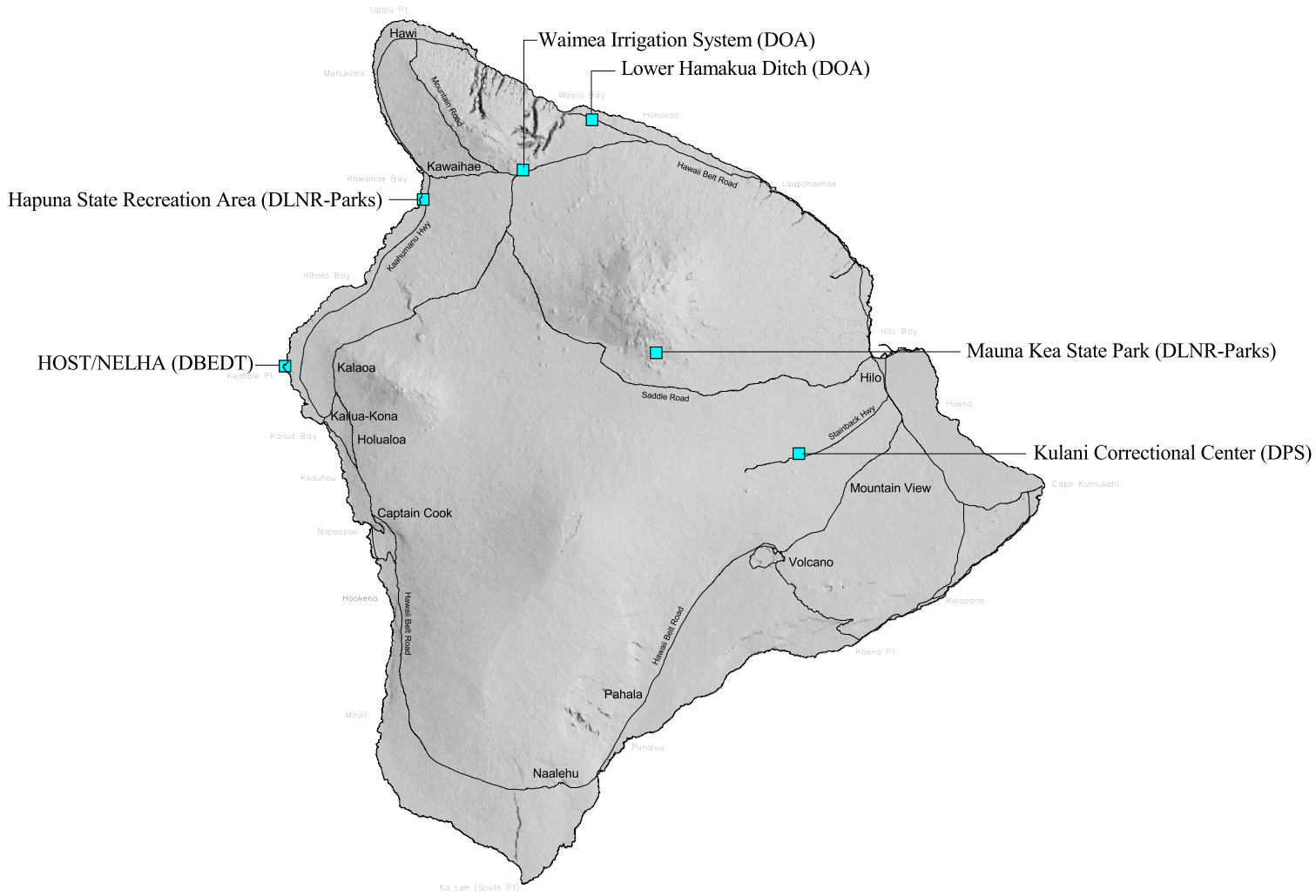

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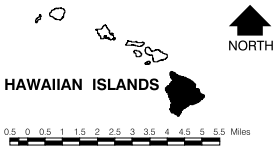

LEGEND:

- State Water Systems (State Dept.)
- Major Highways/Roads

State Water Projects Plan
EXISTING STATE WATER SYSTEMS - HAWAII
FIGURE 2.3

Date: February 2003

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2.3. WATER SYSTEMS OWNED AND/OR OPERATED BY THE STATE

An inventory of State owned and/or operated water systems were compiled as part of the SWPP data survey. Department of Health, "Sanitary Survey Forms" for public water systems were referenced for system information. CWRM "Registration of Stream Diversion Works and Declaration of Water Use" were also used as system information references. Water System field operators were contacted to obtain and verify current system data.

The objectives of the State water system inventory was to provide:

1) A comprehensive list of State water systems;

2) Description of water system components and service areas including: source, storage, booster, pump, distribution, service connections, service area, primary water use, existing consumption and future water demand, schematic diagram for each water system and GIS mapping;

3) Identify water system, which contain surplus source capacity. Surplus source capacity was determined by comparing water source capacity (groundwater wells, catchment systems and/or stream diversions) against existing average day and maximum day consumption;

4) Determine whether water systems with surplus capacity could accommodate future State project water demands.

2.3.1. Evaluation Of Water System Source Capacity

Water system sources range from single source (groundwater well, stream diversion) to multiple combination of sources. A standardized approach to evaluate water system source capacity was based on the following methodology:

1) Identify water system source and source capacity;

2) If a system is supplied by a groundwater well, the pump capacity of the well was used;

3) If a system is supplied by a stream diversion, the design capacity of the diversion was used, if the diversion capacity information was available;

4) Systems served by stream diversions and wells, the combined source capacity of the diversion and well was used;

5) If the stream diversion design capacity was not known, the intake capacity into the reservoir was used. (Note: Design stream diversion capacity was not available on many stream diversions. Stream diversion flows are rarely measured in the field.)

For water systems supplied by stream diversions with no information concerning the stream diversion capacity, the evaluation of source capacity adequacy could not be performed.

The following procedure documents the criteria and methods used to determine the existing average and maximum day consumption, source capacity and water system surplus source capacity.

2.3.1.1. Determine the Existing Average Day and Maximum Day Consumption

Existing metered consumption records were obtained from State agencies. An estimation of water consumption was performed for water systems, which do not meter existing consumption. Water System Standard Domestic Consumption Guidelines average daily demand unit rates and land use type units/areas along with other unit rates provided by State departments were used to calculate estimated water demands. The maximum day demand was then calculated by multiplying the average day demand by a demand factor of 1.5. Primary use of the water was also identified.

2.3.1.2. Determine the Source Capacity

1) For water systems served by a single groundwater well, the safe source capacity was based on a well pump operating time of 16 hours a day, allowing for 8 hours of down time per average day. The safe source capacity is calculated by multiplying the well capacity by a factor of 16 hours/24 hours/day.

2) For water systems served by a single stream diversion, the source capacity was based on the design stream diversion capacity, if available.

3) For water systems served by multiple groundwater wells, the cumulative safe source capacity was based on the cumulative well capacities, well pump operating time of 16 hours a day with the largest well pump on stand-by.

4) For water systems served by multiple stream diversions, the source capacity was based on the cumulative design stream diversion capacities, if available.

5) For water systems served by both multiple groundwater wells and stream diversions, the cumulative safe source capacity was based on the cumulative well capacities and design stream diversion capacities, well pump operating time of 16 hours a day with the largest well pump on stand-by.

6) If the design stream diversion capacity was not known, the average intake capacity was used as the water system source capacity.

7) For water systems supplied by stream diversions with no information concerning the stream diversion capacity, the evaluation of source capacity adequacy could not be

performed.

2.3.1.3. Determine Surplus Source Capacity

A comparison of the water system cumulative safe source capacity against existing maximum day consumption or estimation of maximum day demand was performed to evaluate source capacity adequacy. Water systems with source capacity greater than existing maximum day demand were identified as water system with surplus source capacity.

2.3.1.4. Determine Irrigation System Source and Storage Capacity

Existing State irrigation system source and storage capacities were referenced using engineering design reports and water budget computations. The design reports identify the irrigation system inflow source capacity, required storage volume, and the design irrigation area based on system demands. Water budget computations evaluate storage requirements based on the inflow and outflow of the irrigation system. The inflow into the system is based on source capacity and rainfall. Outflow from the system is based on irrigation demand requirements (crop requirements, planting schedules), system loss and evapotranspiration.

2.3.1.5. Evaluation of Future Project Water Demand

Future projects to be served by existing State water systems were identified. The future project water demand was added to the existing consumption and evaluated against the source capacity of the water system. For irrigation systems, detailed information of the irrigation requirements was not available. New water budget calculations are recommended for irrigation systems with planned expansions.

2.4. DESCRIPTION AND EVALUATION OF STATE WATER SYSTEMS

2.4.1. Department Of Agriculture Water Systems

The Department of Agriculture (DOA) owns two agricultural irrigation water systems:
Lower Hamakua Ditch System (Hawaii),
Waimea Irrigation System (Hawaii).

2.4.1.1. Lower Hamakua Ditch System

The Lower Hamakua Ditch (LHD) is located in the Hamakua District on the island of Hawaii. The system is located in the East Mauna Kea hydrological sector, and Paauilo system. The LHD is owned by the Kamehameha Schools Bishop Estate (KSBE) and other private landowners. The State Department of Agriculture has assumed the operation of the LHD under a 1993 bankruptcy settlement agreement. DOA is responsible to maintain and continue operation of the LHD to sustain agricultural water to

various farmers on former sugar cane lands, located on the Hamakua coast between Paauilo and Kukuihaele. DOA has negotiated an agreement with KSBE and private landowners to operate and control the LHD for a 35-year period. The LHD is a 25-mile ditch system consisting of unlined tunnels; open lined and unlined ditches; and flumes. Surface water from the Kohala Mountains is collected into the LHD by intake structures on the Kawainui, Alakahi, Koiawe and Waima streams. There are four existing reservoirs: Paauilo (10 MG), West 23 (3 MG), Paauhau (15 MG), Gomes (3 MG), with a combined storage capacity of 31 MG. As documented in the Watershed Plan and Draft Environmental Impact Statement, 1998, the LHD is deteriorated and remains in poor condition, causing failures and disruption of water supply. The EIS has extensively documented the improvements required to improve the consistent and efficient delivery of water. The watershed plan remains in the planning stage. The EIS has reported the LHD delivery capacity to be 40 mgd, but currently operates in the 25 to 30 mgd range. The historical low flow was estimated at 15 mgd.

Since the closing of the Hamakua Sugar Company, approximately 1,400 acres on which 600 acres are currently planted are leased by the State of Hawaii, KSBE and private landowners. The Hamakua/North Hilo Agricultural Cooperative has leased State owned lands to about 58 farmers. The farmers have initiated diversified crop production in the Paauilo, Kalopu and Honokaia areas. Diversified crops grown on State owned lands include: papaya, coffee, macadamia, vegetables, fruits and foliage plants. The agricultural activity on KSBE lands remains pasture/grazing farms. The agricultural activity of privately owned lands includes pharmaceutical herb and cattle grazing farms. The existing irrigation demand from the 600 planted acres is estimated by the United States Department of Agriculture, Natural Resources Conservation Service at 2 to 5 mgd. No metered consumption records were available. The projected farming activity served by the LHD will expand the existing planted acreage by HNHAC farmers, private farmers, farm interest groups, private landowners and ranchers. The anticipated major crops planned include: orchard crops, coffee, macadamia nut, papaya, foliage, fruits and truck crops. Extensive interviews and surveys of farm groups have indicated the existing agricultural activity will grow in 13 major sub areas on State, KSBE and privately owned lands on 10,472 acres. There are 120 potential agricultural parcels planting an estimated 129 acres of truck crops and 2,382 acres of tree crops. The projected irrigation demand for the 13 major sub areas from the LHD was not reported; however, SWPP project demand projections for DOA agricultural subdivisions totals 9.1 mgd required by the year 2010. A detailed design water budget analysis has not been performed to determine the irrigation inflow requirements, outflow from the LHD system and reservoir storage volumes required to sustain adequate supply of irrigation water. Determination of the source and storage adequacy should be postponed until detailed design calculations are performed.

2.4.1.2. Waimea Irrigation System

The Waimea Irrigation System (WIS) is located near Puukapu, in the Hamakua District on the windward coast of the island of Hawaii. The system is located in the Kohala hydrological sector and Waimanu hydrological system. The irrigation system is owned and operated by the State of Hawaii, Department of Agriculture, Agricultural Resource Management Division. The Upper Hamakua Ditch (UHD) supplies the Waimea Irrigation system. The UHD consists of a series of lined and unlined ditches, natural streams, flumes and tunnels in the Kohala Forest Reserve. The UHD receives source water from intake structures on five streams. The Kawainui stream, Kawaiki stream and Alakahi stream provide the majority of the flow into the system, while the Waimea stream, Koiawe stream and other tributaries contribute smaller flow amounts into the system. Repairs and maintenance to the UHD to improve the condition of the ditch system has commenced and will be completed in the near future. Improvements to the UHD were based on the recommendations of Report R-77, A Report on the Investigation and Evaluation of Upper Hamakua Ditch, prepared by Hilo Engineering Inc., 1986. DOA has developed two groundwater wells: Puukapu Deep Well, State Well No. 6337-01, with a pumping capacity of 1.44 mgd and Puukapu Shallow Well, State Well No. 6337-02. Puukapu Shallow well is not in service because no pump was installed. The wells are used as an emergency back up for the irrigation system.

The WIS begins at a concrete intake structure, which diverts the flow from the UHD through a 24-inch intake pipeline to the Waimea Reservoir. The Waimea Reservoir is a concrete-lined earthen dam with a design capacity of 60 MG of which only 51 MG is usable. The Waimea Reservoir is located at elevation 2,935 feet. The Waimea Reservoir provides gravity flow to the farming area. The Puu Pulehu Reservoir is another reservoir which serves the WIS. The Puu Pulehu Reservoir has increased its capacity to 110 MG and has been lined with a watertight geomembrane. The reservoir sits at an elevation of 2,830 feet. The reservoir provides overflow storage for the Waimea Reservoir and diverted upstream flow. The reservoir is used to supply a portion of the WIS. The transmission system from the Waimea Reservoir to the farm lot areas consists of two miles of 24-inch diameter ductile iron pipeline and another two miles of 18-inch diameter ductile iron pipeline. The distribution system within the service area includes pipelines varying between 8-inches to 18-inches. The WIS currently serves 73 farmers on 478 acres in three defined sections: the Lalamilo section serves 34 farmers on 278 acres; Puukapu section serves 15 farmers on 99 acres; DHHL section serves 24 farmers on 101 acres. The majority of the agricultural activity is truck crops grown year round. The crops include: Chinese cabbage, celery, head lettuce, burdock, daikon and flowers. The WIS will also support cattle ranching. The current irrigation consumption, identified by water (gallons) sold and acres served from the three defined areas are shown on Table 2.2. Proposed expansion of cropland areas served by the WIS were identified in the Final Waimea-Paauilo Watershed Plan and Environmental Impact Statement prepared by the USDA Natural Resource Conservation Service, 1997. The expanded cropland areas include: Lalamilo Agricultural Park (115 acres), DHHL Phase I and II farm lots (211 acres) and the expansion of existing Puukapu farm lots (39 acres). The Lalamilo

Agricultural Park expansion project has recently been put on hold, replaced by a new DHHL project, Puukapu Pastural Farm lots. The DHHL project irrigation demand is being used in design to replace the Lalamilo Agricultural Park demands from the WIS. In addition to these proposed projects, the DOA plans to expand the WIS service area by 365 acres. The project will require an estimated 1.825 mgd of irrigation water. The total future irrigation demand from the WIS is 3.425 mgd.

The Watershed Plan has recommended the following improvements to the WIS to alleviate the water shortage problem for WIS farmers and increase the capacity and reliability of the WIS: construct the new Kauahi Reservoir 131 MG at elevation 2,935 feet, reconstruct and enlarge the existing UHD inlet structure to accommodate the new 30-inch diameter intake pipeline to the Kauahi Reservoir, new transmission pipeline from the Kauahi Reservoir to future expansion of croplands, additional distribution pipelines in the WIS, and a new separate livestock water distribution system to serve stockwater to farm lots. Currently, these improvements are in the design stage.

The Watershed Plan conducted a simplified reservoir water budget to determine water supply from reservoirs and annual overflow into Lalakea Stream. The reservoir water budget compared the inflow from the UHD and rainfall into WIS reservoirs verses the outflow from irrigation, livestock demands and evaporation from the reservoir areas. The inflow into reservoirs was estimated at 1890 million gallons annually based on measured flows and rainfall volumes. Outflow from reservoirs was estimated at 1545 million gallons annually based on irrigation demand, livestock demand and evaporation volumes. The report concluded there are adequate source and storage volumes to meet the projected irrigation demands of the WIS. The average annual overflow to Lalakea Stream was estimated to be 863 million gallons per year. The report also concluded a combination of a low initial storage volume with months of low UHD flow could exhaust the water supply stored in the reservoirs. DOA has reported a 4.0 mgd irrigation demand to support the Waimea/Paauilo Watershed project in the year 2010. A new water budget calculation is recommended to determine source and storage adequacy based on the proposed WIS expansions.

Table 2.2
State Irrigation Systems

	Waimea Irrigation System							
	Lalamilo Section		**Puukapu Section**		**DHHL Section**		**Total**	
Fiscal Year	**Water Sold (MG)/ (mgd)**	**Acreage Served (Acres)**	**Water Sold (MG)/ (mgd)**	**Acreage Served (Acres)**	**Water Sold (MG)/ (mgd)**	**Acreage Served (Acres)**	**Water Sold (MG)/ (mgd)**	**Acreage Served (Acres)**
94-95	374.10/ 1.02	280	29.42/ 0.08	128	13.56/ 0.04	97	417.07/ 1.14	505
95-96	376.72/ 1.03	280	39.58/ 0.11	128	15.84/ 0.04	106	432.14/ 1.18	514
96-97	349.19/ 0.96	280	41.33/ 0.11	129	14.41/ 0.04	106	404.92/ 1.11	515
97-98	336.29/ 0.92	282	32.65/ 0.09	129	12.66/ 0.03	102	381.60/ 1.05	513

2.4.2. Department Of Business And Economic Development

There is one water system under the Department of Business Economic Development & Tourism (DBEDT):

Natural Energy Laboratory of Hawaii Authority (NELHA) Water System (Hawaii)

2.4.2.1. NELHA Water System

The NELHA water system is located in Keahole, Hawaii. The water system is owned and operated by the State of Hawaii, NELHA. The system is located in the Hualalai hydrological sector, and Keauhou system. The water system serves the Natural Energy Laboratory of Hawaii and the Hawaii Ocean, Science and Technology Park (HOST). The NELHA water system is supplied by the County of Hawaii, Department of Water (DWS) North Kona water system. A six-inch DWS meter records the NELHA consumption. From the water meter, the water system consisting of 4-inch to 8-inch water lines within the NELHA property is considered the State water system. There are 26 tenants and the NELHA within the development. Existing consumption has steadily increased in the 1990's and the current consumption for 1998 was 0.516 mgd. The existing use is primarily diversified agriculture with a small percentage of industrial, park/open space and landscaping. The future water demand from the NELHA development is projected to be 1.084 mgd for the year 2018. Discussion between NELHA, County of Hawaii DWS and DLNR concerning county water system capacity and NELHA water allocation are on going. Evaluation of surplus source capacity for the NELHA water system should be conducted as part of the future update of the Hawaii County Water Use and Development Plan.

2.4.3. Department Of Land and Natural Resources

The Department of Land and Natural Resources owns two water systems:

Hapuna State Recreation Area Water System
Mauna Kea State Park Water System

2.4.3.1. Hapuna State Recreation Area Water System

The Hapuna State Recreation Area is located 2.3 miles South of Kawaihae, on Queen Kaahumanu Highway on the island of Hawaii. The system is located in the West Mauna Kea hydrological sector, and Waimea system. The water system is owned and operated by the State of Hawaii and managed by the DLNR-State Parks. The water system supplies irrigation service only. The potable demand for Hapuna State Park facilities are provided by the County of Hawaii, DWS. The nonpotable source is a groundwater well State well number 5948-01, with a pump capacity of 0.50 mgd. The safe source capacity is 0.33 mgd. The nonpotable water is stored in a reservoir next to the well pump at elevation 244 ft and fed into an irrigation system. The estimated existing irrigation

demand for the park is 0.028 mgd. Future irrigation for the park was not reported. The Hapuna State Park nonpotable groundwater source is adequate to meet current irrigation consumption. A second nonpotable well is planned. A potable well is planned to supplement County water supply to the park.

2.4.3.2. Mauna Kea State Park Water System

The Mauna Kea State Park water system is located on the southwestern side of Mauna Kea on Saddle Road on the island of Hawaii. The system is located in the West Mauna Kea hydrological sector, and Waimea system. The water system is owned by DLNR-State Parks. By agreement with the U.S. Army Pohakuloa Training Area (PTA), the water system sources and transmission lines are maintained by PTA in exchange for water use. The Mauna Kea water system is DOH public water system 143. The source for the water system includes five springs; Upper Hopukani Spring, Hopukani Spring, Waihu Spring, Liloe Spring and unnamed spring. The estimated source capacity from the five springs is 0.00125 mgd. The spring water is gravity fed through two above ground 2-inch galvanized pipelines into three steel storage reservoirs. The water is filtered and disinfected with sodium hypochlorite. The water system serves approximately 25 people and has 13 service connections including the Mauna Kea State Park and Pohakuloa Training Area. The estimated park demand is 0.015 mgd. The estimated water average day demand from the PTA is 0.030 mgd, with a peak demand during training periods of 0.080 mgd. The Mauna Kea State Park water system does not have adequate source capacity to meet the existing consumption. Future water demands for the park were not reported

2.4.4. Department of Public Safety

The Department of Public Safety (DPS) owns and operates one existing water system:

Kulani Correctional Center Water System

2.4.4.1. Kulani Correctional Center Water System

The Kulani Correctional Center water system is located in Kulani, Hawaii off Stainback Hwy. The system is located in the Northeast Mauna Loa hydrological sector, and Keaau system. The Kulani Correctional Center water system is owned and operated by the State of Hawaii, Department of Public Safety. The water system is classified as DOH public water system number 153. The water source is a rubber lined sloped catchment area with a design capacity of 0.024 mgd, approximately 5 acres, which collects rainwater into an open rubber lined 5.0 MG reservoir. A cutoff ditch and retaining wall protects the catchment from surface drainage and forest wildlife. The rainwater is treated by a Key-Tech HDF-100 package treatment plant with a design plant capacity of 0.14 mgd. The treatment process is completely automatic, on-off, non-modulating gravity flow operation, based on hydraulic mass mixing, coagulation reaction and rapid filtration through an inverted sand anthrafilt bed. The water is injected with three separate

chemical solutions at the inlet to the reaction chamber: aluminum sulfate, Poly E-Z and hypochlorite. The filtered water is pumped into a 0.36 MG storage steel tank. The water is then conveyed through a 12-inch and 8-inch distribution system. The water system serves the main camp facility which includes: dormitories, administration building, kitchen, mess hall, laundry boiler, saw mill, garage, gym, lumber shed, woodwork shop, program building and craft display. The current inmate population is 217 and there is a full-time staff of 85. The water consumption is not metered. The estimated consumption based on 217 inmate population using 150 gallons per day and 85 staff using 50 gallons per day is 0.037 mgd. The estimated maximum day demand is 0.06 mgd. The water treatment plant design capacity is adequate to meet the estimated average day and maximum day consumption.

2.5. STATE WATER SYSTEMS WITH SURPLUS CAPACITY

Based on the evaluation of source capacity and existing maximum day consumption, a summary of State water systems with surplus source capacity is presented in **Table 2.3**. Existing State irrigation systems with major planned expansions should conduct design reports and water balance calculations to reevaluate system source and storage capacities. State Parks water systems supplied by surface water were not evaluated for surplus source capacity because source capacity could not be determined. The stream flows supplying the State Parks systems are not gauged or measured.

Table 2.3
State Water Systems with Surplus Capacity

Water System Name	State Agency	Surplus Source Capacity (Excess Source Capacity in mgd)	Future Ave. Day Demand (mgd)
Lower Hamakua Ditch	DOA	a[2]	9.05
Waimea Irrigation System	DOA	a[2]	7.425
Hapuna SRA	DLNR	Yes (0.30)	0.000
Mauna Kea SP	DLNR	No	0.000
Kulani Correctional Center	DPS	Yes (0.08)	0.000

a[1] Stream flow not gauged, unable to determine source capacity adequacy.
a[2] Updated water budget recommended. Water budget to determine source capacity adequacy.
a[3] Source obtained from County Water Department, source analysis to be performed in WUDP/OWMP.

CHAPTER 3
PROPOSED WATER-RELATED STATE PROJECTS

3.1. GENERAL

The State of Hawaii, in its effort to satisfy the many needs of the public, has numerous projects scheduled for implementation by the various State departments. In order to anticipate the future water requirements of proposed State projects, an inventory of State projects requiring water was compiled. State departments were contacted for their proposed project listings and schedules. The collected data was reviewed and sorted to obtain a listing of future projects. The project data was used as the basis for water resource planning, water system improvements and source development. In general, projects involving new housing developments, agriculture/irrigation projects, major facilities or major expansions were considered as having significant impact on water resources.

3.2. EVALUATION AND METHODOLOGY OF SWPP WATER DEMAND

3.2.1. Evaluation of SWPP Project Information

The status of State projects and water requirement information submitted for the SWPP varied from the planning stage, engineering stage to the final design stage. Project information in the planning stage remained conceptual and schematic, with water demand units or areas grossly estimated. Project information in the engineering stage was based on the project design. Project information in the final design stage had water demand requirements based on construction documents, typically plumbing fixture units, and known units or areas.

Project information received through the SWPP survey forms were reviewed for completeness and accuracy. Generally, project water demand calculations were made to conform to Water System Standards domestic consumption guidelines (refer to **Table 3.1**) to determine average day water demands. The use of standard guidelines to compute water demands allows consistency of projected water demands among all State departments and other components of the Hawaii Water Plan.

However, some State projects specified primary water uses not classified by Water System Standards. Project water demands were calculated using unit rates from other reference sources such as: DOH Wastewater Standards, American Society of Heating and Refrigeration and Air Condition, engineering studies and historical consumption records. These unit rates are shown on **Table 3.2**.

Table 3.1
Domestic Consumption Guideline
Average Daily Demand*

Zone	Hawaii	Kauai	Maui	Oahu
RESIDENTIAL:				
Single Family or Duplex	400 gal/unit	500 gal/unit	600 gal/unit or 3000 gal/acre	500 gal/unit or 2500 gal/acre
Multi-Family Low Rise	400 gal/unit	350 gal/unit	560 gal/unit or 5000 gal/acre	400 gal/unit or 4000 gal/acre
Multi-Family High Rise	400 gal/unit	350 gal/unit	560 gal/unit	300 gal/unit
COMMERCIAL:	3000 gal/acre	3000 gal/acre	6000 gal/acre	3000 gal/acre
Commercial/Industry Mix	--	500 gal/acre	140 gal/1000 sq. ft.	100 gal/ 1000 sq. ft.
Commercial/Residential Mix	--	3000 gal/acre	140 gal/1000 sq. ft.	120 gal/1000 sq. ft.
RESORT (To include hotel for Maui only):	400 gal/unit	350 gal/unit	350 gal/unit or 17000 gal/acre	350 gal/unit or 4000 gal/acre
LIGHT INDUSTRY:	4000 gal/acre	4000 gal/acre	6000 gal/acre	4000 gal/acre
SCHOOLS, PARKS:	4000 gal/acre or 60 gal/student	2500 gal/acre plus 20 gal/student	1700 gal/acre or 60 gal/student	4000 gal/acre or 60 gal/student
HOSPITAL:			1800 gal/acre	
AGRICULTURAL:			5000 gal/acre	

*Where two or more figures are listed for the same zoning, the daily demand resulting in higher consumption use shall govern the design unless specified otherwise.

Note: Table 3.1 is taken from Table 15, Domestic Consumption Guideline Average Daily Demand, Water System Standards, State of Hawaii, 1985, Volume I.

Table 3.2
Department Specific Unit Rates

State Department	Zone	Primary Use	Consumption Guideline Average Daily Demand	Remarks	Source
DOA	Agriculture	Nonpotable Irrigation	5000 gals/acre	Planning Level	DOA
DOE	New Cafeteria	Potable	3 gals/meal	Design Level	American Society of Heating, Refrigeration, and Air Conditioning
	New Gymnasium	Potable	20 gals/student	Planning Level Assumed 200 students	DOE
DLNR-BOATING	Harbor Ships/Piers	Potable	50 gals/boat	Non-Live In	DLNR-Boating
			250 gals/boat	Live In	DLNR-Boating
DLNR-PARKS	Parks-Restroom Facility	Potable or Nonpotable	5 gals/park user	w/out showers Assumed 1000 park users/day	DOH
			10 gals/park user	w/ showers Assumed 1000 park users/day	DOH
DPS	Correctional Facility	Potable	150 gals/inmate	Planning Level	DPS
DOT-HIGHWAYS	Landscaping	Nonpotable Irrigation	6000 – 12000 gals/acre	Range for Temporary Irrigation	DOT-Highways
			8000 gals/acre	Temp. Irrig. Average	DOT-Highways
			2000 gals/acre	Permanent	DOT-Highways

3.2.2. Project Water Demand Calculation Methodology

SWPP project water demands were calculated using the following methodology:

1) Demands for projects that conform to the Water System Standards Land Use Types were based on project units or areas, then multiplied by the standard unit rates to determine the average day demand. Examples include: *New School*, used projected student enrollment multiplied by 60 gals/student (depending on island); *Residential Housing* on Oahu, used number of residential units multiplied by 500 gals/unit.

2) Other references and assumptions to determine unit rates and method of demand calculations were used for projects that do not conform to Water System Standard Land Use Types, as discussed below.

3.2.2.1. Non-Standard Guidelines and Methods

The following guidelines and methods were used to calculate and verify SWPP project average day demands for projects with land use types not specified in Water System Standards:

1) Agricultural Parks/Subdivisions: Use agricultural irrigation area, and then multiply by 5,000 gal/acre to determine irrigation demand.

2) DOE-New Classrooms at Existing School for Projected Increase in Student Enrollment: Determine the projected increased student enrollment or proposed number of new classrooms. If water demand based on the number of classrooms, multiply classrooms by 30 students per classroom. If water demand based on increased students, multiply projected number of students by 60 gal/student to determine potable demand.

3) DOE-New Administration Building/Library/Renovation to Classroom at Existing School: Determine the floor area, and then multiply by Water System Standard Commercial/Industrial Mix unit rate to determine the potable demand.

4) DOE-New Cafeteria at Existing School: Determine the total enrollment of students, and then multiply by 3 gal/student to determine potable demand.

5) DOE-New Gymnasium at Existing School: Determine number of students using gymnasium per day, assume fall sports season = 200 students, multiply by 20 gal/student to determine the potable demand.

6) Expansion of Correctional Facility: Determine the number of additional inmates, and then multiply by 150 gal/inmate to determine potable demand.

7) Harbor/Boat Slips and Piers: Determine number of boats, and then multiply by 50

gal/boat (non-live in situation) or 250 gal/boat (live in situation) to determine the potable demand.

8) Highway Landscaping: Determine the landscaped highway area, and then multiply by 8,000 gal/acre for temporary landscaping demand. The temporary landscaping period lasts for the first two years of project. Use a reduced unit rate of 2,000 gal/acre for the permanent landscaping demand.

9) New State Building: Determine building floor area based on number of floors in building and use Water System Standard, Commercial/Industrial Mix unit rate to determine the potable demand. Landscaping demand was determined using landscape area multiplied by Water System Standard, Parks unit rate.

10) Renovation to State Building/Facility: Determine renovated floor area, and then multiply by Water System Standard Commercial/Industrial Mix unit rate to determine the potable demand.

11) Restroom/Park Facility: Determine the projected number of park users, if park projection not available, assume 1,000 park users/day, multiply by 5 gal/park user (facility without showers) or 10 gal/park user (facility with showers) to determine park demand.

3.3. SWPP PROJECT WATER DEMAND

3.3.1. SWPP Project Water Demands for the Island of Hawaii

The individual State projects and water demands located on the island of Hawaii are listed in tabular form separated by Department in **Appendix B,** by Island in **Appendix C** and by Aquifer Sector/System in **Appendix D**.

SWPP project data was updated by DLNR in September 2002 through coordination of each State department. Project water demands were revised based department input and current project status. SWPP project data will be updated every two years by DLNR.

The total project water demands were sorted and summarized to report the yearly cumulative average day demands throughout the 20-year planning period. **Table 3.3** reports the projected water demand for SWPP projects by State department. **Table 3.4** summarizes the sustainable yields, permitted water use (if applicable) and SWPP projected 2020 demands for each aquifer sector and system. The table provides an overview of future State water requirements in relation with current permitted water use and available sustainable yields. **Figure 3.1** shows the map of the island of Hawaii hydrological sectors and aquifer systems.

Table 3.3
Total Projected Demands on the Island of Hawaii by State Department

	Total Additional Yearly Projected Cumulative Average Day Demand (mgd)							
Department	**2001**	**2002**	**2003**	**2004**	**2005**	**2010**	**2015**	**2020**
DAGS	0.016	0.016	0.018	0.018	0.018	0.122	0.122	0.130
DOA	1.825	1.825	1.825	1.825	1.825	14.875	14.875	14.875
DBEDT	0.700	1.000	1.300	1.500	1.600	2.500	3.100	4.320
DOD	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001
DOE	0.134	0.152	0.449	0.450	0.450	0.452	0.452	0.452
DHHL	0.238	0.238	0.238	0.238	0.238	4.618	6.038	6.038
DOH	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
DHS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Judiciary	0.000	0.000	0.008	0.008	0.008	0.008	0.008	0.008
DLNR	0.089	0.158	0.245	0.286	0.288	0.995	0.996	0.998
DPS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
DOT	0.158	0.236	0.533	0.605	0.740	0.604	0.718	0.764
UH	0.393	2.853	2.867	2.920	2.960	3.129	3.199	3.269
Hawaii	**3.553**	**6.477**	**7.484**	**7.852**	**8.128**	**27.304**	**29.509**	**30.855**
State Totals	**12.194**	**18.089**	**25.221**	**26.586**	**33.204**	**69.421**	**76.554**	**80.874**

Table 3.4
Summary of SWPP Projected Water Demands, Sustainable Yield, and Permitted Water Use by Aquifer System

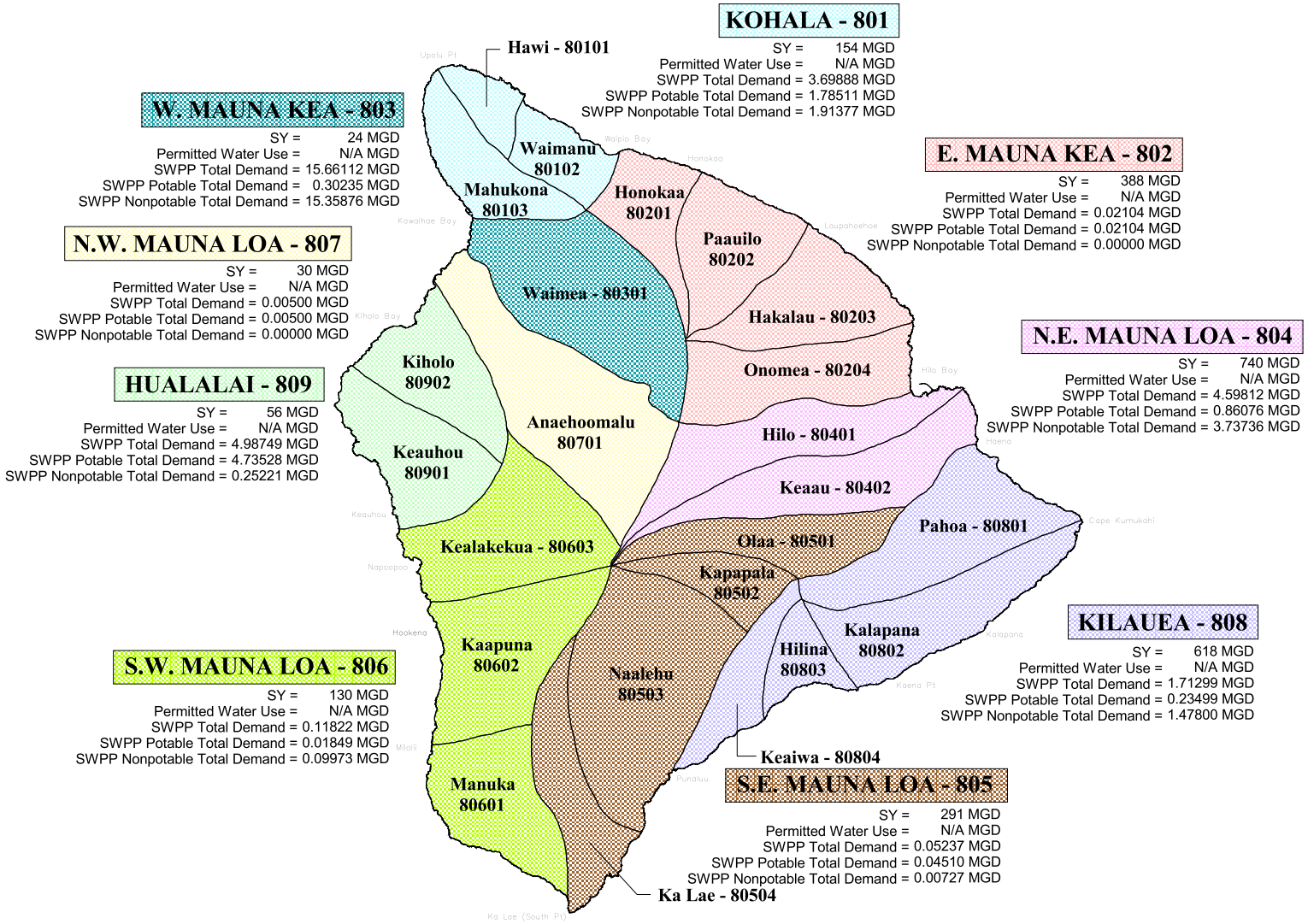
Island	Aquifer Sector	Sector No.	Aquifer System	System No.	Sus. Yield (MGD)	Permitted Water Use (MGD)	SWPP 2018 Nonpotable Demand (MGD)	SWPP 2018 Potable Demand (MGD)	SWPP 2018 Total Demand (MGD)
HAWAII	**KOHALA**	**801**			**154**	**N/A**	**1.91377**	**1.78511**	**3.69888**
			HAWI	80101	27		0.00073	0.00057	0.00130
			WAIMANU	80102	110		1.82500	0.00000	1.82500
			MAHUKONA	80103	17		0.08804	1.78454	1.87258
	EAST MAUNA KEA	**802**			**388**	**N/A**	**0.00000**	**0.02104**	**0.02104**
			HONOKAA	80201	31		0.00000	0.00881	0.00881
			PAAUILO	80202	60		0.00000	0.00500	0.00500
			HAKALAU	80203	150		0.00000	0.00043	0.00043
			ONOMEA	80204	147		0.00000	0.00680	0.00680
	WEST MAUNA KEA	**803**			**24**	**N/A**	**15.35876**	**0.30235**	**15.66112**
			WAIMEA	80301	24		15.35876	0.30235	15.66112
	N.E. MAUNA LOA	**804**			**740**	**N/A**	**3.73736**	**0.86076**	**4.59812**
			HILO	80401	347		2.63736	0.80976	3.44712
			KEAAU	80402	393		1.10000	0.05100	1.15100
	S.E. MAUNA LOA	**805**			**291**	**N/A**	**0.00727**	**0.04510**	**0.05237**
			OLAA	80501	124		0.00000	0.00285	0.00285
			KAPAPALA	80502	19		0.00000	0.00000	0.00000
			NAALEHU	80503	117		0.00727	0.01225	0.01952
			KALAE	80504	31		0.00000	0.03000	0.03000

NOTE: Permitted Water Use as of September 2000.

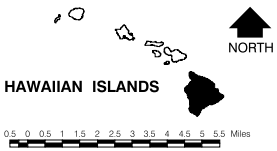
Table 3.4 (cont'd)
Summary of SWPP Projected Water Demands, Sustainable Yield, and Permitted Water Use by Aquifer System

Island	Aquifer Sector	Sector No.	Aquifer System	System No.	Sus. Yield (MGD)	Permitted Water Use (MGD)	SWPP 2018 Nonpotable Demand (MGD)	SWPP 2018 Potable Demand (MGD)	SWPP 2018 Total Demand (MGD)
HAWAII	**S.W. MAUNA LOA**	**806**			**130**	**N/A**	**0.09973**	**0.01849**	**0.11822**
			MANUKA	80601	42		0.00000	0.00000	0.00000
			KAAPUNA	80602	50		0.07973	0.00405	0.08378
			KEALAKEKUA	80603	38		0.02000	0.01444	0.03444
	N.W. MAUNA LOA	**807**			**30**	**N/A**	**0.00000**	**0.00500**	**0.00500**
			ANAEHOOMALU	80701	30		0.00000	0.00500	0.00500
	KILAUEA	**808**			**618**	**N/A**	**1.47800**	**0.23499**	**1.71299**
			PAHOA	80801	435		1.47000	0.21606	1.68606
			KALAPANA	80802	157		0.00000	0.00000	0.00000
			HILINA	80803	9		0.00000	0.00000	0.00000
			KEAIWA	80804	17		0.01893	0.00800	0.02693
	HUALALAI	**809**			**56**	**N/A**	**0.25221**	**4.73528**	**4.98749**
			KEAUHOU	80901	38		0.25221	4.73528	4.98749
			KIHOLO	80902	18		0.00000	0.00000	0.00000

NOTE: Permitted Water Use as of September 2000.



Dept. of Land and Natural Resources
Land Division
Engineering Branch
Commission on Water Resource Management



LEGEND:

KOHALA - 801	Hydrological Sector - No.
Hawi - 80101	Aquifer System - No.

State Water Projects Plan
HYDROLOGIC UNITS - HAWAII
FIGURE 3.1

Date: February 2003

FUKUNAGA & ASSOCIATES, INC.
Consulting Engineers
1388 Kapiolani Boulevard
Honolulu, Hawaii 96814

3.3.2. Issues, Concerns and Uncertainties Related to Project Demands

The issues, concerns and uncertainties raised in this section are based on discussions with departmental contacts, evaluation of SWPP survey data and calculation of SWPP project water demands. The comments and recommendations are provided for discussion purposes only and suggest ways of improving the gathering of more accurate SWPP data in the future.

1) Improve the project coordination among the various divisions and branches within departments. Recommend maintaining an updated list and information of all future department projects.

2) Establish a uniform method of calculating projected water demand by using standard land use types of units and areas, unit rates based on either Water System Standards or other accepted references. Establish uniform consumption guidelines for State departments to follow while projecting future water demand and reviewing submitted project demands. Generally, project water demands computed from Water System Standards represent planning level demands. Project demands should be reevaluated or calculated when additional or design information becomes available.

3) Water demand information of projects that do not receive funding or encounter funding delays by the legislature should be maintained and kept current. Projects in the initial planning phase generally have limited data to compute project water demands.

4) Modifications or changes to CIP projects brought on by funding issues, project priority status, or departmental policies may affect the completion and water requirements of State projects.

5) Establish a uniform method of calculating project average day demand based on plumbing fixture units. Establish uniform guidelines or range of demands to convert project water demands from gallons per minute to gallon per day for various land uses. A comparison of the actual metered water consumption and estimated demand projection upon project completion is recommended.

4.1. WATER DEVELOPMENT STRATEGY – ISLAND OF HAWAII

The source options were assigned to each SWPP project on the island of Hawaii as described in the SWPP Water Development Strategy. Each SWPP project was categorized into a SWPP Water Development Strategy option, detailed in **Table 4.1**. The objective of the strategy was to determine projects with source and water system options to supply project water needs and identify SWPP projects without source and water system options. SWPP projects without source or system options were classified as "remain or unmet project demand". The unmet project demand is the basis for future planning and development of source and water system improvements.

4.2. SWPP PROJECT DEMAND OVERVIEW

The remaining balance of unmet project demand for the island of Hawaii is shown on **Table 4.2**. A graph of the remaining potable and nonpotable water demands is shown on **Figure 4.1**. The SWPP Water Development Strategy accounts for nearly 71% of the total island of Hawaii SWPP project demand. Strategy options supplying the majority of the projected demand include: existing State water systems, private water agreements and planned State wells. The remaining unmet project demand consists of a large number of smaller State projects involving renovations, additions and improvements to existing State facilities. However, within the remaining unmet project demands are State projects with projected demands large enough that alternative source and water service options should be considered. The projects and their primary water use types are (DHHL) Kawaihae Master Plan in the Kohala sector requiring potable water, (DHHL) Makuu Farm Lots in the Kilauea sector requiring nonpotable water and the (DHHL) Panaewa Farm Lots in the North East Mauna Loa sector requiring nonpotable water. The remaining project demand balance (less the above mentioned projects) should not significantly impact County water systems. A list of SWPP projects with significant demand requirements (>0.10 mgd) was compiled to identify those projects with the greatest potential to impact existing water system components and require system improvements. These projects are shown on **Table 4.3**. Strategy source options have been identified for the majority of State projects on the Island of Hawaii. Water system improvements and source development appears to be limited to specific SWPP projects.

TABLE 4.1

SWPP UPDATE - HAWAII WATER DEVELOPMENT STRATEGY

				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)									
				SHORT-TERM						LONG-TERM			
DEPT	SWPP PROJECT NAME	PRIMARY USE	SECTOR	02001	02002	02003	02004	02005	02010	02015	02020	STRATEGY OPTION	SYSTEM OR SOURCE
	ISLAND OF HAWAII			**3.55252**	**6.47739**	**7.48383**	**7.85153**	**8.12827**	**27.30448**	**29.50916**	**30.85522**	**SWPP Total Project Demand for Island of Hawaii**	
	SWPP Projects Within Existing State Water Systems (#1)												
DOA	FUTURE SUBDIVISION IN HONOKAA	NONPOTABLE	WEST MAUNA KEA						7.00000	7.00000	7.00000	EXSWS-LOWER HAMAKUA DITCH	STATE
DOA	FUTURE SUBDIVISION IN PAAUILO	NONPOTABLE	WEST MAUNA KEA						1.25000	1.25000	1.25000	EXSWS-LOWER HAMAKUA DITCH	STATE
DOA	FUTURE SUBDIVISION IN WAIMEA	NONPOTABLE	WEST MAUNA KEA						0.80000	0.80000	0.80000	EXSWS-LOWER HAMAKUA DITCH	STATE
DOA	WAIMEA IRRIGATION SYSTEM	NONPOTABLE	KOHALA	1.82500	1.82500	1.82500	1.82500	1.82500	1.82500	1.82500	1.82500	EXSWS-WAIMEA IRRIGATION SYSTEM	STATE
DHHL	PUUKAPU - FARM LOTS UNITS 2, 2A (IRRIG)	NONPOTABLE	WEST MAUNA KEA						1.60000	1.60000	1.60000	EXSWS-WAIMEA IRRIGATION SYSTEM	COUNTY
DOA	WAIMEA/PAAUILO WATERSHED PROJECT	NONPOTABLE	WEST MAUNA KEA						4.00000	4.00000	4.00000	EXSWS-WAIMEA IRRIGATION SYSTEM	COUNTY
				1.82500	**1.82500**	**1.82500**	**1.82500**	**1.82500**	**16.47500**	**16.47500**	**16.47500**	**Subtotal SWPP Projects Within Existing State Water Systems (#1)**	
	SWPP Projects Within Existing Master Plans (#2)												
HCDCH	KEALAKEHE PLANNED COMMUNITY (LA'I'OPUA)	POTABLE	HUALALAI	0.29310	0.39080	0.48850	0.58650	0.68400	0.97700	1.46550	2.46204	MASTER PLAN - NORTH KONA WATER MASTER PLAN	COUNTY
HCDCH	KEALAKEHE PLANNED COMMUNITY (LA'I'OPUA)	NONPOTABLE USING POTABLE	HUALALAI	0.00690	0.00920	0.01150	0.01350	0.01600	0.02300	0.03450	0.05796	MASTER PLAN - NORTH KONA WATER MASTER PLAN	COUNTY
DOT-AIR	KONA INTERNATIONAL AIRPORT MASTER PLAN	POTABLE	HUALALAI	0.12200	0.13200	0.14200	0.15200	0.16200	0.17200	0.20400	0.24200	MASTER PLAN - NORTH KONA WATER MASTER PLAN	COUNTY
DHHL	LAIOPUA VILLAGE 4	POTABLE	HUALALAI	0.10000	0.10000	0.10000	0.10000	0.10000	0.10000	0.10000	0.10000	MASTER PLAN - NORTH KONA WATER MASTER PLAN	COUNTY
DBEDT	NATURAL ENERGY LABORATORY OF HAWAII	POTABLE	HUALALAI	0.40000	0.60000	0.80000	0.90000	0.90000	1.50000	1.60000	1.80000	MASTER PLAN - NORTH KONA WATER MASTER PLAN	COUNTY
UH	UNIVERSITY OF HAWAII CENTER AT WEST HAWAII - EXTERIOR IMPROVEMENTS PHASE I	NONPOTABLE USING POTABLE	HUALALAI				0.03600	0.03600	0.03600	0.03600	0.03600	MASTER PLAN - NORTH KONA WATER MASTER PLAN	COUNTY
UH	UNIVERSITY OF HAWAII CENTER AT WEST HAWAII - FOOD SERVICES FACILITY	POTABLE	HUALALAI				0.00695	0.00695	0.00695	0.00695	0.00695	MASTER PLAN - NORTH KONA WATER MASTER PLAN	COUNTY
UH	UNIVERSITY OF HAWAII CENTER AT WEST HAWAII - FOOD SERVICES FACILITY	NONPOTABLE USING POTABLE	HUALALAI				0.00029	0.00029	0.00029	0.00029	0.00029	MASTER PLAN - NORTH KONA WATER MASTER PLAN	COUNTY
UH	UNIVERSITY OF HAWAII CENTER AT WEST HAWAII - LEARNING RESOURCE CENTER	POTABLE	HUALALAI				0.00978	0.00978	0.00978	0.00978	0.00978	MASTER PLAN - NORTH KONA WATER MASTER PLAN	COUNTY
UH	UNIVERSITY OF HAWAII CENTER AT WEST HAWAII - LEARNING RESOURCE CENTER	NONPOTABLE USING POTABLE	HUALALAI				0.00010	0.00010	0.00010	0.00010	0.00010	MASTER PLAN - NORTH KONA WATER MASTER PLAN	COUNTY
UH	UNIVERSITY OF HAWAII CENTER AT WEST HAWAII - OPERATIONS & MAINTENANCE PHASE I	POTABLE	HUALALAI					0.00024	0.00024	0.00024	0.00024	MASTER PLAN - NORTH KONA WATER MASTER PLAN	COUNTY
UH	UNIVERSITY OF HAWAII CENTER AT WEST HAWAII - OPERATIONS & MAINTENANCE PHASE I	NONPOTABLE USING POTABLE	HUALALAI					0.00004	0.00004	0.00004	0.00004	MASTER PLAN - NORTH KONA WATER MASTER PLAN	COUNTY
				0.92200	**1.23200**	**1.54200**	**1.80512**	**1.91540**	**2.82540**	**3.45740**	**4.71540**	**Subtotal SWPP Projects Within Existing Master Plans (#2)**	
	SWPP Projects Within Existing State or Private Sources (#3)												
	No SWPP Projects												
	SWPP Projects with County Water Department and/or Private Water Agreements (#4)												
DAGS-PM	DE SILVA ELEM ARCHITECTRL BARRIER REMOV	POTABLE	NORTH EAST MAUNA LOA	0.00743	0.00743	0.00743	0.00743	0.00743	0.00743	0.00743	0.00743	COUNTY-EXEMPT	COUNTY
				0.00743	**0.00743**	**0.00743**	**0.00743**	**0.00743**	**0.00743**	**0.00743**	**0.00743**	**Subtotal SWPP Projects with County Water Department and/or Private Water Agreements (#4)**	
	SWPP Projects with County Water Department Water Agreements - Use of Water Allocation Credits (#5)												
	No SWPP Projects												

TABLE 4.1

SWPP UPDATE - HAWAII WATER DEVELOPMENT STRATEGY

				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)									
				SHORT-TERM						LONG-TERM			
DEPT	SWPP PROJECT NAME	PRIMARY USE	SECTOR	02001	02002	02003	02004	02005	02010	02015	02020	STRATEGY OPTION	SYSTEM OR SOURCE
	ISLAND OF HAWAII			**3.55252**	**6.47739**	**7.48383**	**7.85153**	**8.12827**	**27.30448**	**29.50916**	**30.85522**	**SWPP Total Project Demand for Island of Hawaii**	
	SWPP Projects Assigned to New/Planned State Wells (#6)												
DLNR-PARKS	HAPUNA BEACH SRA	POTABLE	WEST MAUNA KEA		0.05270	0.05270	0.05270	0.05270	0.05270	0.05270	0.05270	NEWSS	STATE/COUNTY
DLNR-PARKS	HAPUNA BEACH SRA	NONPOTABLE	WEST MAUNA KEA						0.64995	0.64995	0.64995	NEWSS	STATE/COUNTY
				0.00000	**0.05270**	**0.05270**	**0.05270**	**0.05270**	**0.70265**	**0.70265**	**0.70265**	**Subtotal SWPP Projects Assigned to New/Planned State Wells (#6)**	
	SWPP Projects Within New State Water Systems (#7)												
	No SWPP Projects												
	SWPP Projects Assigned to Planned Private Sources (#8)												
	No SWPP Projects												
	Remaining Unmet SWPP Projects to be Supplied by DWS (#9)												
DAGS-PL	HILO DAGS BASEYARD	POTABLE	NORTH EAST MAUNA LOA			0.00179	0.00179	0.00179	0.00179	0.00179	0.00179	REMAIN-DAGS PL	COUNTY
DAGS-PL	HILO JUDICIARY COMPLEX	NONPOTABLE USING POTABLE	NORTH EAST MAUNA LOA						0.00682	0.00682	0.00682	REMAIN-DAGS PL	COUNTY
DAGS-PL	HILO JUDICIARY COMPLEX	POTABLE	NORTH EAST MAUNA LOA						0.01718	0.01718	0.01718	REMAIN-DAGS PL	COUNTY
DAGS-PL	KOHALA PUBLIC LIBRARY	NONPOTABLE USING POTABLE	KOHALA						0.00073	0.00073	0.00073	REMAIN-DAGS PL	COUNTY
DAGS-PL	KOHALA PUBLIC LIBRARY	POTABLE	KOHALA						0.00057	0.00057	0.00057	REMAIN-DAGS PL	COUNTY
DAGS-PL	KONA CIVIC CENTER	NONPOTABLE USING POTABLE	SOUTH WEST MAUNA LOA						0.01200	0.01200	0.02000	REMAIN-DAGS PL	COUNTY
DAGS-PL	KONA CIVIC CENTER	POTABLE	SOUTH WEST MAUNA LOA						0.00800	0.00800	0.00800	REMAIN-DAGS PL	COUNTY
DAGS-PL	NEW KONA MULTI-AGENCY MAINTENANCE FAC	POTABLE	HUALALAI	0.00083	0.00083	0.00083	0.00083	0.00083	0.00083	0.00083	0.00083	REMAIN-DAGS PL	COUNTY
DAGS-PL	WAIMEA CIVIC CENTER, STATE OFC BLDG NO.3	NONPOTABLE USING POTABLE	WEST MAUNA KEA						0.05881	0.05881	0.05881	REMAIN-DAGS PL	COUNTY
DAGS-PL	WAIMEA CIVIC CENTER, STATE OFC BLDG NO.3	POTABLE	WEST MAUNA KEA						0.00059	0.00059	0.00059	REMAIN-DAGS PL	COUNTY
DAGS-PM	HOLUALOA ELEM SCHOOL REPLACEMENT OF CAFÉ AND RELOCATION OF PORTABLE P-12	POTABLE	HUALALAI	0.00263	0.00263	0.00263	0.00263	0.00263	0.00263	0.00263	0.00263	REMAIN-DAGS PM	COUNTY
DAGS-PM	HOLUALOA ELEM SCHOOL REPLACEMENT OF FIRE-DAMAGED PORTABLE CLASSROOMS	POTABLE	HUALALAI	0.00045	0.00045	0.00045	0.00045	0.00045	0.00045	0.00045	0.00045	REMAIN-DAGS PM	COUNTY
DAGS-PM	KAHAKAI ELEM ADMIN BUILDING/LIBRARY	POTABLE	HUALALAI	0.00442	0.00442	0.00442	0.00442	0.00442	0.00442	0.00442	0.00442	REMAIN-DAGS PM	COUNTY
DHHL	HAWAII EAST SCTRD LOT	POTABLE	NORTH EAST MAUNA LOA	0.04400	0.04400	0.04400	0.04400	0.04400	0.04400	0.04400	0.04400	REMAIN-DHHL	COUNTY
DHHL	HUMUULA - PASTURE LOTS	POTABLE	NORTH EAST MAUNA LOA						0.00480	0.00480	0.00480	REMAIN-DHHL	COUNTY
DHHL	KAMAOA - PASTURE LOTS	POTABLE	SOUTH EAST MAUNA LOA						0.01000	0.01000	0.01000	REMAIN-DHHL	COUNTY
DHHL	KAMAOA - PUUEO FARM LOTS	POTABLE	SOUTH EAST MAUNA LOA							0.02000	0.02000	REMAIN-DHHL	COUNTY
DHHL	KAWAIHAE - MASTER PLAN AREA	POTABLE	KOHALA							1.40000	1.40000	REMAIN-DHHL	COUNTY
DHHL	KAWAIHAE - RESIDENCE LOTS (MAKAI)	POTABLE	KOHALA						0.00880	0.00880	0.00880	REMAIN-DHHL	COUNTY
DHHL	KAWAIHAE - RESIDENTIAL LOTS (MAUKA)	POTABLE	KOHALA						0.07800	0.07800	0.07800	REMAIN-DHHL	COUNTY
DHHL	KEAUKAHA - RESIDENCE LOTS UNIT 2	POTABLE	NORTH EAST MAUNA LOA						0.03320	0.03320	0.03320	REMAIN-DHHL	COUNTY
DHHL	LALAMILO RESIDENCE LOTS	POTABLE	WEST MAUNA KEA	0.07000	0.07000	0.07000	0.07000	0.07000	0.07000	0.07000	0.07000	REMAIN-DHHL	COUNTY
DHHL	MAKUU - FARM LOTS (2 ACRES)	POTABLE	KILAUEA						0.02000	0.02000	0.02000	REMAIN-DHHL	COUNTY
DHHL	MAKUU - FARM LOTS (2 ACRES) (IRRIG)	NONPOTABLE	KILAUEA						0.20000	0.20000	0.20000	REMAIN-DHHL	COUNTY
DHHL	MAKUU - FARM LOTS (5 ACRE)	POTABLE	KILAUEA						0.05080	0.05080	0.05080	REMAIN-DHHL	COUNTY

TABLE 4.1

SWPP UPDATE - HAWAII WATER DEVELOPMENT STRATEGY

				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)									
				SHORT-TERM						LONG-TERM			
DEPT	SWPP PROJECT NAME	PRIMARY USE	SECTOR	02001	02002	02003	02004	02005	02010	02015	02020	STRATEGY OPTION	SYSTEM OR SOURCE
	ISLAND OF HAWAII			**3.55252**	**6.47739**	**7.48383**	**7.85153**	**8.12827**	**27.30448**	**29.50916**	**30.85522**	**SWPP Total Project Demand for Island of Hawaii**	
	Remaining Unmet SWPP Projects to be Supplied by DWS (#9) CONTINUED												
DHHL	MAKUU - FARM LOTS (5 ACRE) (IRRIG)	NONPOTABLE	KILAUEA						1.27000	1.27000	1.27000	REMAIN-DHHL	COUNTY
DHHL	PANAEWA - FARM LOTS (AUWAE ST)	POTABLE	NORTH EAST MAUNA LOA						0.03000	0.03000	0.03000	REMAIN-DHHL	COUNTY
DHHL	PANAEWA - FARM LOTS (AUWAE ST) (IRRIG)	NONPOTABLE	NORTH EAST MAUNA LOA						0.64000	0.64000	0.64000	REMAIN-DHHL	COUNTY
DHHL	PANAEWA - FARM LOTS PUNA PAPAYA	POTABLE	NORTH EAST MAUNA LOA						0.01000	0.01000	0.01000	REMAIN-DHHL	COUNTY
DHHL	PANAEWA - FARM LOTS PUNA PAPAYA (IRRIG)	NONPOTABLE	NORTH EAST MAUNA LOA						0.30000	0.30000	0.30000	REMAIN-DHHL	COUNTY
DHHL	PANAEWA RESIDENCE LOTS	POTABLE	NORTH EAST MAUNA LOA	0.02400	0.02400	0.02400	0.02400	0.02400	0.02400	0.02400	0.02400	REMAIN-DHHL	COUNTY
DHHL	PUUKAPU - FARM LOTS UNITS 2, 2A	POTABLE	WEST MAUNA KEA						0.03000	0.03000	0.03000	REMAIN-DHHL	COUNTY
DHHL	PUUKAPU - PASTURE LOTS	POTABLE	WEST MAUNA KEA						0.07360	0.07360	0.07360	REMAIN-DHHL	COUNTY
DHHL	PUUKAPU - RESIDENTIAL LOTS (PUU PELEHU)	POTABLE	WEST MAUNA KEA						0.01320	0.01320	0.01320	REMAIN-DHHL	COUNTY
DHHL	WAIAKEA - RESIDENCE LOTS UNIT 2A-5	POTABLE	NORTH EAST MAUNA LOA						0.00800	0.00800	0.00800	REMAIN-DHHL	COUNTY
DLNR-BOATING	KAWAIHAE BOAT HARBOR IMPROVEMENTS	POTABLE	KOHALA	0.00140	0.00140	0.00140	0.00140	0.00140	0.00140	0.00140	0.00140	REMAIN-DLNR (BOATING)	COUNTY
DLNR-BOATING	PUAKO BOAT RAMP	POTABLE	NORTH WEST MAUNA LOA						0.00500	0.00500	0.00500	REMAIN-DLNR (BOATING)	COUNTY
JUD	NAALEHU DIST COURT AND MULTI-PURPOSE BLD	NONPOTABLE USING POTABLE	SOUTH EAST MAUNA LOA			0.00727	0.00727	0.00727	0.00727	0.00727	0.00727	REMAIN-DLNR (JUD)	COUNTY
JUD	NAALEHU DIST COURT AND MULTI-PURPOSE BLD	POTABLE	SOUTH EAST MAUNA LOA			0.00099	0.00099	0.00099	0.00099	0.00099	0.00099	REMAIN-DLNR (JUD)	COUNTY
DLNR-PARKS	KALOPA SRA	POTABLE	EAST MAUNA KEA	0.00500	0.00500	0.00500	0.00500	0.00500	0.00500	0.00500	0.00500	REMAIN-DLNR (PARKS)	COUNTY
DLNR-PARKS	KEALAKEKUA BAY SHP	NONPOTABLE USING POTABLE	SOUTH WEST MAUNA LOA	0.07936	0.07941	0.07946	0.07952	0.07957	0.07973	0.07973	0.07973	REMAIN-DLNR (PARKS)	COUNTY
DLNR-PARKS	KEALAKEKUA BAY SHP	POTABLE	SOUTH WEST MAUNA LOA	0.00080	0.00080	0.00080	0.00080	0.00080	0.00081	0.00081	0.00081	REMAIN-DLNR (PARKS)	COUNTY
DLNR-PARKS	KEKAHA KAI SP (MAHAIULA)	NONPOTABLE USING POTABLE	HUALALAI			0.03869	0.07612	0.07675	0.07738	0.07801	0.07990	REMAIN-DLNR (PARKS)	COUNTY
DLNR-PARKS	KEKAHA KAI SP (MAHAIULA)	POTABLE	HUALALAI			0.00336	0.00662	0.00667	0.00673	0.00678	0.00695	REMAIN-DLNR (PARKS)	COUNTY
DLNR-PARKS	KOHALA HISTORICAL SITES STATE MONUMENT	NONPOTABLE USING POTABLE	KOHALA	0.00097	0.00129	0.02793	0.02825	0.02857	0.05586	0.05586	0.05586	REMAIN-DLNR (PARKS)	COUNTY
DLNR-PARKS	KOHALA HISTORICAL SITES STATE MONUMENT	POTABLE	KOHALA	0.00006	0.00008	0.00178	0.00180	0.00182	0.00357	0.00357	0.00357	REMAIN-DLNR (PARKS)	COUNTY
DLNR-PARKS	LAPAKAHI SHP	NONPOTABLE USING POTABLE	KOHALA	0.00101	0.00135	0.01609	0.01643	0.01676	0.03218	0.03218	0.03218	REMAIN-DLNR (PARKS)	COUNTY
DLNR-PARKS	LAPAKAHI SHP	POTABLE	KOHALA	0.00011	0.00015	0.00179	0.00183	0.00186	0.00358	0.00358	0.00358	REMAIN-DLNR (PARKS)	COUNTY
DLNR-PARKS	OLD KONA AIRPORT SRA	NONPOTABLE USING POTABLE	HUALALAI		0.00592	0.00592	0.00592	0.00592	0.00592	0.00592	0.00592	REMAIN-DLNR (PARKS)	COUNTY
DLNR-PARKS	OLD KONA AIRPORT SRA	POTABLE	HUALALAI		0.01008	0.01008	0.01008	0.01008	0.01008	0.01008	0.01008	REMAIN-DLNR (PARKS)	COUNTY
DLNR-PARKS	WAILUKU RIVER SP (BOILING POTS)	POTABLE	EAST MAUNA KEA						0.00500	0.00500	0.00500	REMAIN-DLNR (PARKS)	COUNTY
DOD	WAIMEA READINESS CENTER	POTABLE	KOHALA			0.00115	0.00115	0.00115	0.00115	0.00115	0.00115	REMAIN-DOD	COUNTY
DOE	CHIEFESS KAPIOLANI ELEM 4-CLASSROOM BLDG	POTABLE	NORTH EAST MAUNA LOA						0.00025	0.00025	0.00025	REMAIN-DOE	COUNTY
DOE	DESILVA ELEM SCHOOL 4-CLASSROOM BUILDING	POTABLE	NORTH EAST MAUNA LOA						0.00025	0.00025	0.00025	REMAIN-DOE	COUNTY
DOE	DeSILVA ELEMENTARY NEW ADMINISTRATION	POTABLE	NORTH EAST MAUNA LOA			0.00031	0.00031	0.00031	0.00031	0.00031	0.00031	REMAIN-DOE	COUNTY
DOE	HAAHEO ELEMENTARY NEW 4 CLASSROOM	POTABLE	EAST MAUNA KEA			0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	REMAIN-DOE	COUNTY
DOE	HAAHEO ELEMENTARY NEW CAFETERIA	POTABLE	EAST MAUNA KEA						0.00060	0.00060	0.00060	REMAIN-DOE	COUNTY
DOE	HAAHEO ELEMENTARY NEW LIBRARY	POTABLE	EAST MAUNA KEA			0.00046	0.00046	0.00046	0.00046	0.00046	0.00046	REMAIN-DOE	COUNTY
DOE	HAWAIIAN PARADISE PARK ELEMENTARY SCHOOL	POTABLE	KILAUEA			0.06000	0.06000	0.06000	0.06000	0.06000	0.06000	REMAIN-DOE	COUNTY
DOE	HILO HIGH SCHOOL 4-CLASSROOM BUILDING	POTABLE	NORTH EAST MAUNA LOA			0.00720	0.00720	0.00720	0.00720	0.00720	0.00720	REMAIN-DOE	COUNTY
DOE	HILO HIGH SCHOOL NEW ADMINISTRATION	POTABLE	NORTH EAST MAUNA LOA			0.00046	0.00046	0.00046	0.00046	0.00046	0.00046	REMAIN-DOE	COUNTY

TABLE 4.1

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				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)									
				SHORT-TERM						LONG-TERM			
DEPT	SWPP PROJECT NAME	PRIMARY USE	SECTOR	02001	02002	02003	02004	02005	02010	02015	02020	STRATEGY OPTION	SYSTEM OR SOURCE
	ISLAND OF HAWAII			**3.55252**	**6.47739**	**7.48383**	**7.85153**	**8.12827**	**27.30448**	**29.50916**	**30.85522**	**SWPP Total Project Demand for Island of Hawaii**	
	Remaining Unmet SWPP Projects to be Supplied by DWS (#9) CONTINUED												
DOE	HILO HIGH SCHOOL NEW GYMNASIUM	POTABLE	NORTH EAST MAUNA LOA			0.00400	0.00400	0.00400	0.00400	0.00400	0.00400	REMAIN-DOE	COUNTY
DOE	HILO INTERMEDIATE - RENOVATE BLDG A PHASE 1 & 2 ADMIN, LIBRARY, 35 CLASSROOMS	POTABLE	NORTH EAST MAUNA LOA			0.00317	0.00317	0.00317	0.00317	0.00317	0.00317	REMAIN-DOE	COUNTY
DOE	HILO UNION NEW 6 CLASSROOM	POTABLE	NORTH EAST MAUNA LOA			0.00037	0.00037	0.00037	0.00037	0.00037	0.00037	REMAIN-DOE	COUNTY
DOE	HOLUALOA ELEM NEW LIBRARY/ADMINISTRATION	POTABLE	HUALALAI	0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	REMAIN-DOE	COUNTY
DOE	HOLUALOA ELEMENTARY NEW 6 CLASSROOM	POTABLE	HUALALAI			0.01080	0.01080	0.01080	0.01080	0.01080	0.01080	REMAIN-DOE	COUNTY
DOE	HONAUNAU ELEM NEW LIBRARY/ADMINISTRATION	POTABLE	SOUTH WEST MAUNA LOA			0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	REMAIN-DOE	COUNTY
DOE	HONAUNAU ELEMENTARY NEW CAFETERIA	POTABLE	SOUTH WEST MAUNA LOA			0.00090	0.00090	0.00090	0.00090	0.00090	0.00090	REMAIN-DOE	COUNTY
DOE	HONOKAA ELEMENTARY NEW 4 CLASSROOM	POTABLE	EAST MAUNA KEA			0.00720	0.00720	0.00720	0.00720	0.00720	0.00720	REMAIN-DOE	COUNTY
DOE	HONOKAA ELEMENTARY NEW ADMINISTRATION	POTABLE	EAST MAUNA KEA			0.00031	0.00031	0.00031	0.00031	0.00031	0.00031	REMAIN-DOE	COUNTY
DOE	HONOKAA HIGH SCHOOL NEW 15 CLASSROOM	POTABLE	EAST MAUNA KEA			0.00093	0.00093	0.00093	0.00093	0.00093	0.00093	REMAIN-DOE	COUNTY
DOE	HONOKAA HIGH SCHOOL NEW 6 CLASSROOM	POTABLE	EAST MAUNA KEA			0.00037	0.00037	0.00037	0.00037	0.00037	0.00037	REMAIN-DOE	COUNTY
DOE	HOOKENA ELEMENTARY NEW 8 CLASSROOM	POTABLE	SOUTH WEST MAUNA LOA	0.00050	0.00050	0.00050	0.00050	0.00050	0.00050	0.00050	0.00050	REMAIN-DOE	COUNTY
DOE	HOOKENA ELEMENTARY NEW ADMINISTRATION	POTABLE	SOUTH WEST MAUNA LOA			0.00031	0.00031	0.00031	0.00031	0.00031	0.00031	REMAIN-DOE	COUNTY
DOE	HOOKENA ELEMENTARY NEW LIBRARY	POTABLE	SOUTH WEST MAUNA LOA		0.00151	0.00151	0.00151	0.00151	0.00151	0.00151	0.00151	REMAIN-DOE	COUNTY
DOE	HOOKENA ELEMENTARY SCHOOL CAFETERIA	POTABLE	SOUTH WEST MAUNA LOA		0.00093	0.00093	0.00093	0.00093	0.00093	0.00093	0.00093	REMAIN-DOE	COUNTY
DOE	KALANIANIOLE ELEM 8-CLASSROOM BUILDING	POTABLE	EAST MAUNA KEA						0.00050	0.00050	0.00050	REMAIN-DOE	COUNTY
DOE	KALANIANIOLE ELEMENTARY NEW LIBRARY	POTABLE	NORTH EAST MAUNA LOA			0.00046	0.00046	0.00046	0.00046	0.00046	0.00046	REMAIN-DOE	COUNTY
DOE	KAU HIGH SCH&PAHALA ELEM SCH 10-CLSRM BLD	POTABLE	KILAUEA			0.01800	0.01800	0.01800	0.01800	0.01800	0.01800	REMAIN-DOE	COUNTY
DOE	KAU HIGH SCH&PAHALA ELEM SCH 3-CLSRM BLD	POTABLE	KILAUEA			0.00019	0.00019	0.00019	0.00019	0.00019	0.00019	REMAIN-DOE	COUNTY
DOE	KAU HIGH SCHOOL PAHALA NEW 12 CLASSROOM	POTABLE	KILAUEA			0.00074	0.00074	0.00074	0.00074	0.00074	0.00074	REMAIN-DOE	COUNTY
DOE	KAUMANA ELEMENTARY NEW 4 CLASSROOM	POTABLE	NORTH EAST MAUNA LOA			0.00720	0.00720	0.00720	0.00720	0.00720	0.00720	REMAIN-DOE	COUNTY
DOE	KEAAU HIGH SCHOOL (1ST INCREMENT)	POTABLE	NORTH EAST MAUNA LOA	0.02400	0.02400	0.02400	0.02400	0.02400	0.02400	0.02400	0.02400	REMAIN-DOE	COUNTY
DOE	KEAAU HIGH SCHOOL 2ND INCREMENT	POTABLE	KILAUEA	0.04800	0.04800	0.04800	0.04800	0.04800	0.04800	0.04800	0.04800	REMAIN-DOE	COUNTY
DOE	KEAAU HIGH SCHOOL 3RD INCREMENT	POTABLE	KILAUEA	0.01200	0.01200	0.01200	0.01200	0.01200	0.01200	0.01200	0.01200	REMAIN-DOE	COUNTY
DOE	KEAAU HIGH SCHOOL 4TH INCREMENT	POTABLE	KILAUEA	0.00960	0.00960	0.00960	0.00960	0.00960	0.00960	0.00960	0.00960	REMAIN-DOE	COUNTY
DOE	KEAAU II ELEMENTARY SCHOOL 2ND INCREMENT	POTABLE	NORTH EAST MAUNA LOA	0.02700	0.02700	0.02700	0.02700	0.02700	0.02700	0.02700	0.02700	REMAIN-DOE	COUNTY
DOE	KEAAU INTERMEDIATE NEW 8 CLASSROOM	POTABLE	KILAUEA			0.00050	0.00043	0.00043	0.00043	0.00043	0.00043	REMAIN-DOE	COUNTY
DOE	KEAAU INTERMEDIATE NEW ADMINISTRATION	POTABLE	KILAUEA			0.00043	0.00043	0.00043	0.00043	0.00043	0.00043	REMAIN-DOE	COUNTY
DOE	KEAAU INTERMEDIATE SCHOOL NEW BAND BLDG	POTABLE	KILAUEA	0.00040	0.00040	0.00040	0.00040	0.00040	0.00040	0.00040	0.00040	REMAIN-DOE	COUNTY
DOE	KEALAKEHE ELEM - PLAYFIELD/RETENTION BASIN	NONPOTABLE USING POTABLE	HUALALAI		0.01200	0.01200	0.01200	0.01200	0.01200	0.01200	0.01200	REMAIN-DOE	COUNTY
DOE	KEALAKEHE ELEM NEW LIBRARY/ADMIN	POTABLE	HUALALAI			0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	REMAIN-DOE	COUNTY
DOE	KEALAKEHE ELEMENTARY NEW 6 CLASSROOM	POTABLE	HUALALAI		0.00037	0.00037	0.00037	0.00037	0.00037	0.00037	0.00037	REMAIN-DOE	COUNTY
DOE	KEALAKEHE HIGH SCHOOL NEW 13 CLASSROOM	POTABLE	HUALALAI	0.00081	0.00081	0.00081	0.00081	0.00081	0.00081	0.00081	0.00081	REMAIN-DOE	COUNTY
DOE	KEALAKEHE II ELEM 1ST & 2ND INCRE	POTABLE	HUALALAI			0.06000	0.06000	0.06000	0.06000	0.06000	0.06000	REMAIN-DOE	COUNTY
DOE	KEALAKEHE INTER SCH NEW LIBRARY/ADMIN	POTABLE	HUALALAI	0.00102	0.00102	0.00102	0.00102	0.00102	0.00102	0.00102	0.00102	REMAIN-DOE	COUNTY
DOE	KEALAKEHE INTER SCHOOL NEW 8 CLASSROOM	POTABLE	HUALALAI			0.01440	0.01440	0.01440	0.01440	0.01440	0.01440	REMAIN-DOE	COUNTY

TABLE 4.1

SWPP UPDATE - HAWAII WATER DEVELOPMENT STRATEGY

				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)									
				SHORT-TERM						LONG-TERM			
DEPT	SWPP PROJECT NAME	PRIMARY USE	SECTOR	02001	02002	02003	02004	02005	02010	02015	02020	STRATEGY OPTION	SYSTEM OR SOURCE
	ISLAND OF HAWAII			**3.55252**	**6.47739**	**7.48383**	**7.85153**	**8.12827**	**27.30448**	**29.50916**	**30.85522**	**SWPP Total Project Demand for Island of Hawaii**	
	Remaining Unmet SWPP Projects to be Supplied by DWS (#9) CONTINUED												
DOE	KEAUKAHA ELEM NEW LIBRARY/ADMINISTRATION	POTABLE	NORTH EAST MAUNA LOA			0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	REMAIN-DOE	COUNTY
DOE	KEAUKAHA ELEMENTARY NEW CAFETERIA	POTABLE	NORTH EAST MAUNA LOA	0.00108	0.00108	0.00108	0.00108	0.00108	0.00108	0.00108	0.00108	REMAIN-DOE	COUNTY
DOE	KEONEPOKO ELEM NEW LIBRARY/ADMINISTRATN	POTABLE	KILAUEA	0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	REMAIN-DOE	COUNTY
DOE	KEONEPOKO ELEM SCHOOL NEW 4 CLASSROOM	POTABLE	KILAUEA			0.00720	0.00720	0.00720	0.00720	0.00720	0.00720	REMAIN-DOE	COUNTY
DOE	KOHALA ELEM NEW LIBRARY/ADMINISTRATION	POTABLE	KOHALA			0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	REMAIN-DOE	COUNTY
DOE	KOHALA ELEMENTARY NEW 4 CLASSROOM	POTABLE	KOHALA			0.00720	0.00720	0.00720	0.00720	0.00720	0.00720	REMAIN-DOE	COUNTY
DOE	KOHALA HIGH SCHOOL NEW 4 CLASSROOM	POTABLE	KOHALA			0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	REMAIN-DOE	COUNTY
DOE	KOHALA HIGH SCHOOL NEW AUTO/TECH SHOP	POTABLE	KOHALA			0.00041	0.00041	0.00041	0.00041	0.00041	0.00041	REMAIN-DOE	COUNTY
DOE	KOHALA HIGH SCHOOL NEW MUSIC BUILDING	POTABLE	KOHALA			0.00043	0.00043	0.00043	0.00043	0.00043	0.00043	REMAIN-DOE	COUNTY
DOE	KONAWAENA HIGH SCHOOL NEW LIBRARY	POTABLE	SOUTH WEST MAUNA LOA			0.00088	0.00088	0.00088	0.00088	0.00088	0.00088	REMAIN-DOE	COUNTY
DOE	KONAWAENA INTER - RENOVATE 12 CLASSROOMS	POTABLE	SOUTH WEST MAUNA LOA	0.00074	0.00074	0.00074	0.00074	0.00074	0.00074	0.00074	0.00074	REMAIN-DOE	COUNTY
DOE	KONAWAENA INTER SCHOOL NEW ADMINISTRATN	POTABLE	SOUTH WEST MAUNA LOA			0.00043	0.00043	0.00043	0.00043	0.00043	0.00043	REMAIN-DOE	COUNTY
DOE	KONAWAENA MID SCH, NEW PE LOCKR&SHOWR	POTABLE	SOUTH WEST MAUNA LOA				0.00120	0.00120	0.00120	0.00120	0.00120	REMAIN-DOE	COUNTY
DOE	KONAWAENA MIDDLE SCH - RENOV 17 CLASSRMS	POTABLE	SOUTH WEST MAUNA LOA		0.00153	0.00153	0.00153	0.00153	0.00153	0.00153	0.00153	REMAIN-DOE	COUNTY
DOE	LAPAHOEHOE HIGH/ELEM NEW BAND/CHORUS	POTABLE	EAST MAUNA KEA	0.00043	0.00043	0.00043	0.00043	0.00043	0.00043	0.00043	0.00043	REMAIN-DOE	COUNTY
DOE	MOUNTAIN VIEW ELEM NEW 12 CLASSROOM	POTABLE	KILAUEA			0.00074	0.00074	0.00074	0.00074	0.00074	0.00074	REMAIN-DOE	COUNTY
DOE	MOUNTAIN VIEW ELEM NEW ADMINISTRATION	POTABLE	KILAUEA			0.00031	0.00031	0.00031	0.00031	0.00031	0.00031	REMAIN-DOE	COUNTY
DOE	MOUNTAIN VIEW ELEMENTARY SCH CAFETERIA	POTABLE	SOUTH EAST MAUNA LOA	0.00285	0.00285	0.00285	0.00285	0.00285	0.00285	0.00285	0.00285	REMAIN-DOE	COUNTY
DOE	NAALEHU ELEMENTARY NEW 6 CLASSROOM	POTABLE	SOUTH EAST MAUNA LOA			0.01080	0.01080	0.01080	0.01080	0.01080	0.01080	REMAIN-DOE	COUNTY
DOE	NAALEHU ELEMENTARY NEW LIBRARY	POTABLE	SOUTH EAST MAUNA LOA			0.00046	0.00046	0.00046	0.00046	0.00046	0.00046	REMAIN-DOE	COUNTY
DOE	PAHOA ELEMENTARY NEW 10 CLASSROOM	POTABLE	KILAUEA			0.00062	0.00062	0.00062	0.00062	0.00062	0.00062	REMAIN-DOE	COUNTY
DOE	PAHOA ELEMENTARY NEW ADMINISTRATION	POTABLE	KILAUEA	0.00031	0.00031	0.00031	0.00031	0.00031	0.00031	0.00031	0.00031	REMAIN-DOE	COUNTY
DOE	PAHOA HIGH SCHOOL NEW ADMINISTRATION	POTABLE	KILAUEA			0.00046	0.00046	0.00046	0.00046	0.00046	0.00046	REMAIN-DOE	COUNTY
DOE	PAHOA HIGH SCHOOL NEW GYMNASIUM	POTABLE	KILAUEA			0.00400	0.00400	0.00400	0.00400	0.00400	0.00400	REMAIN-DOE	COUNTY
DOE	WAIAKEA ELEM NEW LIBRARY/ADMINISTRATION	POTABLE	NORTH EAST MAUNA LOA		0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	REMAIN-DOE	COUNTY
DOE	WAIAKEA INTER NEW PE LOCKER/SHOWER	POTABLE	NORTH EAST MAUNA LOA			0.00042	0.00042	0.00042	0.00042	0.00042	0.00042	REMAIN-DOE	COUNTY
DOE	WAIAKEAWAENA ELEMENTARY NEW CAFETERIA	POTABLE	NORTH EAST MAUNA LOA	0.00285	0.00285	0.00285	0.00285	0.00285	0.00285	0.00285	0.00285	REMAIN-DOE	COUNTY
DOE	WAIKOLOA ELEM SCH 3RD INCR 8 CLSRM/LIBRY	POTABLE	WEST MAUNA KEA	0.00095	0.00095	0.00095	0.00095	0.00095	0.00095	0.00095	0.00095	REMAIN-DOE	COUNTY
DOE	WAIMEA ELEMENTARY 1ST INCREMENT	POTABLE	WEST MAUNA KEA			0.03600	0.03600	0.03600	0.03600	0.03600	0.03600	REMAIN-DOE	COUNTY
DOE	WAIMEA ELEMENTARY 2ND INCREMENT	POTABLE	WEST MAUNA KEA			0.02400	0.02400	0.02400	0.02400	0.02400	0.02400	REMAIN-DOE	COUNTY
DOE	WAIMEA INTER NEW PE LOCKER/SHOWER	POTABLE	WEST MAUNA KEA			0.00042	0.00042	0.00042	0.00042	0.00042	0.00042	REMAIN-DOE	COUNTY
DOE	WAIMEA INTERMEDIATE NEW 8 CLASSROOM	POTABLE	WEST MAUNA KEA		0.00050	0.00050	0.00050	0.00050	0.00050	0.00050	0.00050	REMAIN-DOE	COUNTY
DOE	WAIMEA INTERMEDIATE NEW MUSIC BUILDING	POTABLE	WEST MAUNA KEA			0.00040	0.00040	0.00040	0.00040	0.00040	0.00040	REMAIN-DOE	COUNTY
DOT-AIR	HILO INTERNATIONAL AIRPORT MASTER PLAN	POTABLE	NORTH EAST MAUNA LOA	0.00400	0.00600	0.00800	0.01000	0.01200	0.01300	0.02000	0.02800	REMAIN-DOT AIRPORTS	COUNTY
DOT-HAR	HAWAII COMMERCIAL HARBORS 2020 MASTER PLAN: DRY BULK CARGO TERMINALS	POTABLE	KOHALA		0.01800	0.01800	0.01800	0.01800	0.01800	0.01800	0.01800	REMAIN-DOT HARBORS	COUNTY
DOT-HAR	HAWAII COMMERCIAL HARBORS 2020 MASTER PLAN: INTER-ISLAND CARGO TERMINAL	POTABLE	KOHALA						0.03300	0.06600	0.06600	REMAIN-DOT HARBORS	COUNTY

TABLE 4.1

SWPP UPDATE - HAWAII WATER DEVELOPMENT STRATEGY

				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)									
				SHORT-TERM						LONG-TERM			
DEPT	SWPP PROJECT NAME	PRIMARY USE	SECTOR	02001	02002	02003	02004	02005	02010	02015	02020	STRATEGY OPTION	SYSTEM OR SOURCE
	ISLAND OF HAWAII			**3.55252**	**6.47739**	**7.48383**	**7.85153**	**8.12827**	**27.30448**	**29.50916**	**30.85522**	**SWPP Total Project Demand for Island of Hawaii**	
	Remaining Unmet SWPP Projects to be Supplied by DWS (#9) CONTINUED												
DOT-HAR	HAWAII COMMERCIAL HARBORS 2020 MASTER PLAN: LIQUID BULK CARGO TERMINALS	POTABLE	KOHALA			0.06900	0.06900	0.06900	0.06900	0.06900	0.06900	REMAIN-DOT HARBORS	COUNTY
DOT-HAR	HAWAII COMMERCIAL HARBORS 2020 MASTER PLAN: MILITARY CARGO TERMINAL	POTABLE	KOHALA		0.04800	0.04800	0.04800	0.04800	0.04800	0.04800	0.04800	REMAIN-DOT HARBORS	COUNTY
DOT-HAR	HAWAII COMMERCIAL HARBORS 2020 MASTER PLAN: OCEAN RESEARCH STATION	POTABLE	NORTH EAST MAUNA LOA							0.01200	0.01200	REMAIN-DOT HARBORS	COUNTY
DOT-HAR	HAWAII COMMERCIAL HARBORS 2020 MASTER PLAN: OVERSEAS CONTAINER TERMINAL	POTABLE	KOHALA					0.06300	0.06300	0.06300	0.06300	REMAIN-DOT HARBORS	COUNTY
DOT-HAR	HAWAII COMMERCIAL HARBORS 2020 MASTER PLAN: OVERSEAS CONTAINER TERMINAL	POTABLE	NORTH EAST MAUNA LOA				0.06000	0.06000	0.06000	0.06000	0.06000	REMAIN-DOT HARBORS	COUNTY
DOT-HAR	HAWAII COMMERCIAL HARBORS 2020 MASTER PLAN: PASSENGER TERMINAL-HILO HARBOR	POTABLE	NORTH EAST MAUNA LOA							0.01500	0.01500	REMAIN-DOT HARBORS	COUNTY
DOT-HAR	HAWAII COMMERCIAL HARBORS 2020 MASTER PLAN: INTER-ISLAND CARGO TERMINAL	POTABLE	NORTH EAST MAUNA LOA					0.06000	0.06000	0.06000	0.06000	REMAIN-DOT HARBORS	COUNTY
DOT-HAR	HAWAII COMMERCIAL HARBORS 2020 MASTER PLAN: PASSENGER TERMINAL-KAWAIHAE HARBOR	POTABLE	KOHALA							0.01500	0.01500	REMAIN-DOT HARBORS	COUNTY
DOT-HWY	MAMALAHOA HWY, EMERGENCY REPLACE.OF PAAUAU STR.BRIDGE, REALIGN.OF KAMANI ST., ETC.	NONPOTABLE USING POTABLE	KILAUEA	0.03200	0.03200	0.00800	0.00800	0.00800	0.00800	0.00800	0.00800	REMAIN-DOT HIGHWAYS	COUNTY
DOT-HWY	QUEEN KAAHUMANU HWY WIDENING, KAILUA TO KEAHOLE	NONPOTABLE USING POTABLE	HUALALAI			0.24000	0.24000	0.24000	0.06000	0.06000	0.06000	REMAIN-DOT HIGHWAYS	COUNTY
UH	HAWAII COMMUNITY COLLEGE HILO - EXTERIOR IMPROVEMENTS PHASE I	NONPOTABLE USING POTABLE	NORTH EAST MAUNA LOA					0.04000	0.04000	0.04000	0.04000	REMAIN-UH	COUNTY
UH	HAWAII COMMUNITY COLLEGE HILO - LEARNING RESOURCE CENTER	NONPOTABLE USING POTABLE	NORTH EAST MAUNA LOA						0.00050	0.00050	0.00050	REMAIN-UH	COUNTY
UH	HAWAII COMMUNITY COLLEGE HILO - LEARNING RESOURCE CENTER	POTABLE	NORTH EAST MAUNA LOA						0.00958	0.00958	0.00958	REMAIN-UH	COUNTY
UH	HAWAII COMMUNITY COLLEGE HILO - OPERATIONS & MAINTENANCE, PHASE I	NONPOTABLE USING POTABLE	NORTH EAST MAUNA LOA						0.00004	0.00004	0.00004	REMAIN-UH	COUNTY
UH	HAWAII COMMUNITY COLLEGE HILO - OPERATIONS & MAINTENANCE, PHASE I	POTABLE	NORTH EAST MAUNA LOA						0.00024	0.00024	0.00024	REMAIN-UH	COUNTY
UH	INSTITUTE FOR ASTRONOMY FACILITY-HILO	POTABLE	NORTH EAST MAUNA LOA	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100	REMAIN-UH	COUNTY
UH	PACIFIC AQUACULT&COASTAL RESOURCS CTR	NONPOTABLE	NORTH EAST MAUNA LOA		1.65000	1.65000	1.65000	1.65000	1.65000	1.65000	1.65000	REMAIN-UH	COUNTY
UH	PACIFIC AQUACULTURE AND COASTAL RESOURCES CENTER, UHH FARM @ PANAEWA	NONPOTABLE	NORTH EAST MAUNA LOA		0.75000	0.75000	0.75000	0.75000	0.75000	0.75000	0.75000	REMAIN-UH	COUNTY
UH	PANAEWA FARM WELL AND PUMP	NONPOTABLE	NORTH EAST MAUNA LOA	0.35000	0.35000	0.35000	0.35000	0.35000	0.35000	0.35000	0.35000	REMAIN-UH	COUNTY
UH	U.S. CHINA CENTER	POTABLE	NORTH EAST MAUNA LOA		0.04580	0.04580	0.04580	0.04580	0.13400	0.13400	0.13400	REMAIN-UH	COUNTY
UH	UNIVERSITY OF HAWAII AT HILO CAMPUS DEV	POTABLE	NORTH EAST MAUNA LOA	0.04200	0.05600	0.07000	0.07000	0.07000	0.14000	0.21000	0.28000	REMAIN-UH	COUNTY
				0.79809	**3.36026**	**4.05670**	**4.16128**	**4.32774**	**7.29400**	**8.86668**	**8.95474**	**Subtotal Remaining Unmet SWPP Projects to be Supplied by DWS (#9)**	

TABLE 4.1

SWPP UPDATE - HAWAII WATER DEVELOPMENT STRATEGY

				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)									
				SHORT-TERM						LONG-TERM			
DEPT	SWPP PROJECT NAME	PRIMARY USE	SECTOR	02001	02002	02003	02004	02005	02010	02015	02020	STRATEGY OPTION	SYSTEM OR SOURCE
	ISLAND OF HAWAII			**3.55252**	**6.47739**	**7.48383**	**7.85153**	**8.12827**	**27.30448**	**29.50916**	**30.85522**	**SWPP Total Project Demand for Island of Hawaii**	
	Other Strategy Consideration												
	Nonpotable Demand to be Met by Nonpotable Sources (by Hydrological Sector)												
	KOHALA-801	NONPOTABLE		1.82500	1.82500	1.82500	1.82500	1.82500	1.82500	1.82500	1.82500		
	EAST MAUNA KEA-802	NONPOTABLE		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000		
	WEST MAUNA KEA-803	NONPOTABLE		0.00000	0.00000	0.00000	0.00000	0.00000	15.29995	15.29995	15.29995		
	NORTH EAST MAUNA LOA-804	NONPOTABLE		0.35000	2.75000	2.75000	2.75000	2.75000	3.69000	3.69000	3.69000		
	SOUTH EAST MAUNA LOA-805	NONPOTABLE		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000		
	SOUTH WEST MAUNA LOA-806	NONPOTABLE		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000		
	NORTH WEST MAUNA LOA-807	NONPOTABLE		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000		
	KILAUEA-808	NONPOTABLE		0.00000	0.00000	0.00000	0.00000	0.00000	1.47000	1.47000	1.47000		
	HUALALAI-809	NONPOTABLE		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000		
		NONPOTABLE		**2.17500**	**4.57500**	**4.57500**	**4.57500**	**4.57500**	**22.28495**	**22.28495**	**22.28495**	**Subtotal Nonpotable Demand to be Met by Nonpotable Sources (by Hydrological Sector)**	
	Additional Nonpotable Demand to be Met by Potable Sources (by Hydrological Sector)												
	KOHALA-801	NONPOTABLE USING POTABLE		0.00198	0.00264	0.04402	0.04468	0.04534	0.08877	0.08877	0.08877		
	EAST MAUNA KEA-802	NONPOTABLE USING POTABLE		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000		
	WEST MAUNA KEA-803	NONPOTABLE USING POTABLE		0.00000	0.00000	0.00000	0.00000	0.00000	0.05881	0.05881	0.05881		
	NORTH EAST MAUNA LOA-804	NONPOTABLE USING POTABLE		0.00000	0.00000	0.00000	0.00000	0.04000	0.04736	0.04736	0.04736		
	SOUTH EAST MAUNA LOA-805	NONPOTABLE USING POTABLE		0.00000	0.00000	0.00727	0.00727	0.00727	0.00727	0.00727	0.00727		
	SOUTH WEST MAUNA LOA-806	NONPOTABLE USING POTABLE		0.07936	0.07941	0.07946	0.07952	0.07957	0.09173	0.09173	0.09973		
	NORTH WEST MAUNA LOA-807	NONPOTABLE USING POTABLE		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000		
	KILAUEA-808	NONPOTABLE USING POTABLE		0.03200	0.03200	0.00800	0.00800	0.00800	0.00800	0.00800	0.00800		
	HUALALAI-809	NONPOTABLE USING POTABLE		0.00690	0.02712	0.30811	0.38393	0.38710	0.21473	0.22686	0.25221		
		NONPOTABLE USING POTABLE		**0.12024**	**0.14117**	**0.44686**	**0.52340**	**0.56728**	**0.51667**	**0.52880**	**0.56215**	**Subtotal Additional Nonpotable Demand to be Met by Potable Sources (by Hydrological Sector)**	
			Total Nonpotable Demand Hawaii=	**2.29524**	**4.71617**	**5.02186**	**5.09840**	**5.14228**	**22.80162**	**22.81375**	**22.84710**		

Table 4.2
Water Development Strategy Summary - Hawaii

	SWPP Project (Potable and Nonpotable) Water Demands (mgd)							
State Water Demand Status	**2001**	**2002**	**2003**	**2004**	**2005**	**2010**	**2015**	**2020**
Total SWPP Water Demand for Hawaii	3.55	6.48	7.48	7.85	8.13	27.30	29.51	30.86
Demand Accounted for by Water Development Strategy	2.75	3.12	3.43	3.69	3.80	20.01	20.64	21.90
Remaining Unmet Water Demand Balance to be Accommodated by County Water System or State Well Development	0.80	3.36	4.06	4.16	4.33	7.29	8.87	8.95

Figure 4.1
Total Yearly Cumulative Remaining Demand for Hawaii

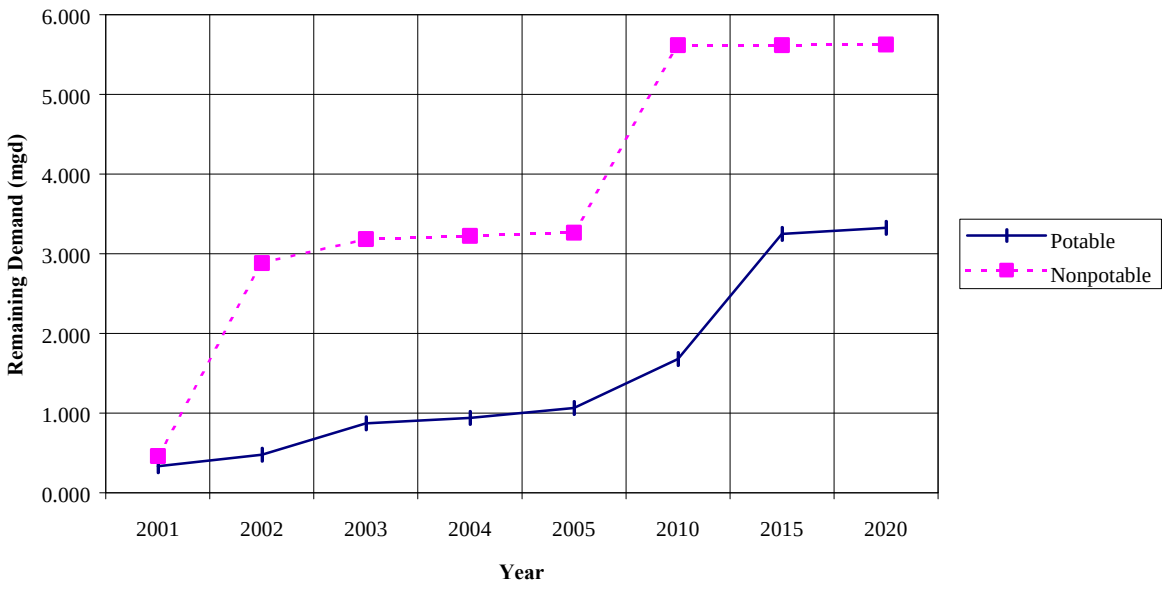

Table 4.3
SWPP Projects with Significant Water Demands (>0.10 mgd) - Hawaii

SWPP Project	Primary Use	2020 Demand (mgd)	Water Development Strategy
Future Subdivision in Honokaa	Nonpotable	7.00	EXSWS – Lower Hamakua Ditch
Waimea/Paauilo Watershed Project	Nonpotable	4.00	EXSWS – Waimea Irrigation System
Kealakehe Planned Community (Laiopua)	Potable Nonpotable	2.46 0.06	Master Plan – North Kona
Waimea Irrigation System	Nonpotable	1.83	EXSWS – Waimea Irrigation System
Natural Energy Laboratory of Hawaii	Potable	1.80	Master Plan – North Kona
Pacific Aquacult&Coastal Resource Cnt	Nonpotable	1.65	REMAIN-UH
Puukapu – Farm Lots Units 2, 2A	Nonpotable	1.60	EXSWS – Waimea Irrigation System
Kawaihae Master Plan Area	Potable	1.40	REMAIN-DHHL
Makuu - Farm Lots 5 Arces Irrig	Potable Nonpotable	0.05 1.27	REMAIN-DHHL
Future Subdivision in Paauilo	Nonpotable	1.25	EXSWS – Lower Hamakua Ditch
Future Subdivision in Waimea	Nonpotable	0.80	EXSWS – Lower Hamakua Ditch
Pacific Aqua&Coas Res Cnt UHH Farm	Nonpotable	0.75	REMAIN-UH
Hapuna Beach SRA	Potable Nonpotable	0.05 0.65	NEWSS – New State Source NEWSS – New State Source
Panaewa – Farm Lots (Auwae St)	Potable Nonpotable	0.03 0.64	REMAIN-DHHL
Panaewa – Farm Well and Pump	Nonpotable	0.35	NEWSS – New State Source
Panaewa – Farm Lots Puna Papaya	Potable Nonpotable	0.01 0.30	REMAIN-DHHL
University of Hawaii at Hilo Campus	Potable	0.28	REMAIN-UH
Kona International Airport Master Plan	Potable	0.24	Master Plan – North Kona
Makuu-Farm Lots 2 Acres Irrig	Potable Nonpotable	0.02 0.20	REMAIN-DHHL
U.S. China Center	Potable	0.13	REMAIN-UH
Laiopua Village 4	Potable	0.10	Master Plan – North Kona

4.3. EVALUATION OF WATER DEVELOPMENT STRATEGY OPTIONS

4.3.1. Existing State Water Systems (EXSWS)

4.3.1.1. Lower Hamakua Ditch Watershed Project (EXSWS-Lower Hamakua Ditch)

The Lower Hamakua Ditch system is anticipated to supply 9.05 mgd of DOA sponsored SWPP projects, which include future subdivision projects in Honokaa, Paauilo and Waimea. The estimated demand is a reduction from previous water consumption supplied by the ditch system. The USDA Natural Resources Conservation Service is preparing a Watershed plan and Draft Environmental Impact Statement for the Lower Hamakua Ditch Watershed. The purpose of the plan was to provide an adequate, reliable and affordable supply of agricultural water to farmers in the Lower Hamakua Ditch service area. A comprehensive repair, rehabilitation or replacement of Lower Hamakua Ditch system components was selected as the preferred alternative. The repair and restoration alternative scored the highest benefit to cost ratio of 2.8:1.0. The total installation construction cost was estimated at $10,592,900 with an annual operational and maintenance cost of $500,000. An installation schedule of system improvements is phased over a four-year period. The State's share (DOA) of the improvement costs was estimated at $4,195,300. DOA operators acknowledge projected future demands will be accommodated for by system improvements. The project has obtained $2,290,000 of CIP funding.

4.3.1.2. Waimea-Paauilo Watershed/Waimea Irrigation System (EXSWS-Waimea Irrigation System)

The Waimea Irrigation System is scheduled to provide water service to three major SWPP projects: (DHHL) Puukapu Farm Lots Units 2, 2A Irrigation (1.60 mgd), (DOA) Waimea/Paauilo Watershed project (4.0 mgd) and (DOA) Waimea Irrigation System Expansion project (1.83 mgd). The USDA Natural Resources Conservation Service prepared a Watershed Plan and Environmental Impact Statement for the Waimea-Paauilo Watershed in 1997. The plan recommended improvements to the Waimea Irrigation System to address the agricultural water shortage problems within the Waimea area. The recommended alternative included installation of a 131 MG reservoir, reservoir transmission main and expansion of the irrigation distribution system. The recommended alternative had a cost benefit ratio of 1:1. The total installation construction cost was estimated at $17,376,600 with an annual operating cost of $196,100. Proposed system improvements were scheduled over a six-year implementation period. The State's share of the funding obligation included DOA contributing $5,741,300 and DHHL contributing $4,233,400. CIP funding information was not available. DOA operators acknowledge future water demands has been accounted and will be provided for by system improvements.

4.3.2. Existing Master Plan (MASTERPLAN)

4.3.2.1. North Kona Water Master Plan (MASTERPLAN-North Kona Water Master Plan)

The SWPP project water demands for (HCDCH, DOT-A, NELHA, UH) within the North Kona master plan boundary was estimated at 4.72 mgd, a decrease in projected demand from previous master plan estimates. The North Kona Water Master Plan prepared for DLNR in 1995 provided a comprehensive Water Development Plan to support the Memorandum of Understanding (MOU) for State Water Development in North Kona, Hawaii. The plan provided for 6.47 of mgd projected State demand representing six State departments under the MOU agreement. The water development plan proposes development of high level sources and improvements to the existing County water system in four phases over a twenty-year period. The total construction cost was estimated at $44.4 million dollars. Phase 1 source development and water system improvements projects are in design and scheduled to be constructed. CIP funding for phase 2 projects is currently being pursued. The water system improvements recommended by the master plan appear sufficient to satisfy State project needs in the North Kona area. <u>However, the previous project demand and proposed system improvements should be reevaluated based on the new SWPP data.</u>

4.3.3. Existing State or Private Sources (EXSS)

There are no existing State or private sources planned to serve SWPP projects.

4.3.4. County and Private Water Agreements (COUNTY-)

The DOE/DAGS-PM De Silva Elementary School Architectural Barrier Removal project will not increase the fixture units for the existing site. The project should be exempt (COUNTY-EXEMPT) from County facilities charges.

4.3.5. County and Private Water Agreements – Use of Water Allocation Credits (COUNTY-BWSWALL)

The State currently does not own water allocation from the County of Hawaii, Department of Water Supply.

4.3.6. New/Planned State Wells (NEWSS)

Several new State wells are planned for development to provide source water to specific SWPP projects. These wells are in the planning stage and should be considered preliminary in status. A potable well and nonpotable well are planned for the (DNLR-Parks) Hapuna Beach SRA project. The University of Hawaii at Hilo proposes a new nonpotable well to support planned agricultural activities. The Keopu-HFDC well and Kalaoa well are part of the North Kona Water Master Plan source development program. These wells will serve State projects in the North Kona area. A summary of reported source development projects is shown on **Table 4.4**. CIP funding has not been appropriated for any of these well projects.

Table 4.4
Water Source Development Program on Hawaii (DLNR)

Well Name/ SWPP Project Name	Primary Use	Exploratory Well Phase Completion	Well Development Phase Completion	Estimated Well Capacity (gpd)
Hapuna Beach SRA*	Potable	NA	NA	60,000**
Hapuna Beach SRA*	Nonpotable	NA	NA	650,000**
UH Hilo Panaewa Farm*	Nonpotable	NA	NA	350,000**
Keopu-HFDC (North Kona)	Potable	2005	NA	1,500,000
Kalaoa Deepening (North Kona)	Potable	2005	NA	300,000

* Wells proposed by State departments are preliminary and planned to meet the water requirements of specific State projects.
** Well capacity information not available. Well capacity estimated based on projected water demand.

4.3.7. New State Water Systems (NEWSWS)

No new State water systems are planned for the island of Hawaii.

4.3.8. Planned Private Sources (PLANPS)

There were no reported planned private sources available for SWPP projects.

4.3.9. Coordination of Unmet SWPP Project Demand with County Water Department (REMAIN)

The remaining balances of unmet potable and nonpotable project demands are summarized by hydrological sector in **Table 4-5**. The remaining balance of SWPP project demands will be integrated into the County's overall water demand. DLNR will coordinate with the County on the availability and feasibility of accommodating unmet SWPP water demands. Hydrological sectors with significant projected demands were highlighted in bold to identify potential impacts on County water systems and/or required source development. Hydrological sectors with unmet SWPP water demands of 1.0 mgd or greater will be recommended for State source development. It is anticipated that County water systems will be able to supply the balance of State water demands in all hydrological sectors.

4.3.10. Other Strategy Considerations

The SWPP project nonpotable water demand remains a significant portion (74%) of the island of Hawaii's total overall SWPP project water demands. Hydrological sectors: West Mauna Kea (15.36 mgd), Kohala (1.91 mgd), Kilauea (1.48 mgd) and North East Mauna Loa (3.74 mgd) have significant cumulative nonpotable water demand totals. Nonpotable sources planned to supply nonpotable demands include: existing State irrigation systems, new State nonpotable wells and planned nonpotable private wells. Additional nonpotable source development is required to support SWPP projects in sectors: West Mauna Kea, Kilauea and Northeast Mauna Loa.

The County of Hawaii, Department of Public Works is proposing an upgrade of the Kealakehe Wastewater Treatment Plant to produce R-1 quality effluent. The SWPP project water nonpotable demand within the service area is 0.25 mgd. <u>The R-1 effluent use alternative to supply SWPP project demands from the Kealakehe WWTP Effluent Reuse Master Plan should be further evaluated.</u>

Table 4.5
Water Development Strategy Remaining Balance of Unmet SWPP Project Demand - Hydrologic Sector Hawaii

Hydrologic Sector	**Remaining Balance of Unmet SWPP Project Demands**															
	Potable Demand (mgd)								**Nonpotable Demand (mgd)**							
	2001	**2002**	**2003**	**2004**	**2005**	**2010**	**2015**	**2020**	**2001**	**2002**	**2003**	**2004**	**2005**	**2010**	**2015**	**2020**
E Mauna Kea			0.01	0.01	0.01	0.02	0.02	0.02								
Hualalai	0.01	0.02	0.11	0.11	0.11	0.11	0.11	0.11		0.02	0.30	0.33	0.33	0.16	0.16	0.16
Kilauea	0.07	0.07	0.16	0.16	0.16	0.24	0.24	0.24	0.03	0.03	0.01	0.01	0.01	**1.48**	**1.48**	**1.48**
Kohala		0.07	0.15	0.15	0.21	0.34	**1.79**	**1.79**			0.04	0.04	0.04	0.09	0.09	0.09
NE Mauna Loa	0.17	0.23	0.27	0.34	0.40	0.67	0.78	0.85	0.35	**2.75**	**2.75**	**2.75**	**2.79**	**3.74**	**3.74**	**3.74**
NW Mauna Loa						0.01	0.01	0.01								
SE Mauna Loa			0.02	0.02	0.02	0.03	0.05	0.05			0.01	0.01	0.01	0.01	0.01	0.01
SW Mauna Loa		0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.08	0.08	0.08	0.08	0.08	0.09	0.09	0.10
W Mauna Kea	0.07	0.07	0.13	0.13	0.13	0.25	0.25	0.25						0.06	0.06	0.06
TOTAL	**0.32**	**0.47**	**0.86**	**0.93**	**1.05**	**1.69**	**3.27**	**3.34**	**0.46**	**2.88**	**3.19**	**3.22**	**3.26**	**6.63**	**6.63**	**6.63**

4.4. RECOMMENDED WATER DEVELOPMENT STRATEGY ACTIONS

Table 4.6 displays the recommended strategy actions for State sponsored source development during the Short-term and Long-term periods. Unmet SWPP project water demands greater than 1.0 mgd within a given hydrological sector were recommended for State sponsored source development. County water systems remain the first strategy option to serve unmet SWPP project water. DLNR will coordinate the availability of water service with the Department of Water Supply. The estimated cost represents a planning level estimate for budgeting purposes only. The source development costs were computed using an island average source development cost per mgd and the projected State water demand. The installation schedule is based on available project schedules.

Additional recommendations are listed below.

DOA to conduct new water budget computations to determine source and storage adequacy for existing State agricultural water systems; Lower Hamakua Ditch System and the Waimea Irrigation System.

A planning assessment or preliminary engineering reports are recommended to identify and evaluate source development and water system options for the following projects. The projects plan on using the County water system for water service; however, the system impacts and capacity have not been evaluated. DHHL has three projects: Kawaihae Master Plan (1.40 mgd potable demand) in the Kohala sector; Makuu Farm Lots (1.47 mgd nonpotable demand) in the Kilauea sector; and Panaewa Farm Lots (0.94 mgd nonpotable demand) in the North East Mauna Loa sector. UH has one project: Pacific Aquaculture and Coastal Resource Center projects (2.40 mgd nonpotable demand) in the North East Mauna Loa sector.

The North Kona Water Master plan should be reevaluated based on new SWPP project water demand within the master plan boundary area.

Table 4.6
Recommended Water Development Strategy Actions – Hawaii
(To meet unmet SWPP project demands)

Project Description	**Hydrologic Sector**	**SWPP Project (Potable and Nonpotable) Water Demand (mgd)**	**Installation Schedule**	**Estimated Cost**
Short-term Actions (2001 – 2010):				
Source Development for SWPP Projects (Including DHHL-Panaewa Farm Lots project)	North East Mauna Loa	2.98	2002	$9,690,000
Long-term Actions (2011 – 2020):				
Source Development for SWPP Projects (Including DHHL-Makuu Farm Lots project)	Kilauea	1.72	2010	$5,590,000
Source Development for SWPP Projects (Including DHHL-Panaewa Farm Lots project)	North East Mauna Loa	1.61	2010	$5,230,000
Source Development for SWPP Projects (Including DHHL-Kawaihae Master Plan project)	Kohala	1.88	2015	$6,110,000

Notes: Unit cost of $3,250,000 per mgd of average (Hawaii) exploratory and production well development is referenced from CIP estimates and construction bid tabulations. The unit cost is a preliminary planning cost estimate.

The unmet SWPP project demands are referenced from Table 4.5.

APPENDICES

APPENDIX A
WELLS; STREAM DIVERSIONS, STATE WATER SYSTEM DIAGRAMS

State Water Projects Plan
Inventory of State Wells

DEPARTMENT	WELL NAME	STATE WELL NO.	ISLAND	USE	YR DRILLED
LAND & NATURAL RESOURCES	KAU EXPL	0139-01	HAWAII	UNU	1990
LAND & NATURAL RESOURCES	PULAMA	2102-01	HAWAII	UNU	1963
LAND & NATURAL RESOURCES	VOLCANO TH 4	2714-01	HAWAII	OBS	1973
LAND & NATURAL RESOURCES	VOLCANO TH5	2714-02	HAWAII	OBS	1976
LAND & NATURAL RESOURCES	VOLCANO A	2714-03	HAWAII	SLD	1976
LAND & NATURAL RESOURCES	VOLCANO TH2	2715-01	HAWAII	SLD	1973
LAND & NATURAL RESOURCES	VOLCANO TH 3	2715-02	HAWAII	OBS	0
LAND & NATURAL RESOURCES	MALAMA KI	2783-01	HAWAII	UNU	1962
LAND & NATURAL RESOURCES	VOLCANO TH-1	2815-01	HAWAII		1973
LAND & NATURAL RESOURCES	VOLCANO B	2815-02	HAWAII	SLD	1977
NO STATE DEPARTMENT LISTED	KULANI PRISON	3117-01	HAWAII	UNU	1947
HAWAIIAN HOME LANDS	KE0NEPOKO NUI 2	3188-02	HAWAII	UNU	1997
LAND & NATURAL RESOURCES	KAINALIU TEST	3255-02	HAWAII	UNU	1993
LAND & NATURAL RESOURCES	PALANI	4059-01	HAWAII	SLD	1958
HAWAII DWS (FORMER DLNR OWNERSHIP)	HUALALAI EXPL	4258-03	HAWAII	UNU	1993
LAND & NATURAL RESOURCES	KALAOA N KONA	4360-01	HAWAII	UNU	1968
TRANSPORTATION	KEAHOLE-DOT	4462-02	HAWAII	OTH	1992
TRANSPORTATION	KEAHOLE MW-11	4462-05	HAWAII	OBS	1996
TRANSPORTATION	KEAHOLE MW-13A	4462-06	HAWAII	OBS	
TRANSPORTATION	KEAHOLE MW-13B	4462-07	HAWAII	OBS	
TRANSPORTATION	KEAHOLE MW-14A	4463-01	HAWAII	OBS	
TRANSPORTATION	KEAHOLE MW-14B	4463-02	HAWAII	OBS	
TRANSPORTATION	KEAHOLE MW-14C	4463-03	HAWAII	OBS	1996
LAND & NATURAL RESOURCES	POHAKULOA TH	4532-01	HAWAII	UNU	1965
LAND & NATURAL RESOURCES	POHAKULOA TH	4534-01	HAWAII	UNU	1969
LAND & NATURAL RESOURCES	KIHOLO	4953-01	HAWAII	UNU	1972
LAND & NATURAL RESOURCES	HAPUNA BCH PARK	5948-01	HAWAII	IRR	1970
LAND & NATURAL RESOURCES	KAWAIHAE 3	6147-01	HAWAII	UNU	1963
AGRICULTURE	PUUKAPU	6337-01	HAWAII	MUN	1987
AGRICULTURE	PUUKAPU SHALLOW	6337-02	HAWAII	UNU	1993
LAND & NATURAL RESOURCES	KOHAKOHAU TH 1	6340-01	HAWAII	LOS	1964
LAND & NATURAL RESOURCES	KOHAKOHAU TH 2	6340-02	HAWAII	LOS	1964
LAND & NATURAL RESOURCES	KOHAKOHAU TH 3	6340-03	HAWAII		1964
LAND & NATURAL RESOURCES	KOHALA T.H. #2	6340-04	HAWAII	OBS	1987
LAND & NATURAL RESOURCES	KOHALA T.H. 1	6340-05	HAWAII	OBS	1987
LAND & NATURAL RESOURCES	WAIAKA GULCH TH	6341-01	HAWAII	LOS	1964
LAND & NATURAL RESOURCES	KOHAKOHAU TH 4	6341-02	HAWAII	LOS	1964
LAND & NATURAL RESOURCES	KOHAKOHAU TH 5	6341-03	HAWAII	LOS	1964
LAND & NATURAL RESOURCES	KOHALA TH 4	6440-01	HAWAII	OBS	1987
LAND & NATURAL RESOURCES	KOHALA TH 3	6440-02	HAWAII	OBS	1987
LAND & NATURAL RESOURCES	KOHALA TH 5	6440-03	HAWAII	OBS	1987
LAND & NATURAL RESOURCES	KAWAIHAE	6448-01	HAWAII	UNU	1990
HAWAIIAN HOME LANDS	KAWAIHAE EXPL	6549-03	HAWAII	UNU	1992
AGRICULTURE	HONOKANE 1	6843-06	HAWAII		
AGRICULTURE	HONOKANE 3	6843-07	HAWAII		1976
DBEDT-NELHA (SWPP REPORTED WELLS)	NELHA CEMP PROGRAM (21 MONITORING WELLS, 4" PVC CASING)	NR	HAWAII	OTH	NR
DBEDT-NELHA (SWPP REPORTED WELLS)	CYANOTECH CORPORATION (2 BRACKISH WELLS)	NR	HAWAII	OTH	NR
DBEDT-NELHA (SWPP REPORTED WELLS)	ROYAL HAWAIIAN SEA FARMS (2 WELLS, 4" PVC CASING)	NR	HAWAII	OTH	NR
DBEDT-NELHA (SWPP REPORTED WELLS)	UWAJIMA FISHERIES (12 WELLS, 4" PVC CASING)	NR	HAWAII	OTH	NR

State Water Projects Plan
Inventory of Stream Diversions

STREAM NAME/DIVERSION STRUCTURE	DEPT.	ISLAND	USETYPE	DIVERSION OWNER	DIVERSION OPERATOR	DIVERSION SYSTEM NAME	DIVERSION STRUCTURE NAME	TMK
ALAKAHI STREAM	DOA	HAWAII	IRRIGATION	DLNR	LAND & NATURAL RESOURCES	UPPER HAMAKUA DITCH	KAWAINUI INTAKE (LOWER ELEV.=4026)	6-3-04
ALAKAHI STREAM	DHHL	HAWAII	IRRIGATION	DLNR	LAND & NATURAL RESOURCES	HAMAKUA DITCH	HAMAKUA DITCH	3-6-3
HAAO SPRING/MOUNTAIN HOUSE TUNNEL	DHHL	HAWAII	MIXED	COUNTY OF HAWAII	COUNTY OF HAWAII			9-3-1
HONOKANE NUI	DHHL	HAWAII	IRRIGATION	DLNR	LAND & NATURAL RESOURCES	KEHENA DITCH	KEHENA DITCH	3-6-1-01
HOPUKANI SPRINGS	DLNR	HAWAII	MIXED	DLNR	DIVISION OF STATE PARKS	MAUNA KEA STATE RECREATIONAL AREA		4-4-15:1,9
KAHAKAHAU STREAM	DHHL	HAWAII	LIVESTOCK	DHHL	PARKER RANCH			3-6-2-01
KAWAIKI STREAM	DOA	HAWAII	IRRIGATION	DLNR	LAND & NATURAL RESOURCES	UPPER HAMAKUA DITCH	KAWAINUI INTAKE (ALAKAHI INTAKE ELEV.=3874)	6-3-04
KAWAIKI STREAM	DHHL	HAWAII	IRRIGATION	DLNR	LAND & NATURAL RESOURCES	HAMAKUA DITCH	HAMAKUA DITCH	3-6-3
KAWAINUI STREAM	DOA	HAWAII	IRRIGATION	DLNR	LAND & NATURAL RESOURCES	UPPER HAMAKUA DITCH	KAWAINUI INTAKE (UPPER ELEV. =4042)	6-3-04
KAWAINUI STREAM	DHHL	HAWAII	IRRIGATION	DLNR	LAND & NATURAL RESOURCES	HAMAKUA DITCH	HAMAKUA DITCH	3-6-3
KEAWEWAI STREAM	DHHL	HAWAII	LIVESTOCK	DHHL	KAHUA RANCH			3-6-1-01
KILOHANA STREAM	DHHL	HAWAII	LIVESTOCK	DHHL	KAHUA RANCH			3-6-1-01
KOHAKOHAU STREAM	DOA	HAWAII		DLNR	LAND & NATURAL RESOURCES		KOHAKOHAU INTAKE	6-3-02
KOHALA DITCH	DLNR	HAWAII	MIXED	KOHALA CORPORATION	DIVISION OF STATE PARKS	LAPAKAHI STATE HISTORICAL PARK IRRIGATION		
KOLEKOLE STREAM	DLNR	HAWAII		DLNR	COUNTY DEPT. OF WATER	AKAKA FALLS WATER SYSTEM		2-8-10:33
MAUNA KEA ACCESS ROAD	DHHL	HAWAII	LIVESTOCK	DHHL	PARKER RANCH		ROAD	3-3-8-01
UPPER HAMAKUA DITCH - 60 MG RESERVOIR	DOA	HAWAII	IRRIGATION	STATE OF HAWAII	LAND & NATURAL RESOURCES	WAIMEA IRRIGATION SYSTEM	60 MG RESEVOIR	6-4-02:125
UPPER HAMAKUA DITCH - KOIAWE INTAKE	DOA	HAWAII	IRRIGATION	DLNR	LAND & NATURAL RESOURCES	UPPER HAMAKUA DITCH	KOIAWE INTAKE	6-3-04
UPPER HAMAKUA DITCH - WAIMEA INTAKE (WAIMA INTAKE)	DOA	HAWAII	IRRIGATION	DLNR	LAND & NATURAL RESOURCES	UPPER HAMAKUA DITCH	WAIMEA INTAKE (WAIMA INTAKE)	6-3-04
UPPER HAMAKUA DITCH TRIBUTARIES	DOA	HAWAII	IRRIGATION	DLNR	AGRICULTURE	WAIMEA IRRIGATION SYSTEM	PUU PULEHU RESEVOIR	6-4-3:15
WAIMANU STREAM	DHHL	HAWAII	IRRIGATION	DHHL				3-4-9-13
WAIPAHOEHOE STREAM	DHHL	HAWAII	LIVESTOCK	DHHL	KAHUA RANCH			3-6-1-01

State Water System Diagrams
have been removed for security reasons.

Please contact the
Commission on Water Resource Management
for more information.

APPENDIX B
SWPP DEMAND TABLE BY DEPARTMENT

STATE WATER PROJECTS PLAN
PROJECTED WATER REQUIREMENTS BY DEPARTMENT

				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)								
	PRIMARY			02001	02002	02003	02004	02005	02010	02015	02020	
PROJECT NAME	USE	ISLAND	SECTOR	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	TMK
			SWPP Statewide Project Demand Total=	12.19	18.10	25.22	26.59	33.20	69.42	76.55	80.87	
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES												
PROJECT MANAGEMENT BRANCH												
HOLUALOA ELEM SCHOOL REPLACEMENT OF CAFÉ AND RELOCATION OF PORTABLE P-12	POTABLE	HAWAII	HUALALAI	0.00263	0.00263	0.00263	0.00263	0.00263	0.00263	0.00263	0.00263	7-6-04:02, 37; 7-6-05:15
HOLUALOA ELEM SCHOOL REPLACEMENT OF FIRE-DAMAGED PORTABLE CLASSROOMS	POTABLE	HAWAII	HUALALAI	0.00045	0.00045	0.00045	0.00045	0.00045	0.00045	0.00045	0.00045	7-6-04: 02,37; 7-6-05:15
KAHAKAI ELEM ADMIN BUILDING/LIBRARY	POTABLE	HAWAII	HUALALAI	0.00442	0.00442	0.00442	0.00442	0.00442	0.00442	0.00442	0.00442	7-5-20:77
DE SILVA ELEM ARCHITECTRL BARRIER REMOV	POTABLE	HAWAII	NORTH EAST MAUNA LOA	0.00743	0.00743	0.00743	0.00743	0.00743	0.00743	0.00743	0.00743	2-5-08:13
NORTH SHORE KAUAI - PRINCEVILLE PUBLIC LIBRARY	POTABLE	KAUAI	HANALEI	0.00139	0.00139	0.00139	0.00139	0.00139	0.00139	0.00139	0.00139	5-3-10:2
NORTH SHORE KAUAI - PRINCEVILLE PUBLIC LIBRARY	NONPOTABLE USING POTABLE	KAUAI	HANALEI	0.00101	0.00101	0.00101	0.00101	0.00101	0.00101	0.00101	0.00101	5-3-10:2
LOKELANI INT CAFETORIUM	POTABLE	MAUI	CENTRAL	0.00200	0.00200	0.00200	0.00200	0.00200	0.00200	0.00200	0.00200	NR
LAHAINALUNA HI LIBRARY & RENOVATION OF EXISTING LIBRARY INTO 3 CLASSROOMS	POTABLE	MAUI	LAHAINA	0.00504	0.00504	0.00504	0.00504	0.00504	0.00504	0.00504	0.00504	NR
KALAUPAPA MEDICAL FACILITY INFECTIOUS WASTE CONTROL STERILIZER	POTABLE	MOLOKAI	NORTH EAST	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	6-1-01: 01
EWA ELEMENTARY SCHOOL ADMIN/LIBRARY RENOVATION CLASSROOM	POTABLE	OAHU	EWA CAPROCK	0.00672	0.00672	0.00672	0.00672	0.00672	0.00672	0.00672	0.00672	9-1-117:02,37
KAPOLEI SPORTS RECREATIONAL COMPLEX	POTABLE	OAHU	EWA CAPROCK	PROJECT DEMAND ACCOUNTED FOR BY EAST KAPOLEI PROJECT								9-1-016:108
KAPOLEI SPORTS RECREATIONAL COMPLEX	NONPOTABLE	OAHU	EWA CAPROCK	PROJECT DEMAND ACCOUNTED FOR BY EAST KAPOLEI PROJECT								9-1-016:108
ROYAL ELEM SCHOOL, ADMIN & LIB BLDG	POTABLE	OAHU	HONOLULU	0.00107	0.00107	0.00107	0.00107	0.00107	0.00107	0.00107	0.00107	2-1-20:01
SALT LAKE ELEM BILD E INTERIOR IMPROVMTS.	POTABLE	OAHU	HONOLULU	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100	NR
AIEA PUBLIC LIBRARY	POTABLE	OAHU	PEARL HARBOR								0.00216	9-9-5:25
AIEA PUBLIC LIBRARY	NONPOTABLE USING POTABLE	OAHU	PEARL HARBOR								0.02484	9-9-5:25
NANAKULI HI RESTROOM FACILITY	POTABLE	OAHU	WAIANAE	0.00500	0.00500	0.00500	0.00500	0.00500	0.00500	0.00500	0.00500	NR
HYCF MAINTENANCE BLDG & RENOVATION HOOKIPA COTTAGE	POTABLE	OAHU	WINDWARD	0.02400	0.02400	0.02400	0.02400	0.02400	0.02400	0.02400	0.02400	NR
HYCF RENOVATION MAKAI HOOKIPA COTTAGE	POTABLE	OAHU	WINDWARD	0.01800	0.01800	0.01800	0.01800	0.01800	0.01800	0.01800	0.01800	NR
HYCF RENOVATION MALUHIA COTTAGE	POTABLE	OAHU	WINDWARD	0.01800	0.01800	0.01800	0.01800	0.01800	0.01800	0.01800	0.01800	NR

STATE WATER PROJECTS PLAN
PROJECTED WATER REQUIREMENTS BY DEPARTMENT

				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)								
	PRIMARY			02001	02002	02003	02004	02005	02010	02015	02020	
PROJECT NAME	USE	ISLAND	SECTOR	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	TMK
			SWPP Statewide Project Demand Total=	12.19	18.10	25.22	26.59	33.20	69.42	76.55	80.87	
PLANNING BRANCH												
NEW KONA MULTI-AGENCY MAINTENANCE FAC	POTABLE	HAWAII	HUALALAI	0.00083	0.00083	0.00083	0.00083	0.00083	0.00083	0.00083	0.00083	NR
KOHALA PUBLIC LIBRARY	POTABLE	HAWAII	KOHALA						0.00057	0.00057	0.00057	NR
KOHALA PUBLIC LIBRARY	NONPOTABLE USING POTABLE	HAWAII	KOHALA						0.00073	0.00073	0.00073	NR
HILO DAGS BASEYARD	POTABLE	HAWAII	NORTH EAST MAUNA LOA			0.00179	0.00179	0.00179	0.00179	0.00179	0.00179	2-1-12: LOT 7 (APPROXIMATE)
HILO JUDICIARY COMPLEX	POTABLE	HAWAII	NORTH EAST MAUNA LOA						0.01718	0.01718	0.01718	2-2-15:33
HILO JUDICIARY COMPLEX	NONPOTABLE USING POTABLE	HAWAII	NORTH EAST MAUNA LOA						0.00682	0.00682	0.00682	2-2-15:33
KONA CIVIC CENTER	POTABLE	HAWAII	SOUTH WEST MAUNA LOA						0.00800	0.00800	0.00800	NR
KONA CIVIC CENTER	NONPOTABLE USING POTABLE	HAWAII	SOUTH WEST MAUNA LOA						0.01200	0.01200	0.02000	NR
WAIMEA CIVIC CENTER, STATE OFC BLDG NO.3	POTABLE	HAWAII	WEST MAUNA KEA						0.00059	0.00059	0.00059	NR
WAIMEA CIVIC CENTER, STATE OFC BLDG NO.3	NONPOTABLE USING POTABLE	HAWAII	WEST MAUNA KEA						0.05881	0.05881	0.05881	NR
KAUAI JUDICIARY COMPLEX	POTABLE	KAUAI	LIHUE				0.07644	0.07644	0.07644	0.07644	0.07644	3-6-2: POR. 01
LIHUE MMSF, PHASE 2D AND 3	POTABLE	KAUAI	LIHUE			0.00044	0.00044	0.00044	0.00044	0.00044	0.00044	NR
KAUAI JUDICIARY COMPLEX	NONPOTABLE USING POTABLE	KAUAI	LIHUE				0.00799	0.00799	0.00799	0.00799	0.00799	3-6-02: POR 01
LIHUE MULTI-AGENCY MAINTENANCE FACILITY, PHASE II	POTABLE	KAUAI	LIHUE		0.00041	0.00041	0.00041	0.00041	0.00041	0.00041	0.00041	NR
KAHULUI CIVIC CENTER, PHASE 1	POTABLE	MAUI	CENTRAL						0.01784	0.01784	0.01784	NR
KAHULUI CIVIC CENTER, PHASE 1	NONPOTABLE USING POTABLE	MAUI	CENTRAL						0.00474	0.00474	0.00474	NR
KAHULUI CIVIC CTR (TEMPORARY OFFICE FAC.)	POTABLE	MAUI	CENTRAL			0.01400	0.01400	0.01400	0.01400	0.01400	0.01400	3-7-04: 3
MAUI CCC BED EXPANSION	POTABLE	MAUI	WAILUKU			0.00777	0.00777	0.00777	0.00777	0.00777	0.00777	3-8-46:5
MAUI ARMY NATIONAL GUARD, PUUNENE ARMORY	POTABLE	MAUI	WAILUKU			0.00710	0.00710	0.00710	0.00710	0.00710	0.00710	3-8-08:POR. 01
MOLOKAI DISTRICT COURT	POTABLE	MOLOKAI	SOUTH EAST						0.00238	0.00238	0.00238	5-3-05:12,13,14
MOLOKAI MULTI-AGENCY MAINTENANCE FAC, PH I	POTABLE	MOLOKAI	SOUTH EAST						0.00210	0.00210	0.00210	5-3-05: 13, 14
WAHIAWA CIVIC CENTER	POTABLE	OAHU	CENTRAL						0.00949	0.00949	0.00949	7-4-06:12
WAHIAWA CIVIC CENTER	NONPOTABLE USING POTABLE	OAHU	CENTRAL						0.00426	0.00426	0.00426	7-4-06:12
KAPOLEI CIVIC CENTER, STATE OFC BLDG NO.2	POTABLE	OAHU	EWA CAPROCK		0.44240	0.44240	0.44240	0.44240	0.44240	0.44240	0.44240	POR,49,52,53,54,97,106,117; 9-1-88: 1 POR, 2-11,13
KAPOLEI CIVIC CENTER, STATE OFC BLDG NO.2	NONPOTABLE USING POTABLE	OAHU	EWA CAPROCK		0.03476	0.03476	0.03476	0.03476	0.03476	0.03476	0.03476	POR,49,52,53,54,97,106,117; 9-1-88: 1POR, 2-11,13
KAPOLEI PUBLIC LIBRARY	POTABLE	OAHU	EWA CAPROCK	0.01244	0.01244	0.01244	0.01244	0.01244	0.01244	0.01244	0.01244	9-1-16: 01
KAPOLEI PUBLIC LIBRARY	NONPOTABLE	OAHU	EWA CAPROCK	0.00796	0.00796	0.00796	0.00796	0.00796	0.00796	0.00796	0.00796	9-1-16: 01

STATE WATER PROJECTS PLAN
PROJECTED WATER REQUIREMENTS BY DEPARTMENT

				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)								
	PRIMARY			02001	02002	02003	02004	02005	02010	02015	02020	
PROJECT NAME	USE	ISLAND	SECTOR	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	TMK
			SWPP Statewide Project Demand Total=	12.19	18.10	25.22	26.59	33.20	69.42	76.55	80.87	
KAMAMALU BUILDING RENOVATIONS	POTABLE	OAHU	HONOLULU								0.00250	2-1-17:10
PLANNING BRANCH CONT.												
LILIHA CIVIC CENTER	POTABLE	OAHU	HONOLULU						0.01007	0.01007	0.01007	NR
LILIHA CIVIC CENTER	NONPOTABLE USING POTABLE	OAHU	HONOLULU						0.00893	0.00893	0.00893	NR
MANOA PUBLIC LIBRARY	POTABLE	OAHU	HONOLULU	0.00067	0.00067	0.00067	0.00067	0.00067	0.00067	0.00067	0.00067	NR
MANOA PUBLIC LIBRARY	NONPOTABLE USING POTABLE	OAHU	HONOLULU	0.00143	0.00143	0.00143	0.00143	0.00143	0.00143	0.00143	0.00143	NR
QUEEN LILIUOKALANI BLDG. EXPANSION	POTABLE	OAHU	HONOLULU			0.00160	0.00160	0.00160	0.00160	0.00160	0.00160	2-1-18:16
STATE CAPITOL ANNEX (REPLACE DOH BUILDING)	POTABLE	OAHU	HONOLULU						0.00750	0.00750	0.00750	2-1-18: 46
MILILANI MAUKA II ELEM SCH, FIRST INCREMENT	POTABLE	OAHU	PEARL HARBOR			0.05160	0.05160	0.05160	0.05160	0.05160	0.05160	
PEARL CITY HIGHLANDS ELEMENTARY SCHOOL, BUILDING E, SHOWER AND TOILET	POTABLE	OAHU	PEARL HARBOR	0.00005	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	9-7-36:122
WAIPAHU ELEM SCH, DRAINAGE IMPROVEMENTS	POTABLE	OAHU	PEARL HARBOR	0.00160	0.00160	0.00160	0.00160	0.00160	0.00160	0.00160	0.00160	9-4-29:01
NANAKULI ELEM SCHOOL, 8-CLASSROOM BLDG.	POTABLE	OAHU	WAIANAE	0.00129	0.00258	0.00258	0.00258	0.00258	0.00258	0.00258	0.00258	8-9-7:9
NANAKULI PUBLIC LIBRARY	POTABLE	OAHU	WAIANAE						0.00151	0.00151	0.00151	NR
NANAKULI PUBLIC LIBRARY	NONPOTABLE USING POTABLE	OAHU	WAIANAE						0.00643	0.00643	0.00643	NR
KANEOHE CIVIC CENTER	POTABLE	OAHU	WINDWARD						0.00065	0.00065	0.00065	NR
KANEOHE CIVIC CENTER	NONPOTABLE USING POTABLE	OAHU	WINDWARD						0.00112	0.00112	0.00112	NR
KANEOHE DISTRICT COURT	POTABLE	OAHU	WINDWARD		0.00099	0.00099	0.00099	0.00099	0.00099	0.00099	0.00198	NR
KANEOHE DISTRICT COURT	NONPOTABLE USING POTABLE	OAHU	WINDWARD		0.00201	0.00201	0.00201	0.00201	0.00201	0.00201	0.00402	NR
			DAGS SUBTOTAL=	**0.12449**	**0.60640**	**0.69071**	**0.77514**	**0.77514**	**0.95686**	**0.95686**	**0.99736**	

STATE WATER PROJECTS PLAN
PROJECTED WATER REQUIREMENTS BY DEPARTMENT

				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)								
	PRIMARY			02001	02002	02003	02004	02005	02010	02015	02020	
PROJECT NAME	USE	ISLAND	SECTOR	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	TMK
			SWPP Statewide Project Demand Total=	12.19	18.10	25.22	26.59	33.20	69.42	76.55	80.87	
DEPARTMENT OF AGRICULTURE												
WAIMEA IRRIGATION SYSTEM	NONPOTABLE	HAWAII	KOHALA	1.82500	1.82500	1.82500	1.82500	1.82500	1.82500	1.82500	1.82500	NR
FUTURE SUBDIVISION IN HONOKAA	NONPOTABLE	HAWAII	WEST MAUNA KEA						7.00000	7.00000	7.00000	VARIOUS
FUTURE SUBDIVISION IN PAAUILO	NONPOTABLE	HAWAII	WEST MAUNA KEA						1.25000	1.25000	1.25000	6-3-6
FUTURE SUBDIVISION IN WAIMEA	NONPOTABLE	HAWAII	WEST MAUNA KEA						0.80000	0.80000	0.80000	6-3-6
WAIMEA/PAAUILO WATERSHED PROJECT	NONPOTABLE	HAWAII	WEST MAUNA KEA						4.00000	4.00000	4.00000	
LANAI AGRICULTURAL PARK	NONPOTABLE	LANAI	CENTRAL						0.50000	0.50000	0.50000	4-9
LOWER KULA WATERSHED PROJECT	NONPOTABLE	MAUI	CENTRAL					6.00000	6.00000	6.00000	6.00000	
UPCOUNTRY MAUI IRRIGATION PROJECT	NONPOTABLE	MAUI	CENTRAL	3.61000	3.61000	3.61000	3.61000	3.61000	3.61000	3.61000	3.61000	2-2, 2-3
FUTURE SUBDIVISION IN PALAAU	NONPOTABLE	MOLOKAI	CENTRAL						1.50000	1.50000	1.50000	5-2-1
MOLOKAI AGRICULTURAL PARK	NONPOTABLE	MOLOKAI	CENTRAL	1.32000	1.32000	1.32000	1.32000	1.32000	1.32000	1.32000	1.32000	5-2-1
BARBERS POINT AGRICULTURAL PARK	POTABLE	OAHU	PEARL HARBOR								0.15500	9-1-31:01 POR, 25,26,37 POR
FUTURE SUBDIVISION IN WAIKELE	NONPOTABLE	OAHU	PEARL HARBOR						5.50000	5.50000	5.50000	VARIOUS
ROYAL KUNIA AGRICULTURAL PARK	POTABLE	OAHU	PEARL HARBOR			0.00999	0.00999	0.00999	0.00999	0.00999	0.00999	9-4-02
ROYAL KUNIA AGRICULTURAL PARK	NONPOTABLE	OAHU	PEARL HARBOR			0.74997	0.74997	0.74997	0.74997	0.74997	0.74997	9-4-02
WAIMANALO IRRIGATION SYSTEM	NONPOTABLE	OAHU	WINDWARD	0.75000	1.00000	1.25000	1.25000	1.25000	1.25000	1.25000	1.25000	NR
			DOA SUBTOTAL=	7.50500	7.75500	8.76496	8.76496	14.76496	35.31496	35.31496	35.46996	

STATE WATER PROJECTS PLAN
PROJECTED WATER REQUIREMENTS BY DEPARTMENT

				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)								
	PRIMARY			02001	02002	02003	02004	02005	02010	02015	02020	
PROJECT NAME	USE	ISLAND	SECTOR	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	TMK
			SWPP Statewide Project Demand Total=	12.19	18.10	25.22	26.59	33.20	69.42	76.55	80.87	
DEPARTMENT OF BUSINESS ECONOMIC DEVELOPMENT & TOURISM												
ALOHA TOWER DEVELOPMENT CORPORATION												
ALOHA TOWER DEVELOPMENT	POTABLE	OAHU	HONOLULU		0.09300	0.09300	0.09300	0.09300	0.13400	0.13400	0.13400	NR
BARBERS POINT NAVAL AIR STATION REDEVELOPMENT COMMISION												
KALAELOA COMMUNITY DEVELOPMENT DISTRICT (NONPOTABLE)	NONPOTABLE	OAHU	EWA CAPROCK						1.21	1.21	1.21	NR
KALAELOA COMMUNITY DEVELOPMENT DISTRICT (POTABLE)	POTABLE	OAHU	EWA CAPROCK						0.431	0.431	0.431	NR
CONVENTION CENTER AUTHORITY												
HAWAII CONVENTION CENTER	POTABLE	OAHU	HONOLULU	0.10000	0.15000	0.20000	0.25000	0.30000	0.30000	0.30000	0.30000	NR
HAWAII COMMUNITY DEVELOPMENT AUTHORITY												
BISHOP LEARNING SCIENCE CENTER	POTABLE	OAHU	HONOLULU				0.01000	0.01000	0.01000	0.01000	0.01000	2-1-60: 2
BISHOP LEARNING SCIENCE CENTER	NONPOTABLE USING POTABLE	OAHU	HONOLULU				0.00918	0.00918	0.00918	0.00918	0.00918	2-1-60: 2
COMMERCIAL PROJECT (LOT 1)	POTABLE	OAHU	HONOLULU				0.01385	0.01385	0.01385	0.01385	0.01385	2-1-15: POR. 9
COMMERCIAL PROJECT (LOT 1)	NONPOTABLE USING POTABLE	OAHU	HONOLULU				0.00420	0.00420	0.00420	0.00420	0.00420	2-1-15: POR. 9
COMMERCIAL PROJECT (LOT 2)	POTABLE	OAHU	HONOLULU				0.03593	0.03593	0.03593	0.03593	0.03593	2-1-15: POR. 9
COMMERCIAL PROJECT (LOT 2)	NONPOTABLE USING POTABLE	OAHU	HONOLULU				0.00440	0.00440	0.00440	0.00440	0.00440	2-1-15: POR. 9
HISTORIC PUMP STATION (LOT 5)	POTABLE	OAHU	HONOLULU			0.05273	0.05273	0.05273	0.05273	0.05273	0.05273	2-1-15: 43,44, POR. 9
HISTORIC PUMP STATION (LOT 5)	NONPOTABLE USING POTABLE	OAHU	HONOLULU			0.00328	0.00328	0.00328	0.00328	0.00328	0.00328	2-1-15: 43,44, POR. 9
JOHN A. BURNS SCHOOL OF MEDICINE	POTABLE	OAHU	HONOLULU					0.06360	0.06360	0.06360	0.06360	2-1-60: 9, 10
JOHN A. BURNS SCHOOL OF MEDICINE	NONPOTABLE USING POTABLE	OAHU	HONOLULU					0.01550	0.01550	0.01550	0.01550	2-1-60: 9, 10
KAKAAKO MAUKA PARK (QUEEN STREET)	NONPOTABLE USING POTABLE	OAHU	HONOLULU			0.00608	0.00608	0.00608	0.00608	0.00608	0.00608	2-3-07: 2
KAKAAKO WATERFRONT PARK IMPROVEMENTS	NONPOTABLE USING POTABLE	OAHU	HONOLULU				0.00916	0.00916	0.00916	0.00916	0.00916	2-1-60: POR 8, 3
KEWALO BASIN RETAIL/MARKET	POTABLE	OAHU	HONOLULU				0.02000	0.02000	0.02000	0.02000	0.02000	2-1-58: 1, 95
KEWALO BASIN RETAIL/MARKET	NONPOTABLE USING POTABLE	OAHU	HONOLULU				0.00916	0.00916	0.00916	0.00916	0.00916	2-1-58: 1, 95
PARKING STRUCTURE	NONPOTABLE USING POTABLE	OAHU	HONOLULU					0.00680	0.00680	0.00680	0.00680	2-1-60: 5, 6

STATE WATER PROJECTS PLAN
PROJECTED WATER REQUIREMENTS BY DEPARTMENT

				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)								
	PRIMARY			02001	02002	02003	02004	02005	02010	02015	02020	
PROJECT NAME	USE	ISLAND	SECTOR	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	TMK
			SWPP Statewide Project Demand Total=	12.19	18.10	25.22	26.59	33.20	69.42	76.55	80.87	
HOUSING AND COMMUNITY & DEVELOPMENT CORPORATION OF HAWAII												
KEALAKEHE PLANNED COMMUNITY (LA'I'OPUA)	POTABLE	HAWAII	HUALALAI	0.29310	0.39080	0.48850	0.58650	0.68400	0.97700	1.46550	2.46204	7-4-20:1-06;7-4-21:1-19;7-4-8:POR56
KEALAKEHE PLANNED COMMUNITY (LA'I'OPUA)	NONPOTABLE USING POTABLE	HAWAII	HUALALAI	0.00690	0.00920	0.01150	0.01350	0.01600	0.02300	0.03450	0.05796	7-4-20:1-06;7-4-21:1-19;7-4-8:POR56
LAHAINA MASTER PLAN	POTABLE	MAUI	LAHAINA	0.04840	0.31240	0.61160	0.65560	0.69960	0.74360	0.87560	1.00760	4-5-21:03
LAHAINA MASTER PLAN	NONPOTABLE USING POTABLE	MAUI	LAHAINA	0.06160	0.39760	0.77840	0.83440	0.89040	0.94641	1.00440	1.28240	4-5-21:03
EAST KAPOLEI	POTABLE	OAHU	EWA CAPROCK					0.07500	0.47500	2.39900	3.81300	9-1-16:108,109
VILLAGES OF KAPOLEI	POTABLE	OAHU	EWA CAPROCK		0.19300	0.51800	0.53000	0.53000	0.68000	0.68000	0.68000	9-1-16:23,25
CIVIC CENTER RENTAL HOUSING	POTABLE	OAHU	HONOLULU	0.05490	0.05490	0.05490	0.05490	0.05490	0.05490	0.05490	0.05490	1-5-7:1
ELDERLY RESIDENTIAL COMPLEX AT IWILEI	POTABLE	OAHU	HONOLULU					0.05100	0.05100	0.05100	0.05100	7:1,2,14,15,18,66,67,69,71,74,75,78-84
ELDERLY RESIDENTIAL COMPLEX AT IWILEI	POTABLE	OAHU	HONOLULU					0.00900	0.00900	0.00900	0.00900	7:1,2,14,15,18,66,67,69,71,74,75,78-84
KAM HOMES ELDERLY	POTABLE	OAHU	HONOLULU						0.02250	0.02250	0.02250	NR
KUHIO PARK TERRACE COMMUNITY PARK CTR	POTABLE	OAHU	HONOLULU	0.00458	0.00458	0.00458	0.00458	0.00458	0.00458	0.00458	0.00458	1-3-39:01
PALAMA ELDERLY HOUSING	POTABLE	OAHU	HONOLULU	0.01640	0.01640	0.01640	0.01640	0.01640	0.01640	0.01640	0.01640	1-7-44:94,97
POHUKAINA MIXED USE	POTABLE	OAHU	HONOLULU						0.11500	0.11500	0.11500	2-1-51:09
CROWN COMMERCIAL	POTABLE	OAHU	PEARL HARBOR						0.01360	0.01360	0.01360	9-4-17:53,54
CROWN III	POTABLE	OAHU	PEARL HARBOR						0.04320	0.04320	0.04320	9-4-17:1,58
CROWN IV	POTABLE	OAHU	PEARL HARBOR						0.02400	0.02400	0.02400	9-4-17:1,58
WAIANAE LOW INCOME HOUSING	POTABLE	OAHU	WAIANAE	0.03700	0.03700	0.03700	0.03700	0.03700	0.03700	0.03700	0.03700	8-5-28:POR42
NATURAL ENERGY LABORATORY OF HAWAII AUTHORITY												
NATURAL ENERGY LABORATORY OF HAWAII	POTABLE	HAWAII	HUALALAI	0.40000	0.60000	0.80000	0.90000	0.90000	1.50000	1.60000	1.80000	7-3-43:POR 4, 5
			DBEDT SUBTOTAL=	1.02288	2.25888	3.67597	4.15385	4.62475	8.07506	10.78905	13.83305	

STATE WATER PROJECTS PLAN
PROJECTED WATER REQUIREMENTS BY DEPARTMENT

				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)								
	PRIMARY			02001	02002	02003	02004	02005	02010	02015	02020	
PROJECT NAME	USE	ISLAND	SECTOR	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	TMK
			SWPP Statewide Project Demand Total=	12.19	18.10	25.22	26.59	33.20	69.42	76.55	80.87	
DEPARTMENT OF DEFENSE												
WAIMEA READINESS CENTER	POTABLE	HAWAII	KOHALA			0.00115	0.00115	0.00115	0.00115	0.00115	0.00115	6-6-03
MAUI CONSOLIDATED FACILITIES	POTABLE	MAUI	WAILUKU		0.00150	0.00150	0.00150	0.00150	0.00150	0.00150	0.00150	3-8-8
KALAELOA TRAINING FACILITY/ARMORY	POTABLE	OAHU	EWA CAPROCK	0.71710	0.71710	0.71710	0.71710	0.71710	0.71710	0.71710	0.71710	NR
KALAELOA TRAINING FACILITY/ARMORY	NONPOTABLE USING POTABLE	OAHU	EWA CAPROCK	0.01050	0.01050	0.01050	0.01050	0.01050	0.01050	0.01050	0.01050	NR
HAWAII VETERANS CENTER	POTABLE	OAHU	PEARL HARBOR	0.00180	0.00180	0.00180	0.00180	0.00180	0.00180	0.00180	0.00180	9-9-03
REGIONAL TRAINING INSTITUTE	POTABLE	OAHU	WINDWARD	0.00184	0.00184	0.00184	0.00184	0.00184	0.00184	0.00184	0.00184	NR
REGIONAL TRAINING INSTITUTE	NONPOTABLE USING POTABLE	OAHU	WINDWARD	0.05946	0.05946	0.05946	0.05946	0.05946	0.05946	0.05946	0.05946	NR
			DOD SUBTOTAL=	0.79070	0.79220	0.79335	0.79335	0.79335	0.79335	0.79335	0.79335	

STATE WATER PROJECTS PLAN
PROJECTED WATER REQUIREMENTS BY DEPARTMENT

				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)								
	PRIMARY			02001	02002	02003	02004	02005	02010	02015	02020	
PROJECT NAME	USE	ISLAND	SECTOR	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	TMK
			SWPP Statewide Project Demand Total=	12.19	18.10	25.22	26.59	33.20	69.42	76.55	80.87	
DEPARTMENT OF EDUCATION												
HAAHEO ELEMENTARY NEW 4 CLASSROOM	POTABLE	HAWAII	EAST MAUNA KEA			0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	2-6-020:038
HAAHEO ELEMENTARY NEW CAFETERIA	POTABLE	HAWAII	EAST MAUNA KEA						0.00060	0.00060	0.00060	2-6-020: 038
HAAHEO ELEMENTARY NEW LIBRARY	POTABLE	HAWAII	EAST MAUNA KEA			0.00046	0.00046	0.00046	0.00046	0.00046	0.00046	2-6-020: 038
HONOKAA ELEMENTARY NEW 4 CLASSROOM	POTABLE	HAWAII	EAST MAUNA KEA			0.00720	0.00720	0.00720	0.00720	0.00720	0.00720	4-5-003: 020
HONOKAA ELEMENTARY NEW ADMINISTRATION	POTABLE	HAWAII	EAST MAUNA KEA			0.00031	0.00031	0.00031	0.00031	0.00031	0.00031	4-5-003: 020
HONOKAA HIGH SCHOOL NEW 15 CLASSROOM	POTABLE	HAWAII	EAST MAUNA KEA			0.00093	0.00093	0.00093	0.00093	0.00093	0.00093	4-5-003: 020
HONOKAA HIGH SCHOOL NEW 6 CLASSROOM	POTABLE	HAWAII	EAST MAUNA KEA			0.00037	0.00037	0.00037	0.00037	0.00037	0.00037	4-5-003: 020
KALANIANIOLE ELEM 8-CLASSROOM BUILDING	POTABLE	HAWAII	EAST MAUNA KEA						0.00050	0.00050	0.00050	2-7-22:2,3, 2-7-25:4
LAPAHOEHOE HIGH/ELEM NEW BAND/CHORUS	POTABLE	HAWAII	EAST MAUNA KEA	0.00043	0.00043	0.00043	0.00043	0.00043	0.00043	0.00043	0.00043	3-5-004: 059
HOLUALOA ELEM NEW LIBRARY/ADMINISTRATION	POTABLE	HAWAII	HUALALAI	0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	7-6-004: 002
HOLUALOA ELEMENTARY NEW 6 CLASSROOM	POTABLE	HAWAII	HUALALAI			0.01080	0.01080	0.01080	0.01080	0.01080	0.01080	7-6-004: 002
KEALAKEHE ELEM - PLAYFIELD/RETENTION BASIN	NONPOTABLE USING POTABLE	HAWAII	HUALALAI		0.01200	0.01200	0.01200	0.01200	0.01200	0.01200	0.01200	7-4-019:044
KEALAKEHE ELEM NEW LIBRARY/ADMIN	POTABLE	HAWAII	HUALALAI			0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	7-4-008: 015
KEALAKEHE ELEMENTARY NEW 6 CLASSROOM	POTABLE	HAWAII	HUALALAI		0.00037	0.00037	0.00037	0.00037	0.00037	0.00037	0.00037	7-4-008: 015
KEALAKEHE HIGH SCHOOL NEW 13 CLASSROOM	POTABLE	HAWAII	HUALALAI	0.00081	0.00081	0.00081	0.00081	0.00081	0.00081	0.00081	0.00081	7-4-20: 8
KEALAKEHE II ELEM 1ST & 2ND INCRE	POTABLE	HAWAII	HUALALAI			0.06000	0.06000	0.06000	0.06000	0.06000	0.06000	NEW
KEALAKEHE INTER SCH NEW LIBRARY/ADMIN	POTABLE	HAWAII	HUALALAI	0.00102	0.00102	0.00102	0.00102	0.00102	0.00102	0.00102	0.00102	7-4-008: 015
KEALAKEHE INTER SCHOOL NEW 8 CLASSROOM	POTABLE	HAWAII	HUALALAI			0.01440	0.01440	0.01440	0.01440	0.01440	0.01440	7-4-008: 015
HAWAIIAN PARADISE PARK ELEMENTARY SCHOOL	POTABLE	HAWAII	KILAUEA			0.06000	0.06000	0.06000	0.06000	0.06000	0.06000	NEW
KAU HIGH SCH&PAHALA ELEM SCH 10-CLSRM BLD	POTABLE	HAWAII	KILAUEA			0.01800	0.01800	0.01800	0.01800	0.01800	0.01800	9-6-5:8,9
KAU HIGH SCH&PAHALA ELEM SCH 3-CLSRM BLD	POTABLE	HAWAII	KILAUEA			0.00019	0.00019	0.00019	0.00019	0.00019	0.00019	9-6-5:8,9
KAU HIGH SCHOOL PAHALA NEW 12 CLASSROOM	POTABLE	HAWAII	KILAUEA			0.00074	0.00074	0.00074	0.00074	0.00074	0.00074	9-6-005: 008
KEAAU HIGH SCHOOL 2ND INCREMENT	POTABLE	HAWAII	KILAUEA	0.04800	0.04800	0.04800	0.04800	0.04800	0.04800	0.04800	0.04800	NEW
KEAAU HIGH SCHOOL 3RD INCREMENT	POTABLE	HAWAII	KILAUEA	0.01200	0.01200	0.01200	0.01200	0.01200	0.01200	0.01200	0.01200	NEW
KEAAU HIGH SCHOOL 4TH INCREMENT	POTABLE	HAWAII	KILAUEA	0.00960	0.00960	0.00960	0.00960	0.00960	0.00960	0.00960	0.00960	NEW
KEAAU INTERMEDIATE NEW 8 CLASSROOM	POTABLE	HAWAII	KILAUEA			0.00050	0.00043	0.00043	0.00043	0.00043	0.00043	7-6-3: 59
KEAAU INTERMEDIATE NEW ADMINISTRATION	POTABLE	HAWAII	KILAUEA			0.00043	0.00043	0.00043	0.00043	0.00043	0.00043	7-6-3: 59

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PROJECTED WATER REQUIREMENTS BY DEPARTMENT

				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)								
	PRIMARY			02001	02002	02003	02004	02005	02010	02015	02020	
PROJECT NAME	USE	ISLAND	SECTOR	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	TMK
			SWPP Statewide Project Demand Total=	12.19	18.10	25.22	26.59	33.20	69.42	76.55	80.87	
KEAAU INTERMEDIATE SCHOOL NEW BAND BLDG	POTABLE	HAWAII	KILAUEA	0.00040	0.00040	0.00040	0.00040	0.00040	0.00040	0.00040	0.00040	7-6-3: 59
DEPARTMENT OF EDUCATION CONT.												
KEONEPOKO ELEM NEW LIBRARY/ADMINISTRATN	POTABLE	HAWAII	KILAUEA	0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	1-5-009: 009
KEONEPOKO ELEM SCHOOL NEW 4 CLASSROOM	POTABLE	HAWAII	KILAUEA			0.00720	0.00720	0.00720	0.00720	0.00720	0.00720	1-5-009: 009
MOUNTAIN VIEW ELEM NEW 12 CLASSROOM	POTABLE	HAWAII	KILAUEA			0.00074	0.00074	0.00074	0.00074	0.00074	0.00074	1-8-001: 007
MOUNTAIN VIEW ELEM NEW ADMINISTRATION	POTABLE	HAWAII	KILAUEA			0.00031	0.00031	0.00031	0.00031	0.00031	0.00031	1-8-001: 007
PAHOA ELEMENTARY NEW 10 CLASSROOM	POTABLE	HAWAII	KILAUEA			0.00062	0.00062	0.00062	0.00062	0.00062	0.00062	1-5-114: 025
PAHOA ELEMENTARY NEW ADMINISTRATION	POTABLE	HAWAII	KILAUEA	0.00031	0.00031	0.00031	0.00031	0.00031	0.00031	0.00031	0.00031	1-5-114: 025
PAHOA HIGH SCHOOL NEW ADMINISTRATION	POTABLE	HAWAII	KILAUEA			0.00046	0.00046	0.00046	0.00046	0.00046	0.00046	2-4-001: 015
PAHOA HIGH SCHOOL NEW GYMNASIUM	POTABLE	HAWAII	KILAUEA			0.00400	0.00400	0.00400	0.00400	0.00400	0.00400	2-4-001: 015
KOHALA ELEM NEW LIBRARY/ADMINISTRATION	POTABLE	HAWAII	KOHALA			0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	5-4-007: 014
KOHALA ELEMENTARY NEW 4 CLASSROOM	POTABLE	HAWAII	KOHALA			0.00720	0.00720	0.00720	0.00720	0.00720	0.00720	5-4-007: 014
KOHALA HIGH SCHOOL NEW 4 CLASSROOM	POTABLE	HAWAII	KOHALA			0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	5-4-007: 014
KOHALA HIGH SCHOOL NEW AUTO/TECH SHOP	POTABLE	HAWAII	KOHALA			0.00041	0.00041	0.00041	0.00041	0.00041	0.00041	5-4-007: 014
KOHALA HIGH SCHOOL NEW MUSIC BUILDING	POTABLE	HAWAII	KOHALA			0.00043	0.00043	0.00043	0.00043	0.00043	0.00043	5-4-007: 014
CHIEFESS KAPIOLANI ELEM 4-CLASSROOM BLDG	POTABLE	HAWAII	NORTH EAST MAUNA LOA						0.00025	0.00025	0.00025	2-2-20:1
DESILVA ELEM SCHOOL 4-CLASSROOM BUILDING	POTABLE	HAWAII	NORTH EAST MAUNA LOA						0.00025	0.00025	0.00025	2-5-8:13
DeSILVA ELEMENTARY NEW ADMINISTRATION	POTABLE	HAWAII	NORTH EAST MAUNA LOA			0.00031	0.00031	0.00031	0.00031	0.00031	0.00031	2-5-008:013
HILO HIGH SCHOOL 4-CLASSROOM BUILDING	POTABLE	HAWAII	NORTH EAST MAUNA LOA			0.00720	0.00720	0.00720	0.00720	0.00720	0.00720	2-3-15:1,26
HILO HIGH SCHOOL NEW ADMINISTRATION	POTABLE	HAWAII	NORTH EAST MAUNA LOA			0.00046	0.00046	0.00046	0.00046	0.00046	0.00046	2-3-015: 001
HILO HIGH SCHOOL NEW GYMNASIUM	POTABLE	HAWAII	NORTH EAST MAUNA LOA			0.00400	0.00400	0.00400	0.00400	0.00400	0.00400	2-3-015: 001
HILO INTERMEDIATE - RENOVATE BLDG A PHASE 1 & 2 ADMIN, LIBRARY, 35 CLASSROOMS	POTABLE	HAWAII	NORTH EAST MAUNA LOA			0.00317	0.00317	0.00317	0.00317	0.00317	0.00317	2-3-021: 058
HILO UNION NEW 6 CLASSROOM	POTABLE	HAWAII	NORTH EAST MAUNA LOA			0.00037	0.00037	0.00037	0.00037	0.00037	0.00037	2-3-016: 037
KALANIANIOLE ELEMENTARY NEW LIBRARY	POTABLE	HAWAII	NORTH EAST MAUNA LOA			0.00046	0.00046	0.00046	0.00046	0.00046	0.00046	2-7-022: 002
KAUMANA ELEMENTARY NEW 4 CLASSROOM	POTABLE	HAWAII	NORTH EAST MAUNA LOA			0.00720	0.00720	0.00720	0.00720	0.00720	0.00720	2-5-005: 084
KEAAU HIGH SCHOOL (1ST INCREMENT)	POTABLE	HAWAII	NORTH EAST MAUNA LOA	0.02400	0.02400	0.02400	0.02400	0.02400	0.02400	0.02400	0.02400	1-6-003:003
KEAAU II ELEMENTARY SCHOOL 2ND INCREMENT	POTABLE	HAWAII	NORTH EAST MAUNA LOA	0.02700	0.02700	0.02700	0.02700	0.02700	0.02700	0.02700	0.02700	1-6-003: 008
KEAUKAHA ELEM NEW LIBRARY/ADMINISTRATION	POTABLE	HAWAII	NORTH EAST MAUNA LOA			0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	2-1-020: 001

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				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)								
	PRIMARY			02001	02002	02003	02004	02005	02010	02015	02020	
PROJECT NAME	USE	ISLAND	SECTOR	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	TMK
			SWPP Statewide Project Demand Total=	12.19	18.10	25.22	26.59	33.20	69.42	76.55	80.87	
KEAUKAHA ELEMENTARY NEW CAFETERIA	POTABLE	HAWAII	NORTH EAST MAUNA LOA	0.00108	0.00108	0.00108	0.00108	0.00108	0.00108	0.00108	0.00108	2-1-020: 001
WAIAKEA ELEM NEW LIBRARY/ADMINISTRATION	POTABLE	HAWAII	NORTH EAST MAUNA LOA		0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	2-4-001: 015
DEPARTMENT OF EDUCATION CONT.												
WAIAKEA INTER NEW PE LOCKER/SHOWER	POTABLE	HAWAII	NORTH EAST MAUNA LOA			0.00042	0.00042	0.00042	0.00042	0.00042	0.00042	2-4-001: 015
WAIAKEAWAENA ELEMENTARY NEW CAFETERIA	POTABLE	HAWAII	NORTH EAST MAUNA LOA	0.00285	0.00285	0.00285	0.00285	0.00285	0.00285	0.00285	0.00285	2-2-042: 017
MOUNTAIN VIEW ELEMENTARY SCH CAFETERIA	POTABLE	HAWAII	SOUTH EAST MAUNA LOA	0.00285	0.00285	0.00285	0.00285	0.00285	0.00285	0.00285	0.00285	1-8-01:07
NAALEHU ELEMENTARY NEW 6 CLASSROOM	POTABLE	HAWAII	SOUTH EAST MAUNA LOA			0.01080	0.01080	0.01080	0.01080	0.01080	0.01080	9-5-009: 006
NAALEHU ELEMENTARY NEW LIBRARY	POTABLE	HAWAII	SOUTH EAST MAUNA LOA			0.00046	0.00046	0.00046	0.00046	0.00046	0.00046	9-5-009: 006
HONAUNAU ELEM NEW LIBRARY/ADMINISTRATION	POTABLE	HAWAII	SOUTH WEST MAUNA LOA			0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	8-3-013: 021
HONAUNAU ELEMENTARY NEW CAFETERIA	POTABLE	HAWAII	SOUTH WEST MAUNA LOA			0.00090	0.00090	0.00090	0.00090	0.00090	0.00090	8-3-013: 021
HOOKENA ELEMENTARY NEW 8 CLASSROOM	POTABLE	HAWAII	SOUTH WEST MAUNA LOA	0.00050	0.00050	0.00050	0.00050	0.00050	0.00050	0.00050	0.00050	8-6-010: 009
HOOKENA ELEMENTARY NEW ADMINISTRATION	POTABLE	HAWAII	SOUTH WEST MAUNA LOA			0.00031	0.00031	0.00031	0.00031	0.00031	0.00031	8-6-010: 009
HOOKENA ELEMENTARY NEW LIBRARY	POTABLE	HAWAII	SOUTH WEST MAUNA LOA		0.00151	0.00151	0.00151	0.00151	0.00151	0.00151	0.00151	8-6-010: 009
HOOKENA ELEMENTARY SCHOOL CAFETERIA	POTABLE	HAWAII	SOUTH WEST MAUNA LOA		0.00093	0.00093	0.00093	0.00093	0.00093	0.00093	0.00093	8-6-10:9,12
KONAWAENA HIGH SCHOOL NEW LIBRARY	POTABLE	HAWAII	SOUTH WEST MAUNA LOA			0.00088	0.00088	0.00088	0.00088	0.00088	0.00088	8-1-002: 038
KONAWAENA INTER - RENOVATE 12 CLASSROOMS	POTABLE	HAWAII	SOUTH WEST MAUNA LOA	0.00074	0.00074	0.00074	0.00074	0.00074	0.00074	0.00074	0.00074	8-1-002:038,068
KONAWAENA INTER SCHOOL NEW ADMINISTRATN	POTABLE	HAWAII	SOUTH WEST MAUNA LOA			0.00043	0.00043	0.00043	0.00043	0.00043	0.00043	8-1-002: 038
KONAWAENA MIDDLE SCH - RENOV 17 CLASSRMS	POTABLE	HAWAII	SOUTH WEST MAUNA LOA		0.00153	0.00153	0.00153	0.00153	0.00153	0.00153	0.00153	NR
KONAWAENA MID SCH, NEW PE LOCKR&SHOWR	POTABLE	HAWAII	SOUTH WEST MAUNA LOA				0.00120	0.00120	0.00120	0.00120	0.00120	8-1-2: 38
WAIKOLOA ELEM SCH 3RD INCR 8 CLSRM/LIBRY	POTABLE	HAWAII	WEST MAUNA KEA	0.00095	0.00095	0.00095	0.00095	0.00095	0.00095	0.00095	0.00095	6-8-2:31
WAIMEA ELEMENTARY 1ST INCREMENT	POTABLE	HAWAII	WEST MAUNA KEA			0.03600	0.03600	0.03600	0.03600	0.03600	0.03600	6-7-002: 015
WAIMEA ELEMENTARY 2ND INCREMENT	POTABLE	HAWAII	WEST MAUNA KEA			0.02400	0.02400	0.02400	0.02400	0.02400	0.02400	6-7-002: 015
WAIMEA INTER NEW PE LOCKER/SHOWER	POTABLE	HAWAII	WEST MAUNA KEA			0.00042	0.00042	0.00042	0.00042	0.00042	0.00042	6-7-002: 015
WAIMEA INTERMEDIATE NEW 8 CLASSROOM	POTABLE	HAWAII	WEST MAUNA KEA		0.00050	0.00050	0.00050	0.00050	0.00050	0.00050	0.00050	6-7-002: 015
WAIMEA INTERMEDIATE NEW MUSIC BUILDING	POTABLE	HAWAII	WEST MAUNA KEA			0.00040	0.00040	0.00040	0.00040	0.00040	0.00040	6-7-002: 015
KALAHEO ELEMENTARY NEW ADMININISTRATION	POTABLE	KAUAI	LIHUE	0.00031	0.00031	0.00031	0.00031	0.00031	0.00031	0.00031	0.00031	2-3-002: 005
KAPAA ELEMENTARY NEW ADMINISTRATION	POTABLE	KAUAI	LIHUE			0.00031	0.00031	0.00031	0.00031	0.00031	0.00031	4-6-014: 031
KAPAA ELEMENTARY NEW LIBRARY	POTABLE	KAUAI	LIHUE			0.00046	0.00046	0.00046	0.00046	0.00046	0.00046	4-6-014: 031

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				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)								
	PRIMARY			02001	02002	02003	02004	02005	02010	02015	02020	
PROJECT NAME	USE	ISLAND	SECTOR	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	TMK
			SWPP Statewide Project Demand Total=	12.19	18.10	25.22	26.59	33.20	69.42	76.55	80.87	
KAPAA HIGH SCHOOL NEW ADMINISTRATION	POTABLE	KAUAI	LIHUE			0.00046	0.00046	0.00046	0.00046	0.00046	0.00046	4-6-014: 031
KAPAA II ELEM SCH IST & 2ND INCREMENT	POTABLE	KAUAI	LIHUE			0.02000	0.02000	0.02000	0.02000	0.02000	0.02000	NEW
KAPAA II ELEM SCH IST & 2ND INCREMENT	NONPOTABLE USING POTABLE	KAUAI	LIHUE			0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	NEW
DEPARTMENT OF EDUCATION CONT.												
KAUAI INTERMEDIATE (BALANCE OF INCREMENTS)	POTABLE	KAUAI	LIHUE	0.04200	0.04200	0.04200	0.04200	0.04200	0.04200	0.04200	0.04200	NR
KILAUEA ELEMENTARY NEW ADMINISTRATION	POTABLE	KAUAI	LIHUE	0.00031	0.00031	0.00031	0.00031	0.00031	0.00031	0.00031	0.00031	5-2-009: 006
KILAUEA ELEMENTARY NEW CAFETERIA	POTABLE	KAUAI	LIHUE			0.00150	0.00150	0.00150	0.00150	0.00150	0.00150	5-2-009: 006
KILAUEA ELEMENTARY NEW LIBRARY	POTABLE	KAUAI	LIHUE			0.00046	0.00046	0.00046	0.00046	0.00046	0.00046	5-2-009: 006
KING KAUMUALII ELEM ADMIN BUILDING	POTABLE	KAUAI	LIHUE	0.00031	0.00031	0.00031	0.00031	0.00031	0.00031	0.00031	0.00031	3-7-03:06, POR 20
KOLOA ELEMENTARY NEW 6 CLASSROOM	POTABLE	KAUAI	LIHUE			0.00360	0.00360	0.00360	0.00360	0.00360	0.00360	2-8-010: 011
KOLOA ELEMENTARY NEW 6 CLASSROOM	NONPOTABLE USING POTABLE	KAUAI	LIHUE			0.00750	0.00750	0.00750	0.00750	0.00750	0.00750	2-8-010: 011
KUKUIULA ELEMENTARY SCHOOL	POTABLE	KAUAI	LIHUE						0.03300	0.03300	0.03300	NR
LIHUE/PUHI ELEM SCHOOL IST & 2ND INCREMENT	POTABLE	KAUAI	LIHUE			0.02000	0.02000	0.02000	0.02000	0.02000	0.02000	NEW
LIHUE/PUHI ELEM SCHOOL IST & 2ND INCREMENT	NONPOTABLE USING POTABLE	KAUAI	LIHUE			0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	NEW
WAIMEA HIGH SCHOOL NEW LIBRARY	POTABLE	KAUAI	WAIMEA			0.00088	0.00088	0.00088	0.00088	0.00088	0.00088	1-6-010: 004
WAIMEA HS - RENOV BLDGS C & H 7 CLSRM	POTABLE	KAUAI	WAIMEA		0.00063	0.00063	0.00063	0.00063	0.00063	0.00063	0.00063	1-6-009:23; 1-6-10:4,10
LANAI HIGH AND ELEM., NEW CLASSROOM BLDG.	POTABLE	LANAI	CENTRAL				0.01440	0.01440	0.01440	0.01440	0.01440	4-9-14: 3
BALDWIN HIGH SCHOOL GYMNASIUM	POTABLE	MAUI	CENTRAL	0.00400	0.00400	0.00400	0.00400	0.00400	0.00400	0.00400	0.00400	3-8-07:4
KALAMA INTER SCHOOL NEW ADMINISTRATION	POTABLE	MAUI	CENTRAL		0.00087	0.00087	0.00087	0.00087	0.00087	0.00087	0.00087	2-4-032: 098
KEKAULIKE HIGH SCH (BALANCE OF INCREMENTS)	POTABLE	MAUI	CENTRAL	0.01800	0.01800	0.01800	0.01800	0.01800	0.01800	0.01800	0.01800	2-3-7:01
KIHEI ELEMENTARY NEW ADMINISTRATION	POTABLE	MAUI	CENTRAL		0.00063	0.00063	0.00063	0.00063	0.00063	0.00063	0.00063	2-2-002: 043
KIHEI HIGH SCHOOL	POTABLE	MAUI	CENTRAL						0.06000	0.06000	0.06000	NR
KING KEKAULIKE HIGH SCHOOL NEW 6 CLSRM	POTABLE	MAUI	CENTRAL			0.01080	0.01080	0.01080	0.01080	0.01080	0.01080	2-3-007: 001
LOKELANI INTER SCHOOL NEW 6 CLASSROOM	POTABLE	MAUI	CENTRAL			0.01080	0.01080	0.01080	0.01080	0.01080	0.01080	2-2-002: 043
LOKELANI INTER SCHOOL NEW ADMINISTRATION	POTABLE	MAUI	CENTRAL			0.00090	0.00090	0.00090	0.00090	0.00090	0.00090	2-2-002: 043
LOKELANI INTERMEDIATE CAFETERIA	POTABLE	MAUI	CENTRAL	0.00270	0.00270	0.00270	0.00270	0.00270	0.00270	0.00270	0.00270	2-2-2:43
MAKAWAO ELEM SCH 8-CLASSROOM BUILDING	POTABLE	MAUI	CENTRAL			0.01440	0.01440	0.01440	0.01440	0.01440	0.01440	2-4-5:10
MAKAWAO ELEMENTARY NEW 12 CLASSROOM	POTABLE	MAUI	CENTRAL			0.02160	0.02160	0.02160	0.02160	0.02160	0.02160	2-4-005: 010

STATE WATER PROJECTS PLAN
PROJECTED WATER REQUIREMENTS BY DEPARTMENT

				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)								
	PRIMARY			02001	02002	02003	02004	02005	02010	02015	02020	
PROJECT NAME	USE	ISLAND	SECTOR	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	TMK
			SWPP Statewide Project Demand Total=	12.19	18.10	25.22	26.59	33.20	69.42	76.55	80.87	
MAUI WAENA INTER SCHOOL NEW ADMINISTRATN	POTABLE	MAUI	CENTRAL		0.00087	0.00087	0.00087	0.00087	0.00087	0.00087	0.00087	3-8-007: 002
MAUI-WAENA INTER SCHOOL NEW 6 CLASSROOM	POTABLE	MAUI	CENTRAL			0.01080	0.01080	0.01080	0.01080	0.01080	0.01080	3-8-007: 002
NEW MAUI INTERMEDIATE	POTABLE	MAUI	CENTRAL						0.09600	0.09600	0.09600	NEW
PAIA ELEMENTARY NEW ADMINISTRATION	POTABLE	MAUI	CENTRAL			0.00059	0.00059	0.00059	0.00059	0.00059	0.00059	2-5-005: 004
DEPARTMENT OF EDUCATION CONT.												
PAIA ELEMENTARY NEW CAFETERIA	POTABLE	MAUI	CENTRAL	0.01500	0.01500	0.01500	0.01500	0.01500	0.01500	0.01500	0.01500	2-5-005: 004
HANA HIGH/ELEM SCHOOL NEW 6 CLASSROOM	POTABLE	MAUI	HANA			0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	1-3-006: 008
HANA HIGH/ELEM SCHOOL NEW ADMINISTRATION	POTABLE	MAUI	HANA			0.00092	0.00092	0.00092	0.00092	0.00092	0.00092	1-3-006: 008
HAIKU ELEMENTARY NEW 6 CLASSROOM	POTABLE	MAUI	KOOLAU			0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	2-7-008: 097
PUAKALANI ELEMENTARY - ADMIN/LIBRARY/RENOVATE 4 CLASSROOMS	POTABLE	MAUI	KOOLAU			0.00720	0.00720	0.00720	0.00720	0.00720	0.00720	2-3-009:035
LAHAINA III ELEMENTARY 1ST & 2ND INCREMENT	POTABLE	MAUI	LAHAINA			0.06000	0.06000	0.06000	0.06000	0.06000	0.06000	NEW
LAHAINA INTER LOCKR/SHOWR FAC & PLAYFLD	POTABLE	MAUI	LAHAINA	0.00086	0.00086	0.00086	0.00086	0.00086	0.00086	0.00086	0.00086	4-6-18:13
LAHAINA INTER LOCKR/SHOWR FAC & PLAYFLD	NONPOTABLE USING POTABLE	MAUI	LAHAINA	0.00680	0.00680	0.00680	0.00680	0.00680	0.00680	0.00680	0.00680	4-6-18:13
LAHAINA INTER SCHOOL NEW 8 CLASSROOM	POTABLE	MAUI	LAHAINA			0.01440	0.01440	0.01440	0.01440	0.01440	0.01440	4-6-018: 013
LAHAINA INTERMEDIATE NEW ADMINISTRATION	POTABLE	MAUI	LAHAINA			0.00087	0.00087	0.00087	0.00087	0.00087	0.00087	4-6-018: 013
LAHAINA INTERMEDIATE SCHOOL NEW LIBRARY	POTABLE	MAUI	LAHAINA			0.00087	0.00087	0.00087	0.00087	0.00087	0.00087	4-6-018:013
LAHAINALUNA HIGH SCHOOL NEW ATHLETIC LOCKER/SHOWER	POTABLE	MAUI	LAHAINA			0.00120	0.00120	0.00120	0.00120	0.00120	0.00120	4-6-018: 007
LAHAINALUNA HIGH SCHOOL NEW CAFETERIA	POTABLE	MAUI	LAHAINA			0.00420	0.00420	0.00420	0.00420	0.00420	0.00420	4-6-018: 017
NAHIENAENA ELEM SCH NEW LIBRARY/ADMIN	POTABLE	MAUI	LAHAINA			0.00155	0.00155	0.00155	0.00155	0.00155	0.00155	4-6-018: 013
PUUKOLII ELEMENTARY 1ST INCREMENT	POTABLE	MAUI	LAHAINA			0.03600	0.03600	0.03600	0.03600	0.03600	0.03600	NEW
PUUKOLII ELEMENTARY 2ND INCREMENT	POTABLE	MAUI	LAHAINA			0.02400	0.02400	0.02400	0.02400	0.02400	0.02400	NEW
BALDWIN HIGH SCHOOL NEW 8 CLASSROOM	POTABLE	MAUI	WAILUKU			0.01440	0.01440	0.01440	0.01440	0.01440	0.01440	3-8-007: 004
BALDWIN HIGH SCHOOL NEW LIBRARY	POTABLE	MAUI	WAILUKU			0.00178	0.00178	0.00178	0.00178	0.00178	0.00178	3-8-007: 004
HLIP SCHOOL NEW SCHOOL	POTABLE	MAUI	WAILUKU			0.12000	0.12000	0.12000	0.12000	0.12000	0.12000	NEW
IAO INTER NEW 12 CLASSROOM (ARMORY)	POTABLE	MAUI	WAILUKU	0.02160	0.02160	0.02160	0.02160	0.02160	0.02160	0.02160	0.02160	NR
IAO INTERMEDIATE NEW 8 CLASSROOM	POTABLE	MAUI	WAILUKU						0.01260	0.01260	0.01260	NR
IAO INTERMEDIATE NEW CAFETERIA	POTABLE	MAUI	WAILUKU	0.00326	0.00326	0.00326	0.00326	0.00326	0.00326	0.00326	0.00326	NR
MAUI LANI ELEMENTARY 1ST & 2ND INCREMENT	POTABLE	MAUI	WAILUKU			0.06000	0.06000	0.06000	0.06000	0.06000	0.06000	NEW

STATE WATER PROJECTS PLAN
PROJECTED WATER REQUIREMENTS BY DEPARTMENT

				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)								
	PRIMARY			02001	02002	02003	02004	02005	02010	02015	02020	
PROJECT NAME	USE	ISLAND	SECTOR	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	TMK
			SWPP Statewide Project Demand Total=	12.19	18.10	25.22	26.59	33.20	69.42	76.55	80.87	
WAIHEE ELEM - PLAYFLD/WTR RETENTN BASIN	NONPOTABLE USING POTABLE	MAUI	WAILUKU	0.00510	0.00510	0.00510	0.00510	0.00510	0.00510	0.00510	0.00510	3-2-007:021
WAIHEE ELEMENTARY NEW 8 CLASSROOM	POTABLE	MAUI	WAILUKU	0.01440	0.01440	0.01440	0.01440	0.01440	0.01440	0.01440	0.01440	3-2-007: 021
WAIHEE ELEMENTARY NEW ADMINISTRATION	POTABLE	MAUI	WAILUKU			0.00063	0.00063	0.00063	0.00063	0.00063	0.00063	3-2-007: 021
WAILUKU II ELEM SCHOOL 1ST & 2ND INCREMENT	POTABLE	MAUI	WAILUKU			0.06000	0.06000	0.06000	0.06000	0.06000	0.06000	NEW
KUALAPUU ELEM SCH 6-CLASSROOM BLD	POTABLE	MOLOKAI	CENTRAL	0.00054	0.00054	0.00054	0.00054	0.00054	0.00054	0.00054	0.00054	5-2-13:27
DEPARTMENT OF EDUCATION CONT.												
MOLOKAI HIGH SCHOOL 8-CLASSROOM BUILDING	POTABLE	MOLOKAI	CENTRAL	0.01440	0.01440	0.01440	0.01440	0.01440	0.01440	0.01440	0.01440	5-2-15:46, 5-2-7:01
MOLOKAI HIGH SCHOOL CAFETERIA	POTABLE	MOLOKAI	CENTRAL			0.00300	0.00300	0.00300	0.00300	0.00300	0.00300	5-2-15:46, 5-2-7:01
MOLOKAI HIGH SCHOOL NEW ADMINISTRATION	POTABLE	MOLOKAI	CENTRAL			0.00093	0.00093	0.00093	0.00093	0.00093	0.00093	5-2-015: 046
KAUNAKAKAI ELEMENTARY NEW 8 CLASSROOM	POTABLE	MOLOKAI	SOUTH EAST			0.00101	0.00101	0.00101	0.00101	0.00101	0.00101	5-3-002: 052
KILOHANA ELEMENTARY NEW CAFETERIA	POTABLE	MOLOKAI	SOUTH EAST			0.00057	0.00057	0.00057	0.00057	0.00057	0.00057	5-6-002: 008
KILOHANA ELEMENTARY NEW LIBRARY	POTABLE	MOLOKAI	SOUTH EAST			0.00092	0.00092	0.00092	0.00092	0.00092	0.00092	5-6-002: 008
MAUNALOA ELEM SCHOOL NEW 4 CLASSROOM	POTABLE	MOLOKAI	WEST			0.00720	0.00720	0.00720	0.00720	0.00720	0.00720	5-1-002: 003
MAUNALOA ELEMENTARY NEW LIBRARY	POTABLE	MOLOKAI	WEST						0.00092	0.00092	0.00092	5-1-002: 003
HALE KULA ELEMENTARY NEW ADMINISTRATION	POTABLE	OAHU	CENTRAL			0.00045	0.00045	0.00045	0.00045	0.00045	0.00045	7-7-001: 003
HALE KULA ELEMENTARY NEW LIBRARY	POTABLE	OAHU	CENTRAL			0.00066	0.00066	0.00066	0.00066	0.00066	0.00066	7-7-001: 003
HELEMANO ELEMENTARY NEW LIBRARY	POTABLE	OAHU	CENTRAL	0.00066	0.00066	0.00066	0.00066	0.00066	0.00066	0.00066	0.00066	7-1-002: 017
LEILEHUA HIGH SCHOOL NEW 8 CLASSROOM	POTABLE	OAHU	CENTRAL		0.01440	0.01440	0.01440	0.01440	0.01440	0.01440	0.01440	7-4-018: 001
WHEELER ELEMENTARY 8-CLASSROOM BUILDING	POTABLE	OAHU	CENTRAL			0.00072	0.00072	0.00072	0.00072	0.00072	0.00072	7-7-01:02
EAST KAPOLEI ELEMENTARY SCHOOL NEW SCH	POTABLE	OAHU	EWA CAPROCK	PROJECT DEMAND ACCOUNTED FOR BY EAST KAPOLEI PROJECT								NEW
EAST KAPOLEI HIGH SCHOOL	POTABLE	OAHU	EWA CAPROCK						0.06000	0.06000	0.06000	NR
EAST KAPOLEI MIDDLE SCHOOL	POTABLE	OAHU	EWA CAPROCK	PROJECT DEMAND ACCOUNTED FOR BY EAST KAPOLEI PROJECT								NR
EWA BEACH ELEMENTARY NEW 6 CLASSROOM	POTABLE	OAHU	EWA CAPROCK			0.01080	0.01080	0.01080	0.01080	0.01080	0.01080	9-1-012: 019
KAPOLEI HIGH SCHOOL 1ST INCREMENT	POTABLE	OAHU	EWA CAPROCK	0.04800	0.04800	0.04800	0.04800	0.04800	0.04800	0.04800	0.04800	NEW
KAPOLEI HIGH SCHOOL 2ND INCREMENT	POTABLE	OAHU	EWA CAPROCK	0.04800	0.04800	0.04800	0.04800	0.04800	0.04800	0.04800	0.04800	NEW
KAPOLEI HIGH SCHOOL 3RD INCREMENT	POTABLE	OAHU	EWA CAPROCK		0.04800	0.04800	0.04800	0.04800	0.04800	0.04800	0.04800	NEW
CENTRAL INTER - RENOV BLDG A PH 1 15 CLSRM	POTABLE	OAHU	HONOLULU		0.00166	0.00166	0.00166	0.00166	0.00166	0.00166	0.00166	2-1-005:1; 2, 2-1-009: 1,2,3
CENTRAL INTER - RENOV BLDG C 16 CLASSROOM	POTABLE	OAHU	HONOLULU		0.00215	0.00215	0.00215	0.00215	0.00215	0.00215	0.00215	2-1-005:1; 2, 2-1-009: 1,2,3

STATE WATER PROJECTS PLAN
PROJECTED WATER REQUIREMENTS BY DEPARTMENT

				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)								
	PRIMARY			02001	02002	02003	02004	02005	02010	02015	02020	
PROJECT NAME	USE	ISLAND	SECTOR	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	TMK
			SWPP Statewide Project Demand Total=	12.19	18.10	25.22	26.59	33.20	69.42	76.55	80.87	
CENTRAL MIDDLE SCH - RENOVATE CAFETERIA	POTABLE	OAHU	HONOLULU		0.00225	0.00225	0.00225	0.00225	0.00225	0.00225	0.00225	2-1-005:1; 2, 2-1-009: 1,2,3
KAKAAKO ELEM 1ST AND 2ND INCREMENTS	POTABLE	OAHU	HONOLULU			0.06000	0.06000	0.06000	0.06000	0.06000	0.06000	NEW
KALAKAUA MIDDLE SCHOOL - RENOVATE BLDGS G & H 3 CLASSROOM	POTABLE	OAHU	HONOLULU		0.00064	0.00064	0.00064	0.00064	0.00064	0.00064	0.00064	1-5-24: 29,40; 1-5-25: 1,2
KAULUWELA ELEMENTARY - NEW CAFETERIA	POTABLE	OAHU	HONOLULU		0.00173	0.00173	0.00173	0.00173	0.00173	0.00173	0.00173	1-7-023: 41,42
KAULUWELA ELEMENTARY 6 CLASSROOM BLDG	POTABLE	OAHU	HONOLULU			0.01080	0.01080	0.01080	0.01080	0.01080	0.01080	1-7-23:41, 1-7-22:15
LINAPUNI ELEM SCH NEW ADMIN BUILDING	POTABLE	OAHU	HONOLULU			0.00045	0.00045	0.00045	0.00045	0.00045	0.00045	1-3-39:5
DEPARTMENT OF EDUCATION CONT.												
McKINLEY HIGH SCHOOL - RENOVATE INDUSTRIAL ARTS EDUC BLDG 6 CLASSROOM	POTABLE	OAHU	HONOLULU	0.00190	0.00190	0.00190	0.00190	0.00190	0.00190	0.00190	0.00190	2-3-009: 001
ROOSEVELT HIGH SCHOOL - RENOVATE BLDG A PHASE 1: ADMIN, LIB., CAFÉ., 43 CLASSROOM	POTABLE	OAHU	HONOLULU	0.00804	0.00804	0.00804	0.00804	0.00804	0.00804	0.00804	0.00804	2-4-032: 001
PEARL HARBOR ELEM SCH NEW 4 CLASSRM BLD	POTABLE	OAHU	HONOLULU			0.00036	0.00036	0.00036	0.00036	0.00036	0.00036	1-1-010: 027
SUNSET BEACH ELEM NEW ADMINISTRATION	POTABLE	OAHU	NORTH			0.00045	0.00045	0.00045	0.00045	0.00045	0.00045	5-9-005: 018
WAIALUA ELEM SCHOOL NEW ADMINISTRATION	POTABLE	OAHU	NORTH	0.00045	0.00045	0.00045	0.00045	0.00045	0.00045	0.00045	0.00045	6-7-001: 010
AHRENS ELEMENTARY SCH NEW 8 CLASSROOM	POTABLE	OAHU	PEARL HARBOR			0.00072	0.00072	0.00072	0.00072	0.00072	0.00072	9-4-059: 073
AIEA HIGH SCHOOL LIBRARY EXPANSION	POTABLE	OAHU	PEARL HARBOR	0.00127	0.00127	0.00127	0.00127	0.00127	0.00127	0.00127	0.00127	9-8-31: 17
CENTRAL OAHU HIGH SCHOOL	POTABLE	OAHU	PEARL HARBOR						0.06000	0.06000	0.06000	NR
EWA ELEM NEW LIBRARY & ADMINISTRATION	POTABLE	OAHU	PEARL HARBOR	0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	1-9-17:2, 37
EWA MARINA ELEM SCHOOL NEW SCHOOL	POTABLE	OAHU	PEARL HARBOR			0.06000	0.06000	0.06000	0.06000	0.06000	0.06000	NEW
HICKAM ELEM NEW CAFETERIA & LIBRY EXPAN	POTABLE	OAHU	PEARL HARBOR			0.00329	0.00329	0.00329	0.00329	0.00329	0.00329	9-9-01:13
HICKAM ELEM SCHOOL, NEW ADMIN. BLDG.	POTABLE	OAHU	PEARL HARBOR				0.00045	0.00045	0.00045	0.00045	0.00045	9-9-01: 13 (POR.)
HLIP	POTABLE	OAHU	PEARL HARBOR						0.03000	0.03000	0.03000	
KAPOLEI II ELEMENTARY SCHOOL NEW SCHOOL	POTABLE	OAHU	PEARL HARBOR	0.06000	0.06000	0.06000	0.06000	0.06000	0.06000	0.06000	0.06000	NEW
MAKALAPA ELEM SCH RENOV/EXPAN OF CAFÉ	POTABLE	OAHU	PEARL HARBOR			0.00195	0.00195	0.00195	0.00195	0.00195	0.00195	9-9-75: 28
ROYAL KUNIA ELEMENTARY 1ST INCREMENT	POTABLE	OAHU	PEARL HARBOR	0.03600	0.03600	0.03600	0.03600	0.03600	0.03600	0.03600	0.03600	NEW
ROYAL KUNIA ELEMENTARY 2ND INCREMENT	POTABLE	OAHU	PEARL HARBOR		0.02400	0.02400	0.02400	0.02400	0.02400	0.02400	0.02400	NEW
WAIAU ELEMENTARY SCHOOL ADMIN/LIBRARY	POTABLE	OAHU	PEARL HARBOR	0.00111	0.00111	0.00111	0.00111	0.00111	0.00111	0.00111	0.00111	9-8-50:71
WAIAWA I ELEMENTARY SCHOOL IST INCREMENT	POTABLE	OAHU	PEARL HARBOR			0.03600	0.03600	0.03600	0.03600	0.03600	0.03600	NEW
WAIAWA INTER SCHOOL 1ST INCRE	POTABLE	OAHU	PEARL HARBOR			0.06000	0.06000	0.06000	0.06000	0.06000	0.06000	NEW
WAIAWA INTERMEDIATE 2ND INCREMENT	POTABLE	OAHU	PEARL HARBOR			0.03600	0.03600	0.03600	0.03600	0.03600	0.03600	NEW

STATE WATER PROJECTS PLAN
PROJECTED WATER REQUIREMENTS BY DEPARTMENT

				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)								
	PRIMARY			02001	02002	02003	02004	02005	02010	02015	02020	
PROJECT NAME	USE	ISLAND	SECTOR	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	TMK
			SWPP Statewide Project Demand Total=	12.19	18.10	25.22	26.59	33.20	69.42	76.55	80.87	
WAIPAHU HIGH SCHOOL NEW 8 CLASSROOM	POTABLE	OAHU	PEARL HARBOR		0.01440	0.01440	0.01440	0.01440	0.01440	0.01440	0.01440	9-4-008: 020
WAIPAHU HIGH SCHOOL NEW CAFETERIA	POTABLE	OAHU	PEARL HARBOR			0.00771	0.00771	0.00771	0.00771	0.00771	0.00771	9-4-008: 020
WAIPAHU INTERMEDIATE - NEW CAFETERIA	POTABLE	OAHU	PEARL HARBOR		0.00456	0.00456	0.00456	0.00456	0.00456	0.00456	0.00456	9-4-001:29,30
LAULANI ELEMENTARY SCHOOL NEW SCHOOL	POTABLE	OAHU	PEARL HARBOR			0.06000	0.06000	0.06000	0.06000	0.06000	0.06000	NEW
MAKALAPA ELEM ADMIN AND RENOVATION	POTABLE	OAHU	PEARL HARBOR	0.00045	0.00045	0.00045	0.00045	0.00045	0.00045	0.00045	0.00045	9-9-075:028
MILILANI HIGH SCHOOL NEW 6 CLASSROOM	POTABLE	OAHU	PEARL HARBOR			0.01080	0.01080	0.01080	0.01080	0.01080	0.01080	9-5-001: 055 & 054
MILILANI INTER (BALANCE OF INCRE) NEW SCH	POTABLE	OAHU	PEARL HARBOR	0.04800	0.04800	0.04800	0.04800	0.04800	0.04800	0.04800	0.04800	NEW
DEPARTMENT OF EDUCATION CONT.												
MILILANI MAUKA II ELEM SCHOOL 1ST INCREMENT	POTABLE	OAHU	PEARL HARBOR			0.03600	0.03600	0.03600	0.03600	0.03600	0.03600	NEW
MILILANI MAUKA II ELEM SCHOOL 2ND INCREMENT	POTABLE	OAHU	PEARL HARBOR			0.02400	0.02400	0.02400	0.02400	0.02400	0.02400	NEW
PEARL HARBOR KAI ELEMENTARY BLDG "F" RENOVATION 2 CLASSROOM	POTABLE	OAHU	PEARL HARBOR		0.00020	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020	9-9-001: 012
PEARL RIDGE ELEM SCH ADMINISTRATION BLDG	POTABLE	OAHU	PEARL HARBOR	0.00045	0.00045	0.00045	0.00045	0.00045	0.00045	0.00045	0.00045	9-8-13:28
WAIMALU ELEM - RENOVATE BLDG A 6 CLASSRM	POTABLE	OAHU	PEARL HARBOR	0.00056	0.00056	0.00056	0.00056	0.00056	0.00056	0.00056	0.00056	9-8-008: 007
KAMAILE ELEMENTARY SCH NEW 8 CLASSROOM	POTABLE	OAHU	WAIANAE			0.01440	0.01440	0.01440	0.01440	0.01440	0.01440	8-5-002: 039
LEIHOKU ELEM NEW LIBRARY/ADMINISTRATION	POTABLE	OAHU	WAIANAE		0.00111	0.00111	0.00111	0.00111	0.00111	0.00111	0.00111	8-6-001: 054
LEIHOKU ELEMENTARY NEW 6 CLASSROOM	POTABLE	OAHU	WAIANAE	0.01080	0.01080	0.01080	0.01080	0.01080	0.01080	0.01080	0.01080	8-6-001: 054
MAKAHA ELEMENTARY NEW LIBRARY	POTABLE	OAHU	WAIANAE			0.00066	0.00066	0.00066	0.00066	0.00066	0.00066	8-4-025: 010
NANAKULI HIGH SCHOOL NEW 8 CLASSROOM	POTABLE	OAHU	WAIANAE			0.01440	0.01440	0.01440	0.01440	0.01440	0.01440	8-9-007: 009
NANAKULI III ELEMENTARY 1ST INCREMENT	POTABLE	OAHU	WAIANAE			0.00660	0.00660	0.00660	0.00660	0.00660	0.00660	NEW
NANAKULI III ELEMENTARY 2ND INCREMENT	POTABLE	OAHU	WAIANAE			0.02400	0.02400	0.02400	0.02400	0.02400	0.02400	NEW
NANAKULI IV ELEMENTARY IST & 2ND INCREMENT	POTABLE	OAHU	WAIANAE	0.06300	0.06300	0.06300	0.06300	0.06300	0.06300	0.06300	0.06300	NEW
WAIANAE HIGH SCHOOL NEW 8 CLASSROOM	POTABLE	OAHU	WAIANAE		0.01440	0.01440	0.01440	0.01440	0.01440	0.01440	0.01440	8-5-015: 001
WAIANAE HIGH SCHOOL NEW ADMINISTRATION	POTABLE	OAHU	WAIANAE			0.00067	0.00067	0.00067	0.00067	0.00067	0.00067	8-5-015: 001
WAIANAE HIGH SCHOOL NEW CAFETERIA	POTABLE	OAHU	WAIANAE			0.00735	0.00735	0.00735	0.00735	0.00735	0.00735	8-5-015: 001
WAIANAE INTER SCHOOL NEW 4 CLASSROOM	POTABLE	OAHU	WAIANAE			0.00720	0.00720	0.00720	0.00720	0.00720	0.00720	8-5-015: 001
LAIE ELEMENTARY NEW CAFETERIA	POTABLE	OAHU	WINDWARD		0.00261	0.00261	0.00261	0.00261	0.00261	0.00261	0.00261	5-5-015: 023,033
PUOHALA ELEMENTARY SCHOOL EXPANSION OF LIBRARY & ADMINISTRATION	POTABLE	OAHU	WINDWARD			0.00111	0.00111	0.00111	0.00111	0.00111	0.00111	4-5-30:38
CASTLE HIGH SCHOOL NEW CAFETERIA	POTABLE	OAHU	WINDWARD	0.00600	0.00600	0.00600	0.00600	0.00600	0.00600	0.00600	0.00600	4-5-034: 008

STATE WATER PROJECTS PLAN
PROJECTED WATER REQUIREMENTS BY DEPARTMENT

				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)								
	PRIMARY			02001	02002	02003	02004	02005	02010	02015	02020	
PROJECT NAME	USE	ISLAND	SECTOR	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	TMK
			SWPP Statewide Project Demand Total=	12.19	18.10	25.22	26.59	33.20	69.42	76.55	80.87	
KAAWA ELEM NEW LIBRARY/ADMINISTRATION	POTABLE	OAHU	WINDWARD			0.00111	0.00111	0.00111	0.00111	0.00111	0.00111	5-1-002: 018
KAAWA ELEMENTARY NEW CAFETERIA	POTABLE	OAHU	WINDWARD			0.00054	0.00054	0.00054	0.00054	0.00054	0.00054	5-1-002: 018
KAELEPULU ELEM SCH, NEW ADMIN BLDG.	POTABLE	OAHU	WINDWARD						0.00045	0.00045	0.00045	4-2-90: 74
KAHUKU HIGH SCHOOL - ATHLETIC FIELD	NONPOTABLE USING POTABLE	OAHU	WINDWARD		0.03800	0.03800	0.03800	0.03800	0.03800	0.03800	0.03800	5-6-006:3,9,10,25
KAHUKU HIGH/INT SCH NEW PE LOCKR SHOWR	POTABLE	OAHU	WINDWARD			0.00065	0.00065	0.00065	0.00065	0.00065	0.00065	5-6-006: 003,009,010,025
KAHUKU HIGH/INTER SCHOOL NEW CAFETERIA	POTABLE	OAHU	WINDWARD			0.00660	0.00660	0.00660	0.00660	0.00660	0.00660	5-6-006: 003,009,010,025
KAHUKU HIGH/INTER SCHOOL NEW GYMNASIUM	POTABLE	OAHU	WINDWARD			0.00400	0.00400	0.00400	0.00400	0.00400	0.00400	5-6-006: 003,009,010,025
KAILUA ELEMENTARY LIBRARY EXPANSION	POTABLE	OAHU	WINDWARD			0.00066	0.00066	0.00066	0.00066	0.00066	0.00066	4-3-056: 003, 009
DEPARTMENT OF EDUCATION CONT.												
KAINALU ELEMENTARY NEW ADMINISTRATION	POTABLE	OAHU	WINDWARD			0.00045	0.00045	0.00045	0.00045	0.00045	0.00045	4-3-076: 015
KANEOHE ELEMENTARY NEW ADMINISTRATION	POTABLE	OAHU	WINDWARD	0.00045	0.00045	0.00045	0.00045	0.00045	0.00045	0.00045	0.00045	4-5-103: 011
			DOE SUBTOTAL=	0.61955	0.81025	2.22742	2.24340	2.24340	2.59797	2.59797	2.59797	

STATE WATER PROJECTS PLAN
PROJECTED WATER REQUIREMENTS BY DEPARTMENT

				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)								
	PRIMARY			02001	02002	02003	02004	02005	02010	02015	02020	
PROJECT NAME	USE	ISLAND	SECTOR	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	TMK
			SWPP Statewide Project Demand Total=	12.19	18.10	25.22	26.59	33.20	69.42	76.55	80.87	
DEPARTMENT OF HAWAIIAN HOME LANDS												
LAIOPUA VILLAGE 4	POTABLE	HAWAII	HUALALAI	0.10000	0.10000	0.10000	0.10000	0.10000	0.10000	0.10000	0.10000	
MAKUU - FARM LOTS (2 ACRES)	POTABLE	HAWAII	KILAUEA						0.02000	0.02000	0.02000	NR
MAKUU - FARM LOTS (2 ACRES) (IRRIG)	NONPOTABLE	HAWAII	KILAUEA						0.20000	0.20000	0.20000	NR
MAKUU - FARM LOTS (5 ACRE)	POTABLE	HAWAII	KILAUEA						0.05080	0.05080	0.05080	NR
MAKUU - FARM LOTS (5 ACRE) (IRRIG)	NONPOTABLE	HAWAII	KILAUEA						1.27000	1.27000	1.27000	NR
KAWAIHAE - MASTER PLAN AREA	POTABLE	HAWAII	KOHALA							1.40000	1.40000	NR
KAWAIHAE - RESIDENCE LOTS (MAKAI)	POTABLE	HAWAII	KOHALA						0.00880	0.00880	0.00880	NR
KAWAIHAE - RESIDENTIAL LOTS (MAUKA)	POTABLE	HAWAII	KOHALA						0.07800	0.07800	0.07800	NR
HAWAII EAST SCTRD LOT	POTABLE	HAWAII	NORTH EAST MAUNA LOA	0.04400	0.04400	0.04400	0.04400	0.04400	0.04400	0.04400	0.04400	VARIOUS
HUMUULA - PASTURE LOTS	POTABLE	HAWAII	NORTH EAST MAUNA LOA						0.00480	0.00480	0.00480	NR
KEAUKAHA - RESIDENCE LOTS UNIT 2	POTABLE	HAWAII	NORTH EAST MAUNA LOA						0.03320	0.03320	0.03320	2-1-20,21,22,23
PANAEWA - FARM LOTS (AUWAE ST)	POTABLE	HAWAII	NORTH EAST MAUNA LOA						0.03000	0.03000	0.03000	NR
PANAEWA - FARM LOTS (AUWAE ST) (IRRIG)	NONPOTABLE	HAWAII	NORTH EAST MAUNA LOA						0.64000	0.64000	0.64000	NR
PANAEWA - FARM LOTS PUNA PAPAYA	POTABLE	HAWAII	NORTH EAST MAUNA LOA						0.01000	0.01000	0.01000	2-1-25:25-40,67-71,74,77-83
PANAEWA - FARM LOTS PUNA PAPAYA (IRRIG)	NONPOTABLE	HAWAII	NORTH EAST MAUNA LOA						0.30000	0.30000	0.30000	NR
PANAEWA RESIDENCE LOTS	POTABLE	HAWAII	NORTH EAST MAUNA LOA	0.02400	0.02400	0.02400	0.02400	0.02400	0.02400	0.02400	0.02400	
WAIAKEA - RESIDENCE LOTS UNIT 2A-5	POTABLE	HAWAII	NORTH EAST MAUNA LOA						0.00800	0.00800	0.00800	NR
KAMAOA - PASTURE LOTS	POTABLE	HAWAII	SOUTH EAST MAUNA LOA						0.01000	0.01000	0.01000	NR
KAMAOA - PUUEO FARM LOTS	POTABLE	HAWAII	SOUTH EAST MAUNA LOA							0.02000	0.02000	NR
LALAMILO RESIDENCE LOTS	POTABLE	HAWAII	WEST MAUNA KEA	0.07000	0.07000	0.07000	0.07000	0.07000	0.07000	0.07000	0.07000	
PUUKAPU - FARM LOTS UNITS 2, 2A	POTABLE	HAWAII	WEST MAUNA KEA						0.03000	0.03000	0.03000	NR
PUUKAPU - FARM LOTS UNITS 2, 2A (IRRIG)	NONPOTABLE	HAWAII	WEST MAUNA KEA						1.60000	1.60000	1.60000	NR
PUUKAPU - PASTURE LOTS	POTABLE	HAWAII	WEST MAUNA KEA						0.07360	0.07360	0.07360	NR
PUUKAPU - RESIDENTIAL LOTS (PUU PELEHU)	POTABLE	HAWAII	WEST MAUNA KEA						0.01320	0.01320	0.01320	NR
ANAHOLA - FARM LOTS UNIT 1A INCREMENT 2	POTABLE	KAUAI	LIHUE	0.00200	0.00200	0.00200	0.00200	0.00200	0.00200	0.00200	0.00200	NR
ANAHOLA - HUNDLEY ROAD	POTABLE	KAUAI	LIHUE	0.01500	0.01500	0.01500	0.01500	0.01500	0.01500	0.01500	0.01500	
ANAHOLA - NORTH (IRRIG)	NONPOTABLE	KAUAI	LIHUE						0.60000	0.60000	0.60000	NR

STATE WATER PROJECTS PLAN
PROJECTED WATER REQUIREMENTS BY DEPARTMENT

				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)								
	PRIMARY			02001	02002	02003	02004	02005	02010	02015	02020	
PROJECT NAME	USE	ISLAND	SECTOR	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	TMK
			SWPP Statewide Project Demand Total=	12.19	18.10	25.22	26.59	33.20	69.42	76.55	80.87	
ANAHOLA - RESIDENCE LOTS BAYVIEW/G, G1	POTABLE	KAUAI	LIHUE	0.03050	0.03050	0.03050	0.03050	0.03050	0.03050	0.03050	0.03050	NR
DEPARTMENT OF HAWAIIAN HOME LANDS CONT.												
ANAHOLA - RESIDENCE LOTS J & K	POTABLE	KAUAI	LIHUE						0.01100	0.01100	0.01100	NR
ANAHOLA - RESIDENCE LOTS M	POTABLE	KAUAI	LIHUE						0.02000	0.02000	0.02000	NR
ANAHOLA - RESIDENCE LOTS UNIT 3	POTABLE	KAUAI	LIHUE	0.01800	0.01800	0.01800	0.01800	0.01800	0.01800	0.01800	0.01800	NR
ANAHOLA - RESIDENCE LOTS UNIT 4	POTABLE	KAUAI	LIHUE	0.04500	0.04500	0.04500	0.04500	0.04500	0.04500	0.04500	0.04500	NR
ANAHOLA - RESIDENCE LOTS UNIT 5	POTABLE	KAUAI	LIHUE	0.02000	0.02000	0.02000	0.02000	0.02000	0.02000	0.02000	0.02000	NR
ANAHOLA UNIT 6	POTABLE	KAUAI	LIHUE			0.12500	0.12500	0.12500	0.12500	0.12500	0.12500	VARIOUS
ANAHOLA VILLAGE RESIDENCE LOTS	POTABLE	KAUAI	LIHUE	0.00550	0.00550	0.00550	0.00550	0.00550	0.00550	0.00550	0.00550	
MOLOAA - FARM LOTS	POTABLE	KAUAI	LIHUE							0.01000	0.01000	NR
MOLOAA - PASTURE LOTS	POTABLE	KAUAI	LIHUE							0.00400	0.00400	NR
KEKAHA RESIDENCE LOTS	POTABLE	KAUAI	WAIMEA			0.01500	0.01500	0.01500	0.01500	0.01500	0.01500	
LANAI	POTABLE	LANAI	CENTRAL		0.01250	0.01250	0.01250	0.01250	0.01250	0.01250	0.01250	
KEOKEA AGRICULTURAL LOTS (RES.)	POTABLE	MAUI	CENTRAL	0.04260	0.04260	0.04260	0.04260	0.04260	0.04260	0.04260	0.04260	
KULA - KEOKEA AG LOTS	POTABLE	MAUI	CENTRAL						3.60000	3.60000	3.60000	NR
KULA - KEOKEA RES. AG LOTS	POTABLE	MAUI	CENTRAL						0.04000	0.04000	0.04000	NR
KULA - MASTER PLAN AREA	POTABLE	MAUI	CENTRAL							2.10000	2.10000	NR
KULA - RESIDENCE LOTS WAIOHULI 1, 2	POTABLE	MAUI	CENTRAL							0.18000	0.18000	NR
KULA - RESIDENCE LOTS, UNIT 2	POTABLE	MAUI	CENTRAL	0.04800	0.04800	0.04800	0.04800	0.04800	0.04800	0.04800	0.04800	
WAIOHULI RES LOTS UNIT 1	POTABLE	MAUI	CENTRAL			0.23040	0.23040	0.23040	0.23040	0.23040	0.23040	2-2-02:56
KAHIKINUI - HOMESTEAD	POTABLE	MAUI	KAHIKINUI							0.00720	0.00720	1-9-01
KAHIKINUI - LIVESTOCK	POTABLE	MAUI	KAHIKINUI							0.01000	0.01000	NR
PAUKUKALO - RESIDENCE LOTS UNIT 3 PHASE 3	POTABLE	MAUI	WAILUKU						0.01980	0.01980	0.01980	NR
PAUKUKALO - RESIDENCE LOTS UNIT 4	POTABLE	MAUI	WAILUKU						0.00840	0.00840	0.00840	NR
WAIEHU - RESIDENCE LOTS	POTABLE	MAUI	WAILUKU			0.02000	0.02000	0.02000	0.02000	0.02000	0.02000	3-2-13:18
WAIEHU KOU	POTABLE	MAUI	WAILUKU			0.10000	0.10000	0.10000	0.10000	0.10000	0.10000	NR
WAIEHU KOU III	POTABLE	MAUI	WAILUKU	0.04200	0.04200	0.04200	0.04200	0.04200	0.04200	0.04200	0.04200	
DEPT. OF EDUCATION	POTABLE	MOLOKAI	CENTRAL			0.00270	0.00270	0.00270	0.00270	0.00270	0.00270	5-2-13:27, 5-2-15:46

STATE WATER PROJECTS PLAN
PROJECTED WATER REQUIREMENTS BY DEPARTMENT

				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)								
	PRIMARY			02001	02002	02003	02004	02005	02010	02015	02020	
PROJECT NAME	USE	ISLAND	SECTOR	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	TMK
			SWPP Statewide Project Demand Total=	12.19	18.10	25.22	26.59	33.20	69.42	76.55	80.87	
HOOLEHUA, AGRICULTURAL LOTS	POTABLE	MOLOKAI	CENTRAL			0.02287	0.02287	0.02287	0.02287	0.02287	0.02287	2-3:1, 5-2-4:1,2,7,26,28,34-36,49,96,98,105, 5-2-
HOOLEHUA, AGRICULTURAL LOTS	NONPOTABLE	MOLOKAI	CENTRAL			0.54893	0.54893	0.54893	0.54893	0.54893	0.54893	2-3:1, 5-2-4:1,2,7,26,28,34-36,49,96,98,105, 5-2-
DEPARTMENT OF HAWAIIAN HOME LANDS CONT.												
HOOLEHUA, OTHER	POTABLE	MOLOKAI	CENTRAL			0.00540	0.00540	0.00540	0.00540	0.00540	0.00540	5-2-04:15,16,46,84, 5-2-23:9
HOOLEHUA, RESIDENTIAL LOTS UNIT 1	POTABLE	MOLOKAI	CENTRAL			0.01200	0.01200	0.01200	0.01200	0.01200	0.01200	5-2-17: 1,2
HOOLEHUA, RESIDENTIAL LOTS UNIT 2	POTABLE	MOLOKAI	CENTRAL			0.03600	0.03600	0.03600	0.03600	0.03600	0.03600	5-2-15: POR 1, 2, 56
KALAMAULA	POTABLE	MOLOKAI	CENTRAL			0.00840	0.00840	0.00840	0.00840	0.00840	0.00840	5-2-08:57,109-110,118
KALAMAULA, COMMERCIAL	POTABLE	MOLOKAI	CENTRAL			0.00384	0.00384	0.00384	0.00384	0.00384	0.00384	5-2-9:12,30
KALAMAULA,RESIDENTIAL LOTS PHASE 1	POTABLE	MOLOKAI	CENTRAL			0.07440	0.07440	0.07440	0.07440	0.07440	0.07440	09:POR14,15,22-23,28, 5-2-10:POR1
EAST KAPOLEI	POTABLE	OAHU	EWA CAPROCK	0.10000	0.10000	0.10000	0.10000	0.10000	0.10000	0.10000	0.10000	
KALAWAHINE	POTABLE	OAHU	HONOLULU			0.04350	0.04350	0.04350	0.04350	0.04350	0.04350	2-4-34:08,POR09,11,22, 2-4-39:1,2, 2-4-40:1
KAPALAMA	POTABLE	OAHU	HONOLULU						0.10000	0.10000	0.10000	1-5-20:06
MOILIILI	POTABLE	OAHU	HONOLULU						0.10000	0.10000	0.10000	2-7-08: 18,20
MOOREIRA	POTABLE	OAHU	HONOLULU						0.01150	0.01150	0.01150	2-2-53:07
PROSPECT STREET	POTABLE	OAHU	HONOLULU						0.12000	0.12000	0.12000	2-2-05:POR 05
AGENA/PINE	POTABLE	OAHU	WAIANAE						0.02750	0.02750	0.02750	8-6-01: POR 01, 51, 52
CAMP ANDREWS	POTABLE	OAHU	WAIANAE						0.07800	0.07800	0.07800	8-9-02: 01
CARLOS DAIRY	NONPOTABLE	OAHU	WAIANAE			0.03800	0.03800	0.03800	0.03800	0.03800	0.03800	8-5-04: 52,59,107
FREITAS DAIRY	POTABLE	OAHU	WAIANAE	0.01600	0.01600	0.01600	0.01600	0.01600	0.01600	0.01600	0.01600	8-5-04: 01, 41, POR 58
HANOHANO LOT	POTABLE	OAHU	WAIANAE			0.00050	0.00050	0.00050	0.00050	0.00050	0.00050	8-9-04: 61
MAILIILI ROAD	POTABLE	OAHU	WAIANAE						0.01500	0.01500	0.01500	8-6-01: POR 01
NANAKULI RESIDENCE, ULEI ST.	POTABLE	OAHU	WAIANAE	0.00800	0.00800	0.00800	0.00800	0.00800	0.00800	0.00800	0.00800	
NANAKULI SCATTERED LOTS	POTABLE	OAHU	WAIANAE	0.00500	0.00500	0.00500	0.00500	0.00500	0.00500	0.00500	0.00500	
NANAKULI SCATTERED SUBDIVISIONS	POTABLE	OAHU	WAIANAE			0.00250	0.00250	0.00250	0.00250	0.00250	0.00250	8-9-02; 36,38, 8-9-03;2,63, 8-9-04: 78
PAHEEHEE RIDGE	POTABLE	OAHU	WAIANAE	0.00950	0.00950	0.00950	0.00950	0.00950	0.00950	0.00950	0.00950	
PRINCESS KAHANU	POTABLE	OAHU	WAIANAE						0.14030	0.14030	0.14030	8-7-07:04, 8-7-33:14, 8-7-42, 8-7-43
PUU MAILIILI	POTABLE	OAHU	WAIANAE						0.05000	0.05000	0.05000	8-6-01: 24, 25, 26, 27, 28
TAAMU LOT	POTABLE	OAHU	WAIANAE			0.00050	0.00050	0.00050	0.00050	0.00050	0.00050	8-9-02: 42

STATE WATER PROJECTS PLAN
PROJECTED WATER REQUIREMENTS BY DEPARTMENT

				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)								
	PRIMARY			02001	02002	02003	02004	02005	02010	02015	02020	
PROJECT NAME	USE	ISLAND	SECTOR	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	TMK
			SWPP Statewide Project Demand Total=	12.19	18.10	25.22	26.59	33.20	69.42	76.55	80.87	
UPPER NANAKULI	POTABLE	OAHU	WAIANAE								0.42500	8-9-08: 03
VOICE OF AMERICA	POTABLE	OAHU	WAIANAE						0.25000	0.25000	0.25000	8-7-10: 07
WAIANAE LOTS 2A-2	POTABLE	OAHU	WAIANAE			0.03100	0.03100	0.03100	0.03100	0.03100	0.03100	8-5-04: 02
DEPARTMENT OF HAWAIIAN HOME LANDS CONT.												
KUPUNA HOUSING	POTABLE	OAHU	WINDWARD			0.04320	0.04320	0.04320	0.04320	0.04320	0.04320	4-1-19: 32
SOUKASEN	POTABLE	OAHU	WINDWARD						0.02500	0.02500	0.02500	4-1-08:11, 4-1-23:65
UNIT 9	POTABLE	OAHU	WINDWARD						0.02650	0.02650	0.02650	4-1-08: POR 08, 4-1-37: 68,69
WAIAHOLE SCATTERED LOTS	POTABLE	OAHU	WINDWARD						0.01100	0.01100	0.01100	NR
WAIMANALO SCATTERED LOTS	POTABLE	OAHU	WINDWARD	0.00250	0.00250	0.00250	0.00250	0.00250	0.00250	0.00250	0.00250	4-1-37: 58-60
WAIMANALO, RESIDENTIAL LOTS ALA KOA STREET	POTABLE	OAHU	WINDWARD			0.00050	0.00050	0.00050	0.00050	0.00050	0.00050	4-1-37:35
			DHHL SUBTOTAL=	0.64760	0.66010	2.02474	2.02474	2.02474	11.65914	15.39034	15.81534	

STATE WATER PROJECTS PLAN
PROJECTED WATER REQUIREMENTS BY DEPARTMENT

				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)								
	PRIMARY			02001	02002	02003	02004	02005	02010	02015	02020	
PROJECT NAME	USE	ISLAND	SECTOR	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	TMK
			SWPP Statewide Project Demand Total=	12.19	18.10	25.22	26.59	33.20	69.42	76.55	80.87	
DEPARTMENT OF HEALTH												
MAUI MEMORIAL HOSPITAL - DIET DEPT RENOV	POTABLE	MAUI	WAILUKU	0.00060	0.00060	0.00060	0.00060	0.00060	0.00060	0.00060	0.00060	3-8-7:3
MALUHIA EXPANSION DAY HOSPITAL	POTABLE	OAHU	HONOLULU	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014	NR
NEW VECTOR CONTROL BUILDING	POTABLE	OAHU	HONOLULU	0.00226	0.00226	0.00226	0.00226	0.00226	0.00226	0.00226	0.00226	9-9-10:34
RESIDENCE CHILDREN FACILITIES - OAHU	POTABLE	OAHU	PEARL HARBOR	0.00470	0.00470	0.00470	0.00470	0.00470	0.00470	0.00470	0.00470	9-7-25:01
			DOH SUBTOTAL=	0.00770	0.00770	0.00770	0.00770	0.00770	0.00770	0.00770	0.00770	

STATE WATER PROJECTS PLAN
PROJECTED WATER REQUIREMENTS BY DEPARTMENT

				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)								
	PRIMARY			02001	02002	02003	02004	02005	02010	02015	02020	
PROJECT NAME	USE	ISLAND	SECTOR	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	TMK
			SWPP Statewide Project Demand Total=	12.19	18.10	25.22	26.59	33.20	69.42	76.55	80.87	
DEPARTMENT OF HUMAN SERVICES												
HYCF VOCATIONAL TRNG/MAINTENANCE FAC	POTABLE	OAHU	WINDWARD	0.00380	0.00380	0.00380	0.00380	0.00380	0.00380	0.00380	0.00380	4-2-3:2
			DHS SUBTOTAL=	0.00380	0.00380	0.00380	0.00380	0.00380	0.00380	0.00380	0.00380	

STATE WATER PROJECTS PLAN
PROJECTED WATER REQUIREMENTS BY DEPARTMENT

				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)								
	PRIMARY			02001	02002	02003	02004	02005	02010	02015	02020	
PROJECT NAME	USE	ISLAND	SECTOR	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	TMK
			SWPP Statewide Project Demand Total=	12.19	18.10	25.22	26.59	33.20	69.42	76.55	80.87	
JUDICIARY												
NAALEHU DIST COURT AND MULTI-PURPOSE BLD	POTABLE	HAWAII	SOUTH EAST MAUNA LOA			0.00099	0.00099	0.00099	0.00099	0.00099	0.00099	NR
NAALEHU DIST COURT AND MULTI-PURPOSE BLD	NONPOTABLE USING POTABLE	HAWAII	SOUTH EAST MAUNA LOA			0.00727	0.00727	0.00727	0.00727	0.00727	0.00727	NR
			JUD SUBTOTAL=	0.00000	0.00000	0.00826	0.00826	0.00826	0.00826	0.00826	0.00826	

STATE WATER PROJECTS PLAN
PROJECTED WATER REQUIREMENTS BY DEPARTMENT

				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)								
	PRIMARY			02001	02002	02003	02004	02005	02010	02015	02020	
PROJECT NAME	USE	ISLAND	SECTOR	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	TMK
			SWPP Statewide Project Demand Total=	12.19	18.10	25.22	26.59	33.20	69.42	76.55	80.87	
DEPARTMENT OF LAND AND NATURAL RESOURCES												
BOATING AND OCEAN RECREATION DIVISION												
KAWAIHAE BOAT HARBOR IMPROVEMENTS	POTABLE	HAWAII	KOHALA	0.00140	0.00140	0.00140	0.00140	0.00140	0.00140	0.00140	0.00140	6-1-03
PUAKO BOAT RAMP	POTABLE	HAWAII	NORTH WEST MAUNA LOA						0.00500	0.00500	0.00500	NR
NA WILIWILI BOAT HARBOR	POTABLE	KAUAI	LIHUE						0.00500	0.00500	0.00500	3-2-03
WAIKAEA BOAT HARBOR IMPROVEMENTS	POTABLE	KAUAI	LIHUE			0.00500	0.00500	0.00500	0.00500	0.00500	0.00500	4-5-06
KIKIAOLA BOAT HARBOR IMPROVEMENTS	POTABLE	KAUAI	WAIMEA	0.02250	0.02250	0.02250	0.02250	0.02250	0.04500	0.04500	0.04500	1-2-06
MANELE BOAT HARBOR ELEC/TELE IMPROVEMTS.	NONPOTABLE USING POTABLE	LANAI	KANAO	0.00100	0.00300	0.00300	0.00300	0.00300	0.00300	0.00300	0.00300	4-9-17:06
MANELE BOAT HARBOR ELEC/TELE IMPROVMTS.	POTABLE	LANAI	KANAO	0.00100	0.00200	0.00200	0.00200	0.00200	0.00200	0.00200	0.00200	4-9-17:06
KAHULUI BOAT HARBOR	POTABLE	MAUI	CENTRAL			0.00504	0.00504	0.00504	0.00504	0.00504	0.00504	3-7-01
KAHULUI BOAT HARBOR	NONPOTABLE USING POTABLE	MAUI	CENTRAL			0.00096	0.00096	0.00096	0.00096	0.00096	0.00096	3-7-01
MAALAEA BOAT HAR EAST MOLE IMPROVEMTS	POTABLE	MAUI	CENTRAL						0.02300	0.02300	0.02300	3-6-01, 3-8-14
MAALAEA BOAT HARBOR ADMIN BLD AND BYD	POTABLE	MAUI	CENTRAL			0.00021	0.00021	0.00021	0.00021	0.00021	0.00021	3-6-01, 3-8-14
MAALAEA BOAT HARBOR ADMIN BLD AND BYD	NONPOTABLE USING POTABLE	MAUI	CENTRAL			0.00170	0.00170	0.00170	0.00170	0.00170	0.00170	3-6-01, 3-8-14
ALA WAI BOAT HARBOR COMFORT STATION	POTABLE	OAHU	HONOLULU		0.00500	0.00500	0.00500	0.00500	0.00500	0.00500	0.00500	2-6-10,2-3-37,2-1-58
KEEHI BOAT HARBOR	POTABLE	OAHU	HONOLULU			0.01008	0.01008	0.01008	0.01008	0.01008	0.01008	1-2-23, 1-5-41
KEEHI BOAT HARBOR	NONPOTABLE USING POTABLE	OAHU	HONOLULU			0.00543	0.00543	0.00543	0.00543	0.00543	0.00543	1-2-23, 1-5-41
MAUNALUA BAY COMFORT STATION	POTABLE	OAHU	HONOLULU			0.00500	0.00500	0.00500	0.00500	0.00500	0.00500	2-9-2,3,4,7,16,17,33
STATE PARKS DIVISION												
KALOPA SRA	POTABLE	HAWAII	EAST MAUNA KEA	0.00500	0.00500	0.00500	0.00500	0.00500	0.00500	0.00500	0.00500	4-4-14:1
WAILUKU RIVER SP (BOILING POTS)	POTABLE	HAWAII	EAST MAUNA KEA						0.00500	0.00500	0.00500	2-3-27:1, 2-3-29:12, 2-5-10:1
KEKAHA KAI SP (MAHAIULA)	POTABLE	HAWAII	HUALALAI			0.00336	0.00662	0.00667	0.00673	0.00678	0.00695	NR
KEKAHA KAI SP (MAHAIULA)	NONPOTABLE USING POTABLE	HAWAII	HUALALAI			0.03869	0.07612	0.07675	0.07738	0.07801	0.07990	NR
OLD KONA AIRPORT SRA	POTABLE	HAWAII	HUALALAI		0.01008	0.01008	0.01008	0.01008	0.01008	0.01008	0.01008	7-5-05:7,72,73,74,79,82,83
OLD KONA AIRPORT SRA	NONPOTABLE USING POTABLE	HAWAII	HUALALAI		0.00592	0.00592	0.00592	0.00592	0.00592	0.00592	0.00592	7-5-05:7,72,73,74,79,82,83
KOHALA HISTORICAL SITES STATE MONUMENT	POTABLE	HAWAII	KOHALA	0.00006	0.00008	0.00178	0.00180	0.00182	0.00357	0.00357	0.00357	5-5-05:6,20, 5-6-01:75
KOHALA HISTORICAL SITES STATE MONUMENT	NONPOTABLE USING POTABLE	HAWAII	KOHALA	0.00097	0.00129	0.02793	0.02825	0.02857	0.05586	0.05586	0.05586	5-5-05:6,20, 5-6-01:75

STATE WATER PROJECTS PLAN
PROJECTED WATER REQUIREMENTS BY DEPARTMENT

				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)								
	PRIMARY			02001	02002	02003	02004	02005	02010	02015	02020	
PROJECT NAME	USE	ISLAND	SECTOR	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	TMK
			SWPP Statewide Project Demand Total=	12.19	18.10	25.22	26.59	33.20	69.42	76.55	80.87	
LAPAKAHI SHP	POTABLE	HAWAII	KOHALA	0.00011	0.00015	0.00179	0.00183	0.00186	0.00358	0.00358	0.00358	5-7-01:22
STATE PARKS DIVISION CONT.												
LAPAKAHI SHP	NONPOTABLE USING POTABLE	HAWAII	KOHALA	0.00101	0.00135	0.01609	0.01643	0.01676	0.03218	0.03218	0.03218	5-7-01:22
KEALAKEKUA BAY SHP	POTABLE	HAWAII	SOUTH WEST MAUNA LOA	0.00080	0.00080	0.00080	0.00080	0.00080	0.00081	0.00081	0.00081	8-1-07:50 & OTHERS
KEALAKEKUA BAY SHP	NONPOTABLE USING POTABLE	HAWAII	SOUTH WEST MAUNA LOA	0.07936	0.07941	0.07946	0.07952	0.07957	0.07973	0.07973	0.07973	8-1-07:50 & OTHERS
HAPUNA BEACH SRA	POTABLE	HAWAII	WEST MAUNA KEA		0.05270	0.05270	0.05270	0.05270	0.05270	0.05270	0.05270	6-6-01:2, 6-6-02:32,34,35,41
HAPUNA BEACH SRA	NONPOTABLE	HAWAII	WEST MAUNA KEA						0.64995	0.64995	0.64995	6-6-01:2, 6-6-02:32,34,35,41
HAENA SP	POTABLE	KAUAI	HANALEI	0.01258	0.01998	0.01998	0.01998	0.01998	0.01998	0.01998	0.01998	5-9-6,7,8
HAENA SP	NONPOTABLE	KAUAI	HANALEI	0.02142	0.03402	0.03402	0.03402	0.03402	0.03402	0.03402	0.03402	5-9-6,7,8
AHUKINI SRP	POTABLE	KAUAI	LIHUE	0.00021	0.00027	0.00034	0.00041	0.00048	0.00069	0.00069	0.00069	3-7-02:2,7,9,10
WAILUA RIVER SP	POTABLE	KAUAI	LIHUE	0.00090	0.00121	0.00151	0.00181	0.00211	0.00301	0.00301	0.00301	3-9-02 & OTHERS
MALAE HEIAU	POTABLE	KAUAI	LIHUE			0.00199	0.00199	0.00202	0.00204	0.00206	0.00215	3/9/02
MALAE HEIAU	NONPOTABLE USING POTABLE	KAUAI	LIHUE			0.01612	0.01612	0.01631	0.01649	0.01667	0.01740	3/9/02
RUSSIAN FORT ELIZABETH SHP	POTABLE	KAUAI	WAIMEA	0.00003	0.00192	0.00193	0.00194	0.00195	0.00198	0.00198	0.00198	1-7-05:3
RUSSIAN FORT ELIZABETH SHP	NONPOTABLE USING POTABLE	KAUAI	WAIMEA	0.00059	0.03641	0.03660	0.03680	0.03699	0.03758	0.03758	0.03758	1-7-05:3
MAKENA STATE PARK - COMFORT STATIONS WITH COMPOSTING TOILETS	POTABLE	MAUI	KAHIKINUI	0.00250	0.00250	0.00250	0.00250	0.00250	0.00250	0.00250	0.00250	2-1-06: 27 & 30
MAKENA STATE PARK - SECURITY RESIDENCE	POTABLE	MAUI	KAHIKINUI	0.00060	0.00060	0.00060	0.00060	0.00060	0.00060	0.00060	0.00060	2-1-06: 28 & POR. 53
HALEKII-PIHANA HEIAU SM	POTABLE	MAUI	WAILUKU	0.00003	0.00004	0.00004	0.00005	0.00006	0.00128	0.00128	0.00128	3-4-30:4
HALEKII-PIHANA HEIAU SM	NONPOTABLE USING POTABLE	MAUI	WAILUKU	0.00035	0.00047	0.00059	0.00070	0.00082	0.01698	0.01698	0.01698	3-4-30:4
KUKANILOKO HEIAU (NEAR WHITMORE VILLAGE)	POTABLE	OAHU	CENTRAL			0.00003	0.00004	0.00050	0.00051	0.00051	0.00099	7-1-01:4,8
KUKANILOKO HEIAU (NEAR WHITMORE VILLAGE)	NONPOTABLE USING POTABLE	OAHU	CENTRAL	0.00028	0.00037	0.00502	0.00511	0.00511	0.01003	0.01003	0.01003	7-1-01:4,8
DIAMOND HEAD STATE MONUMENT	POTABLE	OAHU	HONOLULU	0.02087	0.02087	0.02087	0.02087	0.02087	0.02087	0.02087	0.02087	3-1-42, 3-1-35
DIAMOND HEAD STATE MONUMENT	NONPOTABLE	OAHU	HONOLULU	0.27733	0.27733	0.27733	0.27733	0.27733	0.27733	0.27733	0.27733	3-1-42, 3-1-35
KAIWI SP	POTABLE	OAHU	HONOLULU			0.00164	0.00219	0.00274	0.00329	0.00384	0.00548	3-9-11:2,3,5,6,7,4-01-14:1
KALIHI VALLEY SP	POTABLE	OAHU	HONOLULU			0.00019	0.00025	0.00031	0.00037	0.00043	0.00062	1-3-24:2
KUULEI CLIFFS	POTABLE	OAHU	HONOLULU					0.00003	0.00005	0.00094	0.00095	3-1-42
KUULEI CLIFFS	NONPOTABLE USING POTABLE	OAHU	HONOLULU	0.00027	0.00037	0.00758	0.00767	0.00776	0.00803	0.00803	0.00803	3-1-42
MAKALEI PLACE	POTABLE	OAHU	HONOLULU			0.00000	0.00000	0.00040	0.00040	0.00040	0.00081	3-1-42

STATE WATER PROJECTS PLAN
PROJECTED WATER REQUIREMENTS BY DEPARTMENT

				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)								
	PRIMARY			02001	02002	02003	02004	02005	02010	02015	02020	
PROJECT NAME	USE	ISLAND	SECTOR	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	TMK
			SWPP Statewide Project Demand Total=	12.19	18.10	25.22	26.59	33.20	69.42	76.55	80.87	
MAKALEI PLACE	NONPOTABLE USING POTABLE	OAHU	HONOLULU			0.00018	0.00024	0.03990	0.03997	0.04003	0.07981	3-1-42
MAKIKI TANTALUS STATE PARK	POTABLE	OAHU	HONOLULU	0.00141	0.00187	0.00994	0.01041	0.01088	0.01229	0.01229	0.01229	2-5-19
STATE PARKS DIVISION CONT.												
MAKIKI TANTALUS STATE PARK	NONPOTABLE USING POTABLE	OAHU	HONOLULU	0.00229	0.00306	0.01622	0.01699	0.01775	0.02004	0.02004	0.02004	2-5-19
ROYAL MAUSOLEUM SM	POTABLE	OAHU	HONOLULU	0.00014	0.00019	0.00024	0.00029	0.00034	0.00048	0.00048	0.00048	2-2-20:14, 2-2-21:7,12
SAND ISLAND SRA	POTABLE	OAHU	HONOLULU	0.00001	0.00001	0.00241	0.00242	0.00242	0.00243	0.00243	0.00243	1-5-41:6
SAND ISLAND SRA	NONPOTABLE USING POTABLE	OAHU	HONOLULU	0.00081	0.00109	0.23896	0.23923	0.23950	0.24031	0.24031	0.24031	1-5-41:6
WASHINGTON PLACE	POTABLE	OAHU	HONOLULU	0.00062	0.00082	0.00103	0.00123	0.00144	0.00206	0.00206	0.00206	2-1-18:46
PUU MAHUKA HEIAU SM	POTABLE	OAHU	NORTH				0.00013	0.00017	0.00225	0.00229	0.00233	5-9-05:68
PUU MAHUKA HEIAU SM	NONPOTABLE USING POTABLE	OAHU	NORTH	0.00061	0.00082	0.01098	0.01119	0.01139	0.01201	0.01201	0.01201	5-9-05:68
AIEA BAY STATE RECREATION AREA	POTABLE	OAHU	PEARL HARBOR	0.00021	0.00027	0.00034	0.00041	0.00048	0.00069	0.00069	0.00069	9-8-19:2 & OTHERS
WAIMANO GULCH STATE PARK RESERVE	POTABLE	OAHU	PEARL HARBOR				0.00000	0.00000	0.00000	0.00000	0.00000	9-7-25
WAIMANO GULCH STATE PARK RESERVE	NONPOTABLE USING POTABLE	OAHU	PEARL HARBOR	0.00002	0.00003	0.00003	0.00004	0.00005	0.14223	0.14223	0.14223	9-7-25
KAENA POINT SP	POTABLE	OAHU	WAIANAE	0.00102	0.00136	0.00542	0.00576	0.00610	0.01084	0.01084	0.01084	6-9-01:2 & OTHERS
KAENA POINT SP	NONPOTABLE	OAHU	WAIANAE	0.00227	0.00302	0.01206	0.01282	0.01357	0.02412	0.02412	0.02412	6-9-01:2 & OTHERS
HEEIA STATE PARK	POTABLE	OAHU	WINDWARD	0.00003	0.00004	0.00006	0.00007	0.00008	0.00011	0.00011	0.00011	4-6-05:2,4,9
KAHANA VALLEY SP	POTABLE	OAHU	WINDWARD	0.00026	0.00034	0.00043	0.00051	0.00060	0.00085	0.00085	0.00085	5-2-01:1, 5-2-02:1-8, 5-2-05:1,3,20,21
LAIE POINT STATE WAYSIDE	POTABLE	OAHU	WINDWARD			0.00017	0.00022	0.00110	0.00116	0.00121	0.00138	5-5-10:2,3,22,29
LAIE POINT STATE WAYSIDE	NONPOTABLE USING POTABLE	OAHU	WINDWARD			0.00024	0.00032	0.00158	0.00166	0.00175	0.00199	5-5-10:2,3,22,29
MALAEKAHANA SRA (KAHUKU SECTION)	POTABLE	OAHU	WINDWARD			0.01000	0.01000	0.01000	0.02000	0.02000	0.02000	5-6-01:4,24,25,45,46,47,51,53-65
MALAEKAHANA SRA (KAHUKU SECTION)	NONPOTABLE	OAHU	WINDWARD			0.03000	0.03000	0.03000	0.06000	0.06000	0.06000	5-6-01:4,24,25,45,46,47,51,53-65
MALAEKAHANA SRA (KALANAI POINT SECTION)	POTABLE	OAHU	WINDWARD			0.01000	0.01000	0.01000	0.02000	0.02000	0.02000	5-6-01:4,24,25,45,46,47,49,51,53-65
MALAEKAHANA SRA (KALANAI POINT SECTION)	NONPOTABLE	OAHU	WINDWARD			0.03000	0.03000	0.03000	0.06000	0.06000	0.06000	5-6-01:4,24,25,45,46,47,49,51,53-65
NUUANU PALI SW	POTABLE	OAHU	WINDWARD				0.00164	0.00219	0.00274	0.00329	0.00384	1-9-07:1, 2-2-54:1
SACRED FALLS STATE PARK	POTABLE	OAHU	WINDWARD	0.00154	0.00206	0.00257	0.00308	0.00360	0.00514	0.00514	0.00514	5-3-11:9
ULUPO HEIAU STATE MONUMENT	POTABLE	OAHU	WINDWARD			0.00039	0.00052	0.00065	0.00078	0.00091	0.00130	4-2-13:2
			DLNR SUBTOTAL=	**0.46241**	**0.60201**	**1.12148**	**1.17029**	**1.22051**	**2.25145**	**2.25476**	**2.30154**	

STATE WATER PROJECTS PLAN
PROJECTED WATER REQUIREMENTS BY DEPARTMENT

				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)								
	PRIMARY			02001	02002	02003	02004	02005	02010	02015	02020	
PROJECT NAME	USE	ISLAND	SECTOR	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	TMK
			SWPP Statewide Project Demand Total=	12.19	18.10	25.22	26.59	33.20	69.42	76.55	80.87	
DEPARTMENT OF PUBLIC SAFETY												
MAUI COM CORRECT CTR, EXPAN&RENOVS	POTABLE	MAUI	CENTRAL	0.06400	0.06400	0.06400	0.10000	0.10000	0.10000	0.10000	0.10000	3-8-46: 5 & 6
NEW 200-BED ADDITION	POTABLE	OAHU	PEARL HARBOR	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	0.03000	9-6-05:11,12
NEW 84-BED HOUSING	POTABLE	OAHU	WINDWARD	0.01260	0.01260	0.01260	0.01260	0.01260	0.01260	0.01260	0.01260	4-2-3:04
			DPS SUBTOTAL=	0.10660	0.10660	0.10660	0.14260	0.14260	0.14260	0.14260	0.14260	

STATE WATER PROJECTS PLAN
PROJECTED WATER REQUIREMENTS BY DEPARTMENT

				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)								
	PRIMARY			02001	02002	02003	02004	02005	02010	02015	02020	
PROJECT NAME	USE	ISLAND	SECTOR	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	TMK
			SWPP Statewide Project Demand Total=	12.19	18.10	25.22	26.59	33.20	69.42	76.55	80.87	
DEPARTMENT OF TRANSPORTATION												
AIRPORTS DIVISION												
KONA INTERNATIONAL AIRPORT MASTER PLAN	POTABLE	HAWAII	HUALALAI	0.12200	0.13200	0.14200	0.15200	0.16200	0.17200	0.20400	0.24200	7-3-10
HILO INTERNATIONAL AIRPORT MASTER PLAN	POTABLE	HAWAII	NORTH EAST MAUNA LOA	0.00400	0.00600	0.00800	0.01000	0.01200	0.01300	0.02000	0.02800	2-1-12
LIHUE AIRPORT MASTER PLAN	POTABLE	KAUAI	LIHUE	0.00800	0.01300	0.01500	0.01900	0.02400	0.05200	0.09500	0.14500	3-5-01
LANAI AIRPORT MASTER PLAN	POTABLE	LANAI	CENTRAL	0.00040	0.00060	0.00090	0.00120	0.00150	0.00190	0.00290	0.00390	4-9-02
KAHULUI AIRPORT ACCESS ROAD	POTABLE	MAUI	CENTRAL				0.10000					3-8-01
KAHULUI AIRPORT MASTER PLAN	POTABLE	MAUI	CENTRAL	0.01200	0.01700	0.02200	0.02700	0.03200	0.06700	0.11700	0.16700	3-8-01
HANA AIRPORT MASTER PLAN	POTABLE	MAUI	HANA	0.00050	0.00060	0.00070	0.00080	0.00090	0.00100	0.00200	0.00400	NR
MOLOKAI AIRPORT MASTER PLAN	POTABLE	MOLOKAI	CENTRAL	0.00020	0.00030	0.00040	0.00050	0.00060	0.00100	0.00150	0.00250	5-2-04
HONOLULU INTERNATIONAL AIRPORT	POTABLE	OAHU	HONOLULU						0.10000	0.10000	0.10000	1-1-03
DILLINGHAM FIELD - MOKULEIA	POTABLE	OAHU	NORTH	0.00200	0.00300	0.00400	0.00500	0.00600	0.01500	0.02500	0.03500	6-8-02
HARBORS DIVISION												
HAWAII COMMERCIAL HARBORS 2020 MASTER PLAN: DRY BULK CARGO TERMINALS	POTABLE	HAWAII	KOHALA		0.01800	0.01800	0.01800	0.01800	0.01800	0.01800	0.01800	3-6-1:03
HAWAII COMMERCIAL HARBORS 2020 MASTER PLAN: INTER-ISLAND CARGO TERMINAL	POTABLE	HAWAII	KOHALA						0.03300	0.06600	0.06600	3-6-1:03
HAWAII COMMERCIAL HARBORS 2020 MASTER PLAN: LIQUID BULK CARGO TERMINALS	POTABLE	HAWAII	KOHALA			0.06900	0.06900	0.06900	0.06900	0.06900	0.06900	3-6-1:03
HAWAII COMMERCIAL HARBORS 2020 MASTER PLAN: MILITARY CARGO TERMINAL	POTABLE	HAWAII	KOHALA		0.04800	0.04800	0.04800	0.04800	0.04800	0.04800	0.04800	3-6-1:03
HAWAII COMMERCIAL HARBORS 2020 MASTER PLAN: OVERSEAS CONTAINER TERMINAL	POTABLE	HAWAII	KOHALA					0.06300	0.06300	0.06300	0.06300	3-6-1:03
HAWAII COMMERCIAL HARBORS 2020 MASTER PLAN: PASSENGER TERMINAL-KAWAIHAE HARBOR	POTABLE	HAWAII	KOHALA							0.01500	0.01500	3-6-1:03
HAWAII COMMERCIAL HARBORS 2020 MASTER PLAN: OCEAN RESEARCH STATION	POTABLE	HAWAII	NORTH EAST MAUNA LOA							0.01200	0.01200	3-2-1-:07
HAWAII COMMERCIAL HARBORS 2020 MASTER PLAN: OVERSEAS CONTAINER TERMINAL	POTABLE	HAWAII	NORTH EAST MAUNA LOA				0.06000	0.06000	0.06000	0.06000	0.06000	3-2-1:09
HAWAII COMMERCIAL HARBORS 2020 MASTER PLAN: PASSENGER TERMINAL-HILO HARBOR	POTABLE	HAWAII	NORTH EAST MAUNA LOA							0.01500	0.01500	3-2-1:07
HAWAII COMMERCIAL HARBORS 2020 MASTER PLAN: INTER-ISLAND CARGO TERMINAL	POTABLE	HAWAII	NORTH EAST MAUNA LOA					0.06000	0.06000	0.06000	0.06000	3-2-1:07
PORT ALLEN AIRPORT MASTER PLAN	POTABLE	KAUAI	LIHUE	0.00300	0.00300	0.00300	0.00300	0.00300	0.00300	0.00300	0.00400	1-8-08:1
KAUAI COMMERCIAL HARBORS - 2025 MASTER PLAN: COMMERCIAL/NAVY VESSEL BERTHING	POTABLE	KAUAI	WAIMEA							0.00300	0.00300	4-2-1:03
KAHULUI COMMERCIAL HARBOR - 2025 MASTER PLAN: CARGO YARD	POTABLE	MAUI	CENTRAL	0.05000	0.05000	0.05000	0.05000	0.05000	0.10000	0.10000	0.10000	2-3-7:8,10
KAUNAKAKAI HARBOR - 2010 MASTER PLAN	POTABLE	MOLOKAI	SOUTH EAST							0.03660	0.03660	NR

STATE WATER PROJECTS PLAN
PROJECTED WATER REQUIREMENTS BY DEPARTMENT

				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)								
	PRIMARY			02001	02002	02003	02004	02005	02010	02015	02020	
PROJECT NAME	USE	ISLAND	SECTOR	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	TMK
			SWPP Statewide Project Demand Total=	12.19	18.10	25.22	26.59	33.20	69.42	76.55	80.87	
OAHU COMMERCIAL HARBORS 2020 MASTER PLAN: DRY BULK CARGO YARD	POTABLE	OAHU	EWA CAPROCK		0.11000	0.11000	0.11000	0.11000	0.11000	0.11000	0.11000	9-1-14
HARBORS DIVISION CONT.												
OAHU COMMERCIAL HARBORS 2020 MASTER PLAN: PETROLEUM PIER	POTABLE	OAHU	EWA CAPROCK					0.02000	0.02000	0.02000	0.02000	9-1-14
OAHU COMMERCIAL HARBORS 2020 MASTER PLAN: SHIPYARD	POTABLE	OAHU	EWA CAPROCK				0.09000	0.09000	0.09000	0.09000	0.09000	9-1-14
OAHU COMMERCIAL HARBORS 2020 MASTER PLAN: COMMERCIAL FISHING BERTHS	POTABLE	OAHU	HONOLULU					0.00003	0.00003	0.00003	0.00003	2-1-01
OAHU COMMERCIAL HARBORS 2020 MASTER PLAN: EXCURSION VESSEL & FERRY TERMINAL	POTABLE	OAHU	HONOLULU		0.07000	0.07000	0.07000	0.07000	0.07000	0.07000	0.07000	1-5-38
OAHU COMMERCIAL HARBORS 2020 MASTER PLAN: FOREIGN FISHING & OIL RESPONSE LAY BERTHS	POTABLE	OAHU	HONOLULU					0.00003	0.00003	0.00003	0.00003	1-1-76
OAHU COMMERCIAL HARBORS 2020 MASTER PLAN: GENERAL/NEOBULK CARGO YARD	POTABLE	OAHU	HONOLULU		0.04000	0.08000	0.08000	0.08000	0.08000	0.08000	0.08000	1-5-36
OAHU COMMERCIAL HARBORS 2020 MASTER PLAN: KAPALAMA MILITARY RESER.CONTAINER YD	POTABLE	OAHU	HONOLULU						0.27000	0.27000	0.27000	1-2-25
OAHU COMMERCIAL HARBORS 2020 MASTER PLAN: KEEHI INDUSTRIAL PARK ASSOCIATION	POTABLE	OAHU	HONOLULU					0.05000	0.05000	0.05000	0.05000	1-2-23
OAHU COMMERCIAL HARBORS 2020 MASTER PLAN: PASSENGER TERMINAL	POTABLE	OAHU	HONOLULU			0.06000	0.06000	0.06000	0.06000	0.06000	0.06000	2-1-15
OAHU COMMERCIAL HARBORS 2020 MASTER PLAN: PASSENGER TERMINAL & GENERAL CARGO YARD	POTABLE	OAHU	HONOLULU		0.03000	0.03000	0.06000	0.06000	0.06000	0.06000	0.06000	1-5-39
DIVISION OF HIGHWAYS												
QUEEN KAAHUMANU HWY WIDENING, KAILUA TO KEAHOLE	NONPOTABLE USING POTABLE	HAWAII	HUALALAI			0.24000	0.24000	0.24000	0.06000	0.06000	0.06000	NR
MAMALAHOA HWY, EMERGENCY REPLACE.OF PAAUAU STR.BRIDGE, REALIGN.OF KAMANI ST., ETC.	NONPOTABLE USING POTABLE	HAWAII	KILAUEA	0.03200	0.03200	0.00800	0.00800	0.00800	0.00800	0.00800	0.00800	9-6-23:43, 9-6-05:46, 9-6-12:12, 9-6-02:47, 9-6-13:05
KAUMUALII HWY IMPROVEMENTS, LIHUE TO WEST OF MALUHIA	NONPOTABLE USING POTABLE	KAUAI	LIHUE			0.23200	0.23200	0.05800	0.05800	0.05800	0.05800	NR
KUHIO HWY, HANAMAULU TO KAPAA	NONPOTABLE USING POTABLE	KAUAI	LIHUE					0.13600	0.03400	0.03400	0.03400	NR
HALEAKALA HWY WIDENING, PUKALANI BYPASS TO HANA HWY	NONPOTABLE USING POTABLE	MAUI	CENTRAL				0.06600	0.06600	0.01700	0.01700	0.01700	NR
HONOAPIILANI HWY WIDENING, NORTH KIHEI ROAD TO MAALAEA HARBOR	NONPOTABLE USING POTABLE	MAUI	CENTRAL		0.01800	0.01800	0.00450	0.00450	0.00450	0.00450	0.00450	NR
NORTH-SOUTH ROAD KAPOLEI PARKWAY TO FARRINGTON HWY, PHASE 1	NONPOTABLE USING POTABLE	OAHU	EWA CAPROCK						0.04500	0.01140	0.01140	NR
NORTH-SOUTH ROAD, FARRINGTON HIGHWAY TO INTERSTATE RTE. H-1, PHASE 2	NONPOTABLE USING POTABLE	OAHU	EWA CAPROCK				0.24000	0.24000	0.06000	0.06000	0.06000	NR
PUULOA ROAD IMPROVEMENTS, KAMEHAMEHA HWY TO SALTLAKE BLVD (LANDSCAPING)	NONPOTABLE USING POTABLE	OAHU	HONOLULU			0.02400	0.02400	0.00600	0.00600	0.00600	0.00600	NR
FARRINGTON HWY IMPROVEMENTS, WAIPAHU DEPOT ROAD TO ANIANI STREET	NONPOTABLE USING POTABLE	OAHU	PEARL HARBOR				0.01600	0.01600	0.00400	0.00400	0.00400	9-4-01,10,11,14,25
FARRINGTON HWY MEDIAL STRIP, KAMEHAMEHA HWY TO FORT WEAVER ROAD	NONPOTABLE USING POTABLE	OAHU	PEARL HARBOR		0.06000	0.06000	0.06000	0.03000	0.03000	0.03000	0.03000	NR
ROUTE H3, HALAWA INTERCHANGE FINISH CONTRACT, UNIT VII	NONPOTABLE USING POTABLE	OAHU	PEARL HARBOR		0.00650	0.00325	0.00650	0.00325	0.00325	0.00325	0.00325	NR
KAHEKILI HWY	NONPOTABLE USING POTABLE	OAHU	WINDWARD		0.05400	0.01350	0.01350	0.01350	0.01350	0.01350	0.01350	NR
			DOT SUBTOTAL=	0.23410	0.71200	1.32975	1.94400	1.97131	2.03021	2.25571	2.41671	

STATE WATER PROJECTS PLAN
PROJECTED WATER REQUIREMENTS BY DEPARTMENT

				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)								
	PRIMARY			02001	02002	02003	02004	02005	02010	02015	02020	
PROJECT NAME	USE	ISLAND	SECTOR	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	TMK
			SWPP Statewide Project Demand Total=	12.19	18.10	25.22	26.59	33.20	69.42	76.55	80.87	
UNIVERSITY OF HAWAII												
UNIVERSITY OF HAWAII CENTER AT WEST HAWAII - EXTERIOR IMPROVEMENTS PHASE I	NONPOTABLE USING POTABLE	HAWAII	HUALALAI				0.03600	0.03600	0.03600	0.03600	0.03600	7-3-10:33
UNIVERSITY OF HAWAII CENTER AT WEST HAWAII - FOOD SERVICES FACILITY	POTABLE	HAWAII	HUALALAI				0.00695	0.00695	0.00695	0.00695	0.00695	7-3-10:33
UNIVERSITY OF HAWAII CENTER AT WEST HAWAII - FOOD SERVICES FACILITY	NONPOTABLE USING POTABLE	HAWAII	HUALALAI				0.00029	0.00029	0.00029	0.00029	0.00029	7-3-10:33
UNIVERSITY OF HAWAII CENTER AT WEST HAWAII - LEARNING RESOURCE CENTER	POTABLE	HAWAII	HUALALAI				0.00978	0.00978	0.00978	0.00978	0.00978	7-3-10:33
UNIVERSITY OF HAWAII CENTER AT WEST HAWAII - LEARNING RESOURCE CENTER	NONPOTABLE USING POTABLE	HAWAII	HUALALAI				0.00010	0.00010	0.00010	0.00010	0.00010	7-3-10:33
UNIVERSITY OF HAWAII CENTER AT WEST HAWAII - OPERATIONS & MAINTENANCE PHASE I	POTABLE	HAWAII	HUALALAI					0.00024	0.00024	0.00024	0.00024	7-3-10:33
UNIVERSITY OF HAWAII CENTER AT WEST HAWAII - OPERATIONS & MAINTENANCE PHASE I	NONPOTABLE USING POTABLE	HAWAII	HUALALAI					0.00004	0.00004	0.00004	0.00004	7-3-10:33
PACIFIC AQUACULT&COASTAL RESOURCS CTR	NONPOTABLE	HAWAII	N.E. MAUNA LOA		1.65000	1.65000	1.65000	1.65000	1.65000	1.65000	1.65000	2-1-9: 1 & 41, 2-1-11: 4
PACIFIC AQUACULTURE AND COASTAL RESOURCES CENTER, UHH FARM @ PANAEWA	NONPOTABLE	HAWAII	N.E. MAUNA LOA		0.75000	0.75000	0.75000	0.75000	0.75000	0.75000	0.75000	2-1-56: 56
INSTITUTE FOR ASTRONOMY FACILITY-HILO	POTABLE	HAWAII	NORTH EAST MAUNA LOA	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100	2-4-01:07
PANAEWA FARM WELL AND PUMP	NONPOTABLE	HAWAII	NORTH EAST MAUNA LOA	0.35000	0.35000	0.35000	0.35000	0.35000	0.35000	0.35000	0.35000	2-2-56:56
UNIVERSITY OF HAWAII AT HILO CAMPUS DEV	POTABLE	HAWAII	NORTH EAST MAUNA LOA	0.04200	0.05600	0.07000	0.07000	0.07000	0.14000	0.21000	0.28000	2-4-57:25,26
HAWAII COMMUNITY COLLEGE HILO - EXTERIOR IMPROVEMENTS PHASE I	NONPOTABLE USING POTABLE	HAWAII	NORTH EAST MAUNA LOA					0.04000	0.04000	0.04000	0.04000	NR
HAWAII COMMUNITY COLLEGE HILO - LEARNING RESOURCE CENTER	POTABLE	HAWAII	NORTH EAST MAUNA LOA						0.00958	0.00958	0.00958	NR
HAWAII COMMUNITY COLLEGE HILO - LEARNING RESOURCE CENTER	NONPOTABLE USING POTABLE	HAWAII	NORTH EAST MAUNA LOA						0.00050	0.00050	0.00050	NR
HAWAII COMMUNITY COLLEGE HILO - OPERATIONS & MAINTENANCE, PHASE I	POTABLE	HAWAII	NORTH EAST MAUNA LOA						0.00024	0.00024	0.00024	NR
HAWAII COMMUNITY COLLEGE HILO - OPERATIONS & MAINTENANCE, PHASE I	NONPOTABLE USING POTABLE	HAWAII	NORTH EAST MAUNA LOA						0.00004	0.00004	0.00004	NR
U.S. CHINA CENTER	POTABLE	HAWAII	NORTH EAST MAUNA LOA		0.04580	0.04580	0.04580	0.04580	0.13400	0.13400	0.13400	2-4-01:05 (POR.)
KAUAI COMMUNITY COLLEGE - OCET FACILITIES	POTABLE	KAUAI	LIHUE				0.00760	0.00760	0.00760	0.00760	0.00760	3-4-005;006,009
KAUAI COMMUNITY COLLEGE - OCET FACILITIES	NONPOTABLE USING POTABLE	KAUAI	LIHUE				0.00202	0.00202	0.00202	0.00202	0.00202	3-4-005;006,009
KAUAI COMMUNITY COLLEGE - RENOV. CAMPUS CENTER FOR CULINARY ARTS	POTABLE	KAUAI	LIHUE	0.00432	0.00432	0.00432	0.00432	0.00432	0.00432	0.00432	0.00432	3-4-005;006,009
KAUAI COMMUNITY COLLEGE - ADDITION TO BLDG 4463C ELECT TECH	POTABLE	KAUAI	LIHUE	0.00600	0.00600	0.00600	0.00600	0.00600	0.00600	0.00600	0.00600	3-4-005;006,009
MAUI COMMUNITY COLLEGE - BLDG N TELECOMMUNICATION/MEDIA CENTER	POTABLE	MAUI	CENTRAL	0.01145	0.01145	0.01145	0.01145	0.01145	0.01145	0.01145	0.01145	3-7-002-011
MAUI COMMUNITY COLLEGE - BLDG N TELECOMMUNICATION/MEDIA CENTER	NONPOTABLE USING POTABLE	MAUI	CENTRAL	0.00361	0.00361	0.00361	0.00361	0.00361	0.00361	0.00361	0.00361	3-7-002-011
MAUI COMMUNITY COLLEGE - BLDG P FOOD SERVICES	POTABLE	MAUI	CENTRAL		0.09286	0.09286	0.09286	0.09286	0.09286	0.09286	0.09286	3-7-002-011
MAUI COMMUNITY COLLEGE - BLDG P FOOD SERVICES	NONPOTABLE USING POTABLE	MAUI	CENTRAL		0.00094	0.00094	0.00094	0.00094	0.00094	0.00094	0.00094	3-7-002-011
MAUI COMMUNITY COLLEGE - BUILDING S COMMUNITY SERVICES	POTABLE	MAUI	CENTRAL	0.00929	0.00929	0.00929	0.00929	0.00929	0.00929	0.00929	0.00929	3-7-002-011

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PROJECTED WATER REQUIREMENTS BY DEPARTMENT

				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)								
	PRIMARY			02001	02002	02003	02004	02005	02010	02015	02020	
PROJECT NAME	USE	ISLAND	SECTOR	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	TMK
			SWPP Statewide Project Demand Total=	12.19	18.10	25.22	26.59	33.20	69.42	76.55	80.87	
MAUI COMMUNITY COLLEGE - BUILDING S COMMUNITY SERVICES	NONPOTABLE USING POTABLE	MAUI	CENTRAL	0.00029	0.00029	0.00029	0.00029	0.00029	0.00029	0.00029	0.00029	3-7-002-011
UNIVERSITY OF HAWAII CONT.												
MAUI COMMUNITY COLLEGE, RENOVATE BLDG. Q, STUDENT CENTER	POTABLE	MAUI	CENTRAL				0.00163	0.00163	0.00163	0.00163	0.00163	3-7-2: 11
MOLOKAI EDUCATION CENTER	POTABLE	MOLOKAI	SOUTH EAST	0.00060	0.00060	0.00060	0.00060	0.00060	0.00060	0.00060	0.00060	5-3-03:POR:01
HANGER 111 (EXISTING)	POTABLE	OAHU	EWA CAPROCK	0.00805	0.00805	0.00805	0.00805	0.00805	0.00805	0.00805	0.00805	NR
RENOVATE BARRACK, BLDG. 36	POTABLE	OAHU	EWA CAPROCK				0.00432	0.00432	0.00432	0.00432	0.00432	NR
RENOVATE BARRACK, BLDG. 36	NONPOTABLE USING POTABLE	OAHU	EWA CAPROCK				0.00005	0.00005	0.00005	0.00005	0.00005	NR
UNIVERSITY OF HAWAII - WEST OAHU CAMPUS	POTABLE	OAHU	EWA CAPROCK						0.32880	0.50400	0.68160	9-2-02:01,03,05
UNIVERSITY OF HAWAII - WEST OAHU CAMPUS	NONPOTABLE	OAHU	EWA CAPROCK						0.35620	0.54610	0.73840	9-2-02:01,03,05
BIOMEDICAL SCIENCE BLDG RENOVATIONS	POTABLE	OAHU	HONOLULU						0.01850	0.01850	0.01850	2-8-26:4
CRAWFORD HALL RENOVATIONS	POTABLE	OAHU	HONOLULU	0.00250	0.00250	0.00250	0.00250	0.00250	0.00250	0.00250	0.00250	2-8-26:4
DEAN HALL RENOVATIONS	POTABLE	OAHU	HONOLULU					0.00190	0.00190	0.00190	0.00190	2-8-26:4
DIAMOND HEAD HEALTH SCIENCE CAMPUS DEV	POTABLE	OAHU	HONOLULU						0.01900	0.04300	0.05000	3-2-30:2,3-2-31:1,15, 3-2-32:1, 3-2-33:1,3
GARTLEY HALL RENOVATIONS	POTABLE	OAHU	HONOLULU				0.00240	0.00240	0.00240	0.00240	0.00240	2-8-26:4
HAWAII HALL RENOVATION	POTABLE	OAHU	HONOLULU	0.00350	0.00350	0.00350	0.00350	0.00350	0.00350	0.00350	0.00350	2-8-26:4
ITS (INFORMATION TECHNOLOGY SERVICES) FAC	POTABLE	OAHU	HONOLULU					0.00480	0.00480	0.00480	0.00480	2-8-26:4
SINCLAIR LIBRARY RENOVATION	POTABLE	OAHU	HONOLULU					0.01180	0.01180	0.01180	0.01180	2-8-26:4
UNIVERSITY OF HAWAII AT MANOA - AGRICULTURAL SCIENCE FACILITY, PHASE III	POTABLE	OAHU	HONOLULU	0.02494	0.02494	0.02494	0.02494	0.02494	0.02494	0.02494	0.02494	2-8-26:4
UNIVERSITY OF HAWAII AT MANOA - AGRICULTURAL SCIENCE FACILITY, PHASE III	NONPOTABLE USING POTABLE	OAHU	HONOLULU	0.00406	0.00406	0.00406	0.00406	0.00406	0.00406	0.00406	0.00406	2-8-26:4
UNIVERSITY OF HAWAII AT MANOA - HAMILTON LIBRARY, PHASE III	POTABLE	OAHU	HONOLULU	0.00022	0.00022	0.00022	0.00022	0.00022	0.00022	0.00022	0.00022	2-8-23-3
UNIVERSITY OF HAWAII AT MANOA, HAMILTON LIBRARY, PHASE III	NONPOTABLE USING POTABLE	OAHU	HONOLULU	0.00698	0.00698	0.00698	0.00698	0.00698	0.00698	0.00698	0.00698	2-8-23:3
UNIVERSITY OF HAWAII AT MANOA, SCHOOL OF MEDICINE AND CANCER RESEARCH CENTER	POTABLE	OAHU	HONOLULU				0.00900	0.01800	0.03600	0.03600	0.03600	2-1-60: 9 & 10
UNIVERSITY OF HAWAII AT MANOA, SCHOOL OF MEDICINE AND CANCER RESEARCH CENTER	NONPOTABLE USING POTABLE	OAHU	HONOLULU				0.00100	0.00200	0.00400	0.00400	0.00400	2-1-60: 9 & 10
YIAN CHINESE TEA HOUSE	POTABLE	OAHU	HONOLULU			0.00020	0.00020	0.00020	0.00020	0.00020	0.00020	2-8-26:4
KAPIOLANI COMMUNITY COLLEGE, CULINARY INSTITUTE OF PACIFIC EXPANSION	POTABLE	OAHU	HONOLULU			0.01200	0.01200	0.01200	0.01200	0.01200	0.01200	
KAPIOLANI COMMUNITY COLLEGE, CULINARY INSTITUTE OF PACIFIC EXPANSION	NONPOTABLE USING POTABLE	OAHU	HONOLULU			0.01600	0.01600	0.01600	0.01600	0.01600	0.01600	
KAPIOLANI COMMUNITY COLLEGE, PARKING IMPROVEMENTS 18TH AVE.	NONPOTABLE USING POTABLE	OAHU	HONOLULU						0.00200	0.00200	0.00200	3-1-42:009-0000
HONOLULU COMMUNITY COLLEGE, HIGH TECHNOLOGY PROGRAM RENOVATION	POTABLE	OAHU	HONOLULU			0.00510	0.00510	0.00510	0.00510	0.00510	0.00510	NR

STATE WATER PROJECTS PLAN
PROJECTED WATER REQUIREMENTS BY DEPARTMENT

				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)								
	PRIMARY			02001	02002	02003	02004	02005	02010	02015	02020	
PROJECT NAME	USE	ISLAND	SECTOR	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	TMK
			SWPP Statewide Project Demand Total=	12.19	18.10	25.22	26.59	33.20	69.42	76.55	80.87	
HONOLULU COMMUNITY COLLEGE, HUMAN SERVICES LABORATORY FACILITY	POTABLE	OAHU	HONOLULU						0.01405	0.01405	0.01405	NR
HONOLULU COMMUNITY COLLEGE, HUMAN SERVICES LABORATORY FACILITY	NONPOTABLE USING POTABLE	OAHU	HONOLULU						0.00029	0.00029	0.00029	NR
UNIVERSITY OF HAWAII CONT.												
HONOLULU COMMUNITY COLLEGE, MARINE PROPULSION FACILITY	POTABLE	OAHU	HONOLULU						0.01072	0.01072	0.01072	1-5-41:6,130
PEARL CITY URBAN GARDEN CENTER	NONPOTABLE USING POTABLE	OAHU	PEARL HARBOR	0.02000	0.02000	0.02000	0.02000	0.02000	0.02000	0.02000	0.02000	9-7-23:3
LEEWARD COMMUNITY COLLEGE - BUILDING L SOCIAL SCIENCES	POTABLE	OAHU	PEARL HARBOR						0.01604	0.01604	0.01604	9-6-003-048
LEEWARD COMMUNITY COLLEGE - BUILDING L SOCIAL SCIENCES	NONPOTABLE USING POTABLE	OAHU	PEARL HARBOR						0.00016	0.00016	0.00016	9-6-003-048
LEEWARD COMMUNITY COLLEGE - NAO PRKG LOT	NONPOTABLE USING POTABLE	OAHU	PEARL HARBOR						0.00200	0.00200	0.00200	9-6-003-048
LEEWARD COMMUNITY COLLEGE, FOOD SERVICES PROGRAM RENOVATION	POTABLE	OAHU	PEARL HARBOR			0.00088	0.00088	0.00088	0.00088	0.00088	0.00088	9-6-003: 048
UNIVERSITY OF HAWAII AT MANOA, WAIMANALO, FOOD AND AGRICULTURE INNOVATION CENTER	POTABLE	OAHU	WINDWARD	0.01500	0.09000	0.18500	0.18500	0.18500	0.18500	0.18500	0.18500	4-1-08: 80, PORTION OF 5, PORTION OF 74
UNIVERSITY OF HAWAII AT MANOA, WAIMANALO, FOOD AND AGRICULTURE INNOVATION CENTER	NONPOTABLE USING POTABLE	OAHU	WINDWARD	0.08800	0.51000	1.05000	1.05000	1.05000	1.05000	1.05000	1.05000	4-1-08: 80, PORTION OF 5, PORTION OF 74
WINDWARD COMMUNITY COLLEGE - BUILDING D CAMPUS CENTER	POTABLE	OAHU	WINDWARD		0.05961	0.05961	0.05961	0.05961	0.05961	0.05961	0.05961	NR
WINDWARD COMMUNITY COLLEGE - BUILDING D CAMPUS CENTER	NONPOTABLE USING POTABLE	OAHU	WINDWARD		0.00381	0.00381	0.00381	0.00381	0.00381	0.00381	0.00381	NR
WINDWARD COMMUNITY COLLEGE - BUILDING H, LEARNING RESOURCE CENTER	POTABLE	OAHU	WINDWARD				0.00482	0.00482	0.00482	0.00482	0.00482	NR
WINDWARD COMMUNITY COLLEGE - BUILDING H, LEARNING RESOURCE CENTER	NONPOTABLE USING POTABLE	OAHU	WINDWARD				0.00054	0.00054	0.00054	0.00054	0.00054	NR
WINDWARD COMMUNITY COLLEGE - BUILDING J HUMANITIES	POTABLE	OAHU	WINDWARD	0.05815	0.05815	0.05815	0.05815	0.05815	0.05815	0.05815	0.05874	NR
WINDWARD COMMUNITY COLLEGE - BUILDING J HUMANITIES	NONPOTABLE USING POTABLE	OAHU	WINDWARD	0.00059	0.00059	0.00059	0.00059	0.00059	0.00059	0.00059	0.00059	NR
WINDWARD COMMUNITY COLLEGE - BUILDING K-1, MULTI-MEDIA FACILITY	POTABLE	OAHU	WINDWARD	0.00479	0.00479	0.00479	0.00479	0.00479	0.00479	0.00479	0.00479	4-5-23: 2
WINDWARD COMMUNITY COLLEGE - BUILDING K-1, MULTI-MEDIA FACILITY	NONPOTABLE USING POTABLE	OAHU	WINDWARD	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	4-5-23: 2
WINDWARD COMMUNITY COLLEGE - PARKING LOT @ KUHINA	NONPOTABLE USING POTABLE	OAHU	WINDWARD				0.00160	0.00160	0.00160	0.00160	0.00160	4-5-023:002
WINDWARD COMMUNITY COLLEGE - SCIEN ANNEX	POTABLE	OAHU	WINDWARD	0.00360	0.00360	0.00360	0.00360	0.00360	0.00360	0.00360	0.00360	4-5-23:2
			UH SUBTOTAL=	**0.66899**	**3.78301**	**4.46619**	**4.55429**	**4.62307**	**5.57939**	**6.03849**	**6.48598**	

APPENDIX C
SWPP DEMAND TABLE BY ISLAND

STATE WATER PROJECTS PLAN
PROJECTED WATER REQUIREMENTS BY ISLAND

				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)								
PROJECT NAME	PRIMARY USE	ISLAND	SECTOR	02001 MGD	02002 MGD	02003 MGD	02004 MGD	02005 MGD	02010 MGD	02015 MGD	02020 MGD	TMK
			SWPP Statewide Project Demand Total=	**12.19**	**18.10**	**25.22**	**26.59**	**33.20**	**69.42**	**76.55**	**80.87**	
ISLAND OF HAWAII												
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES												
PLANNING BRANCH												
NEW KONA MULTI-AGENCY MAINTENANCE FAC	POTABLE	HAWAII	HUALALAI	0.00083	0.00083	0.00083	0.00083	0.00083	0.00083	0.00083	0.00083	NR
KOHALA PUBLIC LIBRARY	POTABLE	HAWAII	KOHALA						0.00057	0.00057	0.00057	NR
KOHALA PUBLIC LIBRARY	NONPOTABLE USING POTABLE	HAWAII	KOHALA						0.00073	0.00073	0.00073	NR
HILO DAGS BASEYARD	POTABLE	HAWAII	NORTH EAST MAUNA LOA			0.00179	0.00179	0.00179	0.00179	0.00179	0.00179	2-1-12: LOT 7 (APPROXIMATE)
HILO JUDICIARY COMPLEX	POTABLE	HAWAII	NORTH EAST MAUNA LOA						0.01718	0.01718	0.01718	2-2-15:33
HILO JUDICIARY COMPLEX	NONPOTABLE USING POTABLE	HAWAII	NORTH EAST MAUNA LOA						0.00682	0.00682	0.00682	2-2-15:33
KONA CIVIC CENTER	POTABLE	HAWAII	SOUTH WEST MAUNA LOA						0.00800	0.00800	0.00800	NR
KONA CIVIC CENTER	NONPOTABLE USING POTABLE	HAWAII	SOUTH WEST MAUNA LOA						0.01200	0.01200	0.02000	NR
WAIMEA CIVIC CENTER, STATE OFC BLDG NO.3	POTABLE	HAWAII	WEST MAUNA KEA						0.00059	0.00059	0.00059	NR
WAIMEA CIVIC CENTER, STATE OFC BLDG NO.3	NONPOTABLE USING POTABLE	HAWAII	WEST MAUNA KEA						0.05881	0.05881	0.05881	NR
PROJECT MANAGEMENT BRANCH												
HOLUALOA ELEM SCHOOL REPLACEMENT OF CAFÉ AND RELOCATION OF PORTABLE P-12	POTABLE	HAWAII	HUALALAI	0.00263	0.00263	0.00263	0.00263	0.00263	0.00263	0.00263	0.00263	7-6-04:02, 37; 7-6-05:15
HOLUALOA ELEM SCHOOL REPLACEMENT OF FIRE-DAMAGED PORTABLE CLASSROOMS	POTABLE	HAWAII	HUALALAI	0.00045	0.00045	0.00045	0.00045	0.00045	0.00045	0.00045	0.00045	7-6-04: 02,37; 7-6-05:15
KAHAKAI ELEM ADMIN BUILDING/LIBRARY	POTABLE	HAWAII	HUALALAI	0.00442	0.00442	0.00442	0.00442	0.00442	0.00442	0.00442	0.00442	7-5-20:77
DE SILVA ELEM ARCHITECTRL BARRIER REMOV	POTABLE	HAWAII	NORTH EAST MAUNA LOA	0.00743	0.00743	0.00743	0.00743	0.00743	0.00743	0.00743	0.00743	2-5-08:13
			DAGS SUBTOTAL=	**0.01575**	**0.01575**	**0.01754**	**0.01754**	**0.01754**	**0.12224**	**0.12224**	**0.13024**	
DEPARTMENT OF AGRICULTURE												
WAIMEA IRRIGATION SYSTEM	NONPOTABLE	HAWAII	KOHALA	1.82500	1.82500	1.82500	1.82500	1.82500	1.82500	1.82500	1.82500	NR
FUTURE SUBDIVISION IN HONOKAA	NONPOTABLE	HAWAII	WEST MAUNA KEA						7.00000	7.00000	7.00000	VARIOUS
FUTURE SUBDIVISION IN PAAUILO	NONPOTABLE	HAWAII	WEST MAUNA KEA						1.25000	1.25000	1.25000	6-3-6
FUTURE SUBDIVISION IN WAIMEA	NONPOTABLE	HAWAII	WEST MAUNA KEA						0.80000	0.80000	0.80000	6-3-6
WAIMEA/PAAUILO WATERSHED PROJECT	NONPOTABLE	HAWAII	WEST MAUNA KEA						4.00000	4.00000	4.00000	
			DOA SUBTOTAL=	**1.82500**	**1.82500**	**1.82500**	**1.82500**	**1.82500**	**14.87500**	**14.87500**	**14.87500**	

STATE WATER PROJECTS PLAN
PROJECTED WATER REQUIREMENTS BY ISLAND

				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)								
	PRIMARY			02001	02002	02003	02004	02005	02010	02015	02020	
PROJECT NAME	USE	ISLAND	SECTOR	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	TMK
			SWPP Statewide Project Demand Total=	**12.19**	**18.10**	**25.22**	**26.59**	**33.20**	**69.42**	**76.55**	**80.87**	
DEPARTMENT OF BUSINESS ECONOMIC DEVELOPMENT & TOURISM												
HOUSING AND COMMUNITY & DEVELOPMENT CORPORATION OF HAWAII												
KEALAKEHE PLANNED COMMUNITY (LA'I'OPUA)	POTABLE	HAWAII	HUALALAI	0.29310	0.39080	0.48850	0.58650	0.68400	0.97700	1.46550	2.46204	7-4-20:1-06;7-4-21:1-19;7-4-8:POR56
KEALAKEHE PLANNED COMMUNITY (LA'I'OPUA)	NONPOTABLE USING POTABLE	HAWAII	HUALALAI	0.00690	0.00920	0.01150	0.01350	0.01600	0.02300	0.03450	0.05796	7-4-20:1-06;7-4-21:1-19;7-4-8:POR56
NATURAL ENERGY LABORATORY OF HAWAII AUTHORITY												
NATURAL ENERGY LABORATORY OF HAWAII	POTABLE	HAWAII	HUALALAI	0.40000	0.60000	0.80000	0.90000	0.90000	1.50000	1.60000	1.80000	7-3-43:POR 4, 5
			DBEDT SUBTOTAL=	**0.70000**	**1.00000**	**1.30000**	**1.50000**	**1.60000**	**2.50000**	**3.10000**	**4.32000**	
DEPARTMENT OF DEFENSE												
WAIMEA READINESS CENTER	POTABLE	HAWAII	KOHALA			0.00115	0.00115	0.00115	0.00115	0.00115	0.00115	6-6-03
			DOD SUBTOTAL=	**0.00000**	**0.00000**	**0.00115**	**0.00115**	**0.00115**	**0.00115**	**0.00115**	**0.00115**	
DEPARTMENT OF EDUCATION												
HAAHEO ELEMENTARY NEW 4 CLASSROOM	POTABLE	HAWAII	EAST MAUNA KEA			0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	2-6-020:038
HAAHEO ELEMENTARY NEW CAFETERIA	POTABLE	HAWAII	EAST MAUNA KEA						0.00060	0.00060	0.00060	2-6-020: 038
HAAHEO ELEMENTARY NEW LIBRARY	POTABLE	HAWAII	EAST MAUNA KEA			0.00046	0.00046	0.00046	0.00046	0.00046	0.00046	2-6-020: 038
HONOKAA ELEMENTARY NEW 4 CLASSROOM	POTABLE	HAWAII	EAST MAUNA KEA			0.00720	0.00720	0.00720	0.00720	0.00720	0.00720	4-5-003: 020
HONOKAA ELEMENTARY NEW ADMINISTRATION	POTABLE	HAWAII	EAST MAUNA KEA			0.00031	0.00031	0.00031	0.00031	0.00031	0.00031	4-5-003: 020
HONOKAA HIGH SCHOOL NEW 15 CLASSROOM	POTABLE	HAWAII	EAST MAUNA KEA			0.00093	0.00093	0.00093	0.00093	0.00093	0.00093	4-5-003: 020
HONOKAA HIGH SCHOOL NEW 6 CLASSROOM	POTABLE	HAWAII	EAST MAUNA KEA			0.00037	0.00037	0.00037	0.00037	0.00037	0.00037	4-5-003: 020
KALANIANIOLE ELEM 8-CLASSROOM BUILDING	POTABLE	HAWAII	EAST MAUNA KEA						0.00050	0.00050	0.00050	2-7-22:2,3, 2-7-25:4
LAPAHOEHOE HIGH/ELEM NEW BAND/CHORUS	POTABLE	HAWAII	EAST MAUNA KEA	0.00043	0.00043	0.00043	0.00043	0.00043	0.00043	0.00043	0.00043	3-5-004: 059
HOLUALOA ELEM NEW LIBRARY/ADMINISTRATION	POTABLE	HAWAII	HUALALAI	0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	7-6-004: 002
HOLUALOA ELEMENTARY NEW 6 CLASSROOM	POTABLE	HAWAII	HUALALAI			0.01080	0.01080	0.01080	0.01080	0.01080	0.01080	7-6-004: 002
KEALAKEHE ELEM - PLAYFIELD/RETENTION BASIN	NONPOTABLE USING POTABLE	HAWAII	HUALALAI		0.01200	0.01200	0.01200	0.01200	0.01200	0.01200	0.01200	7-4-019:044
KEALAKEHE ELEM NEW LIBRARY/ADMIN	POTABLE	HAWAII	HUALALAI			0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	7-4-008: 015

STATE WATER PROJECTS PLAN
PROJECTED WATER REQUIREMENTS BY ISLAND

				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)								
	PRIMARY			02001	02002	02003	02004	02005	02010	02015	02020	
PROJECT NAME	USE	ISLAND	SECTOR	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	TMK
			SWPP Statewide Project Demand Total=	12.19	18.10	25.22	26.59	33.20	69.42	76.55	80.87	
KEALAKEHE ELEMENTARY NEW 6 CLASSROOM	POTABLE	HAWAII	HUALALAI		0.00037	0.00037	0.00037	0.00037	0.00037	0.00037	0.00037	7-4-008: 015
KEALAKEHE HIGH SCHOOL NEW 13 CLASSROOM	POTABLE	HAWAII	HUALALAI	0.00081	0.00081	0.00081	0.00081	0.00081	0.00081	0.00081	0.00081	7-4-20: 8
DEPARTMENT OF EDUCATION CONT.												
KEALAKEHE II ELEM 1ST & 2ND INCRE	POTABLE	HAWAII	HUALALAI			0.06000	0.06000	0.06000	0.06000	0.06000	0.06000	NEW
KEALAKEHE INTER SCH NEW LIBRARY/ADMIN	POTABLE	HAWAII	HUALALAI	0.00102	0.00102	0.00102	0.00102	0.00102	0.00102	0.00102	0.00102	7-4-008: 015
KEALAKEHE INTER SCHOOL NEW 8 CLASSROOM	POTABLE	HAWAII	HUALALAI			0.01440	0.01440	0.01440	0.01440	0.01440	0.01440	7-4-008: 015
HAWAIIAN PARADISE PARK ELEMENTARY SCHOOL	POTABLE	HAWAII	KILAUEA			0.06000	0.06000	0.06000	0.06000	0.06000	0.06000	NEW
KAU HIGH SCH&PAHALA ELEM SCH 10-CLSRM BLD	POTABLE	HAWAII	KILAUEA			0.01800	0.01800	0.01800	0.01800	0.01800	0.01800	9-6-5:8,9
KAU HIGH SCH&PAHALA ELEM SCH 3-CLSRM BLD	POTABLE	HAWAII	KILAUEA			0.00019	0.00019	0.00019	0.00019	0.00019	0.00019	9-6-5:8,9
KAU HIGH SCHOOL PAHALA NEW 12 CLASSROOM	POTABLE	HAWAII	KILAUEA			0.00074	0.00074	0.00074	0.00074	0.00074	0.00074	9-6-005: 008
KEAAU HIGH SCHOOL 2ND INCREMENT	POTABLE	HAWAII	KILAUEA	0.04800	0.04800	0.04800	0.04800	0.04800	0.04800	0.04800	0.04800	NEW
KEAAU HIGH SCHOOL 3RD INCREMENT	POTABLE	HAWAII	KILAUEA	0.01200	0.01200	0.01200	0.01200	0.01200	0.01200	0.01200	0.01200	NEW
KEAAU HIGH SCHOOL 4TH INCREMENT	POTABLE	HAWAII	KILAUEA	0.00960	0.00960	0.00960	0.00960	0.00960	0.00960	0.00960	0.00960	NEW
KEAAU INTERMEDIATE NEW 8 CLASSROOM	POTABLE	HAWAII	KILAUEA			0.00050	0.00043	0.00043	0.00043	0.00043	0.00043	7-6-3: 59
KEAAU INTERMEDIATE NEW ADMINISTRATION	POTABLE	HAWAII	KILAUEA			0.00043	0.00043	0.00043	0.00043	0.00043	0.00043	7-6-3: 59
KEAAU INTERMEDIATE SCHOOL NEW BAND BLDG	POTABLE	HAWAII	KILAUEA	0.00040	0.00040	0.00040	0.00040	0.00040	0.00040	0.00040	0.00040	7-6-3: 59
KEONEPOKO ELEM NEW LIBRARY/ADMINISTRATN	POTABLE	HAWAII	KILAUEA	0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	1-5-009: 009
KEONEPOKO ELEM SCHOOL NEW 4 CLASSROOM	POTABLE	HAWAII	KILAUEA			0.00720	0.00720	0.00720	0.00720	0.00720	0.00720	1-5-009: 009
MOUNTAIN VIEW ELEM NEW 12 CLASSROOM	POTABLE	HAWAII	KILAUEA			0.00074	0.00074	0.00074	0.00074	0.00074	0.00074	1-8-001: 007
MOUNTAIN VIEW ELEM NEW ADMINISTRATION	POTABLE	HAWAII	KILAUEA			0.00031	0.00031	0.00031	0.00031	0.00031	0.00031	1-8-001: 007
PAHOA ELEMENTARY NEW 10 CLASSROOM	POTABLE	HAWAII	KILAUEA			0.00062	0.00062	0.00062	0.00062	0.00062	0.00062	1-5-114: 025
PAHOA ELEMENTARY NEW ADMINISTRATION	POTABLE	HAWAII	KILAUEA	0.00031	0.00031	0.00031	0.00031	0.00031	0.00031	0.00031	0.00031	1-5-114: 025
PAHOA HIGH SCHOOL NEW ADMINISTRATION	POTABLE	HAWAII	KILAUEA			0.00046	0.00046	0.00046	0.00046	0.00046	0.00046	2-4-001: 015
PAHOA HIGH SCHOOL NEW GYMNASIUM	POTABLE	HAWAII	KILAUEA			0.00400	0.00400	0.00400	0.00400	0.00400	0.00400	2-4-001: 015
KOHALA ELEM NEW LIBRARY/ADMINISTRATION	POTABLE	HAWAII	KOHALA			0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	5-4-007: 014
KOHALA ELEMENTARY NEW 4 CLASSROOM	POTABLE	HAWAII	KOHALA			0.00720	0.00720	0.00720	0.00720	0.00720	0.00720	5-4-007: 014
KOHALA HIGH SCHOOL NEW 4 CLASSROOM	POTABLE	HAWAII	KOHALA			0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	5-4-007: 014
KOHALA HIGH SCHOOL NEW AUTO/TECH SHOP	POTABLE	HAWAII	KOHALA			0.00041	0.00041	0.00041	0.00041	0.00041	0.00041	5-4-007: 014

STATE WATER PROJECTS PLAN
PROJECTED WATER REQUIREMENTS BY ISLAND

				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)								
	PRIMARY			02001	02002	02003	02004	02005	02010	02015	02020	
PROJECT NAME	USE	ISLAND	SECTOR	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	TMK
			SWPP Statewide Project Demand Total=	12.19	18.10	25.22	26.59	33.20	69.42	76.55	80.87	
KOHALA HIGH SCHOOL NEW MUSIC BUILDING	POTABLE	HAWAII	KOHALA			0.00043	0.00043	0.00043	0.00043	0.00043	0.00043	5-4-007: 014
CHIEFESS KAPIOLANI ELEM 4-CLASSROOM BLDG	POTABLE	HAWAII	NORTH EAST MAUNA LOA						0.00025	0.00025	0.00025	2-2-20:1
DESILVA ELEM SCHOOL 4-CLASSROOM BUILDING	POTABLE	HAWAII	NORTH EAST MAUNA LOA						0.00025	0.00025	0.00025	2-5-8:13
DEPARTMENT OF EDUCATION CONT.												
DeSILVA ELEMENTARY NEW ADMINISTRATION	POTABLE	HAWAII	NORTH EAST MAUNA LOA			0.00031	0.00031	0.00031	0.00031	0.00031	0.00031	2-5-008:013
HILO HIGH SCHOOL 4-CLASSROOM BUILDING	POTABLE	HAWAII	NORTH EAST MAUNA LOA			0.00720	0.00720	0.00720	0.00720	0.00720	0.00720	2-3-15:1,26
HILO HIGH SCHOOL NEW ADMINISTRATION	POTABLE	HAWAII	NORTH EAST MAUNA LOA			0.00046	0.00046	0.00046	0.00046	0.00046	0.00046	2-3-015: 001
HILO HIGH SCHOOL NEW GYMNASIUM	POTABLE	HAWAII	NORTH EAST MAUNA LOA			0.00400	0.00400	0.00400	0.00400	0.00400	0.00400	2-3-015: 001
HILO INTERMEDIATE - RENOVATE BLDG A PHASE 1 & 2 ADMIN, LIBRARY, 35 CLASSROOMS	POTABLE	HAWAII	NORTH EAST MAUNA LOA			0.00317	0.00317	0.00317	0.00317	0.00317	0.00317	2-3-021: 058
HILO UNION NEW 6 CLASSROOM	POTABLE	HAWAII	NORTH EAST MAUNA LOA			0.00037	0.00037	0.00037	0.00037	0.00037	0.00037	2-3-016: 037
KALANIANIOLE ELEMENTARY NEW LIBRARY	POTABLE	HAWAII	NORTH EAST MAUNA LOA			0.00046	0.00046	0.00046	0.00046	0.00046	0.00046	2-7-022: 002
KAUMANA ELEMENTARY NEW 4 CLASSROOM	POTABLE	HAWAII	NORTH EAST MAUNA LOA			0.00720	0.00720	0.00720	0.00720	0.00720	0.00720	2-5-005: 084
KEAAU HIGH SCHOOL (1ST INCREMENT)	POTABLE	HAWAII	NORTH EAST MAUNA LOA	0.02400	0.02400	0.02400	0.02400	0.02400	0.02400	0.02400	0.02400	1-6-003:003
KEAAU II ELEMENTARY SCHOOL 2ND INCREMENT	POTABLE	HAWAII	NORTH EAST MAUNA LOA	0.02700	0.02700	0.02700	0.02700	0.02700	0.02700	0.02700	0.02700	1-6-003: 008
KEAUKAHA ELEM NEW LIBRARY/ADMINISTRATION	POTABLE	HAWAII	NORTH EAST MAUNA LOA			0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	2-1-020: 001
KEAUKAHA ELEMENTARY NEW CAFETERIA	POTABLE	HAWAII	NORTH EAST MAUNA LOA	0.00108	0.00108	0.00108	0.00108	0.00108	0.00108	0.00108	0.00108	2-1-020: 001
WAIAKEA ELEM NEW LIBRARY/ADMINISTRATION	POTABLE	HAWAII	NORTH EAST MAUNA LOA		0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	2-4-001: 015
WAIAKEA INTER NEW PE LOCKER/SHOWER	POTABLE	HAWAII	NORTH EAST MAUNA LOA			0.00042	0.00042	0.00042	0.00042	0.00042	0.00042	2-4-001: 015
WAIAKEAWAENA ELEMENTARY NEW CAFETERIA	POTABLE	HAWAII	NORTH EAST MAUNA LOA	0.00285	0.00285	0.00285	0.00285	0.00285	0.00285	0.00285	0.00285	2-2-042: 017
MOUNTAIN VIEW ELEMENTARY SCH CAFETERIA	POTABLE	HAWAII	SOUTH EAST MAUNA LOA	0.00285	0.00285	0.00285	0.00285	0.00285	0.00285	0.00285	0.00285	1-8-01:07
NAALEHU ELEMENTARY NEW 6 CLASSROOM	POTABLE	HAWAII	SOUTH EAST MAUNA LOA			0.01080	0.01080	0.01080	0.01080	0.01080	0.01080	9-5-009: 006
NAALEHU ELEMENTARY NEW LIBRARY	POTABLE	HAWAII	SOUTH EAST MAUNA LOA			0.00046	0.00046	0.00046	0.00046	0.00046	0.00046	9-5-009: 006
HONAUNAU ELEM NEW LIBRARY/ADMINISTRATION	POTABLE	HAWAII	SOUTH WEST MAUNA LOA			0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	8-3-013: 021
HONAUNAU ELEMENTARY NEW CAFETERIA	POTABLE	HAWAII	SOUTH WEST MAUNA LOA			0.00090	0.00090	0.00090	0.00090	0.00090	0.00090	8-3-013: 021
HOOKENA ELEMENTARY NEW 8 CLASSROOM	POTABLE	HAWAII	SOUTH WEST MAUNA LOA	0.00050	0.00050	0.00050	0.00050	0.00050	0.00050	0.00050	0.00050	8-6-010: 009
HOOKENA ELEMENTARY NEW ADMINISTRATION	POTABLE	HAWAII	SOUTH WEST MAUNA LOA			0.00031	0.00031	0.00031	0.00031	0.00031	0.00031	8-6-010: 009
HOOKENA ELEMENTARY NEW LIBRARY	POTABLE	HAWAII	SOUTH WEST MAUNA LOA		0.00151	0.00151	0.00151	0.00151	0.00151	0.00151	0.00151	8-6-010: 009
HOOKENA ELEMENTARY SCHOOL CAFETERIA	POTABLE	HAWAII	SOUTH WEST MAUNA LOA		0.00093	0.00093	0.00093	0.00093	0.00093	0.00093	0.00093	8-6-10:9,12

STATE WATER PROJECTS PLAN
PROJECTED WATER REQUIREMENTS BY ISLAND

				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)								
	PRIMARY			02001	02002	02003	02004	02005	02010	02015	02020	
PROJECT NAME	USE	ISLAND	SECTOR	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	TMK
			SWPP Statewide Project Demand Total=	**12.19**	**18.10**	**25.22**	**26.59**	**33.20**	**69.42**	**76.55**	**80.87**	
KONAWAENA HIGH SCHOOL NEW LIBRARY	POTABLE	HAWAII	SOUTH WEST MAUNA LOA			0.00088	0.00088	0.00088	0.00088	0.00088	0.00088	8-1-002: 038
KONAWAENA INTER - RENOVATE 12 CLASSROOMS	POTABLE	HAWAII	SOUTH WEST MAUNA LOA	0.00074	0.00074	0.00074	0.00074	0.00074	0.00074	0.00074	0.00074	8-1-002:038,068
KONAWAENA INTER SCHOOL NEW ADMINISTRATN	POTABLE	HAWAII	SOUTH WEST MAUNA LOA			0.00043	0.00043	0.00043	0.00043	0.00043	0.00043	8-1-002: 038
KONAWAENA MID SCH, NEW PE LOCKR&SHOWR	POTABLE	HAWAII	SOUTH WEST MAUNA LOA				0.00120	0.00120	0.00120	0.00120	0.00120	8-1-2: 38
DEPARTMENT OF EDUCATION CONT.												
KONAWAENA MIDDLE SCH - RENOV 17 CLASSRMS	POTABLE	HAWAII	SOUTH WEST MAUNA LOA		0.00153	0.00153	0.00153	0.00153	0.00153	0.00153	0.00153	NR
WAIKOLOA ELEM SCH 3RD INCR 8 CLSRM/LIBRY	POTABLE	HAWAII	WEST MAUNA KEA	0.00095	0.00095	0.00095	0.00095	0.00095	0.00095	0.00095	0.00095	6-8-2:31
WAIMEA ELEMENTARY 1ST INCREMENT	POTABLE	HAWAII	WEST MAUNA KEA			0.03600	0.03600	0.03600	0.03600	0.03600	0.03600	6-7-002: 015
WAIMEA ELEMENTARY 2ND INCREMENT	POTABLE	HAWAII	WEST MAUNA KEA			0.02400	0.02400	0.02400	0.02400	0.02400	0.02400	6-7-002: 015
WAIMEA INTER NEW PE LOCKER/SHOWER	POTABLE	HAWAII	WEST MAUNA KEA			0.00042	0.00042	0.00042	0.00042	0.00042	0.00042	6-7-002: 015
WAIMEA INTERMEDIATE NEW 8 CLASSROOM	POTABLE	HAWAII	WEST MAUNA KEA		0.00050	0.00050	0.00050	0.00050	0.00050	0.00050	0.00050	6-7-002: 015
WAIMEA INTERMEDIATE NEW MUSIC BUILDING	POTABLE	HAWAII	WEST MAUNA KEA			0.00040	0.00040	0.00040	0.00040	0.00040	0.00040	6-7-002: 015
			DOE SUBTOTAL=	**0.13406**	**0.15166**	**0.44907**	**0.45020**	**0.45020**	**0.45180**	**0.45180**	**0.45180**	
DEPARTMENT OF HAWAIIAN HOME LANDS												
LAIOPUA VILLAGE 4	POTABLE	HAWAII	HUALALAI	0.10000	0.10000	0.10000	0.10000	0.10000	0.10000	0.10000	0.10000	
MAKUU - FARM LOTS (2 ACRES)	POTABLE	HAWAII	KILAUEA						0.02000	0.02000	0.02000	NR
MAKUU - FARM LOTS (2 ACRES) (IRRIG)	NONPOTABLE	HAWAII	KILAUEA						0.20000	0.20000	0.20000	NR
MAKUU - FARM LOTS (5 ACRE)	POTABLE	HAWAII	KILAUEA						0.05080	0.05080	0.05080	NR
MAKUU - FARM LOTS (5 ACRE) (IRRIG)	NONPOTABLE	HAWAII	KILAUEA						1.27000	1.27000	1.27000	NR
KAWAIHAE - MASTER PLAN AREA	POTABLE	HAWAII	KOHALA							1.40000	1.40000	NR
KAWAIHAE - RESIDENCE LOTS (MAKAI)	POTABLE	HAWAII	KOHALA						0.00880	0.00880	0.00880	NR
KAWAIHAE - RESIDENTIAL LOTS (MAUKA)	POTABLE	HAWAII	KOHALA						0.07800	0.07800	0.07800	NR
HAWAII EAST SCTRD LOT	POTABLE	HAWAII	NORTH EAST MAUNA LOA	0.04400	0.04400	0.04400	0.04400	0.04400	0.04400	0.04400	0.04400	VARIOUS
HUMUULA - PASTURE LOTS	POTABLE	HAWAII	NORTH EAST MAUNA LOA						0.00480	0.00480	0.00480	NR
KEAUKAHA - RESIDENCE LOTS UNIT 2	POTABLE	HAWAII	NORTH EAST MAUNA LOA						0.03320	0.03320	0.03320	2-1-20,21,22,23
PANAEWA - FARM LOTS (AUWAE ST)	POTABLE	HAWAII	NORTH EAST MAUNA LOA						0.03000	0.03000	0.03000	NR
PANAEWA - FARM LOTS (AUWAE ST) (IRRIG)	NONPOTABLE	HAWAII	NORTH EAST MAUNA LOA						0.64000	0.64000	0.64000	NR

STATE WATER PROJECTS PLAN
PROJECTED WATER REQUIREMENTS BY ISLAND

				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)								
	PRIMARY			02001	02002	02003	02004	02005	02010	02015	02020	
PROJECT NAME	USE	ISLAND	SECTOR	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	TMK
			SWPP Statewide Project Demand Total=	**12.19**	**18.10**	**25.22**	**26.59**	**33.20**	**69.42**	**76.55**	**80.87**	
PANAEWA - FARM LOTS PUNA PAPAYA	POTABLE	HAWAII	NORTH EAST MAUNA LOA						0.01000	0.01000	0.01000	2-1-25:25-40,67-71,74,77-83
PANAEWA - FARM LOTS PUNA PAPAYA (IRRIG)	NONPOTABLE	HAWAII	NORTH EAST MAUNA LOA						0.30000	0.30000	0.30000	NR
PANAEWA RESIDENCE LOTS	POTABLE	HAWAII	NORTH EAST MAUNA LOA	0.02400	0.02400	0.02400	0.02400	0.02400	0.02400	0.02400	0.02400	
WAIAKEA - RESIDENCE LOTS UNIT 2A-5	POTABLE	HAWAII	NORTH EAST MAUNA LOA						0.00800	0.00800	0.00800	NR
KAMAOA - PASTURE LOTS	POTABLE	HAWAII	SOUTH EAST MAUNA LOA						0.01000	0.01000	0.01000	NR
DEPARTMENT OF HAWAIIAN HOME LANDS CONT.												
KAMAOA - PUUEO FARM LOTS	POTABLE	HAWAII	SOUTH EAST MAUNA LOA							0.02000	0.02000	NR
LALAMILO RESIDENCE LOTS	POTABLE	HAWAII	WEST MAUNA KEA	0.07000	0.07000	0.07000	0.07000	0.07000	0.07000	0.07000	0.07000	
PUUKAPU - FARM LOTS UNITS 2, 2A	POTABLE	HAWAII	WEST MAUNA KEA						0.03000	0.03000	0.03000	NR
PUUKAPU - FARM LOTS UNITS 2, 2A (IRRIG)	NONPOTABLE	HAWAII	WEST MAUNA KEA						1.60000	1.60000	1.60000	NR
PUUKAPU - PASTURE LOTS	POTABLE	HAWAII	WEST MAUNA KEA						0.07360	0.07360	0.07360	NR
PUUKAPU - RESIDENTIAL LOTS (PUU PELEHU)	POTABLE	HAWAII	WEST MAUNA KEA						0.01320	0.01320	0.01320	NR
			DHHL SUBTOTAL=	**0.23800**	**0.23800**	**0.23800**	**0.23800**	**0.23800**	**4.61840**	**6.03840**	**6.03840**	
JUDICIARY												
NAALEHU DIST COURT AND MULTI-PURPOSE BLD	POTABLE	HAWAII	SOUTH EAST MAUNA LOA			0.00099	0.00099	0.00099	0.00099	0.00099	0.00099	NR
NAALEHU DIST COURT AND MULTI-PURPOSE BLD	NONPOTABLE USING POTABLE	HAWAII	SOUTH EAST MAUNA LOA			0.00727	0.00727	0.00727	0.00727	0.00727	0.00727	NR
			JUD SUBTOTAL=	**0.00000**	**0.00000**	**0.00826**	**0.00826**	**0.00826**	**0.00826**	**0.00826**	**0.00826**	
DEPARTMENT OF LAND AND NATURAL RESOURCES												
BOATING AND OCEAN RECREATION DIVISION												
KAWAIHAE BOAT HARBOR IMPROVEMENTS	POTABLE	HAWAII	KOHALA	0.00140	0.00140	0.00140	0.00140	0.00140	0.00140	0.00140	0.00140	6-1-03
PUAKO BOAT RAMP	POTABLE	HAWAII	NORTH WEST MAUNA LOA						0.00500	0.00500	0.00500	NR
STATE PARKS DIVISION												
KALOPA SRA	POTABLE	HAWAII	EAST MAUNA KEA	0.00500	0.00500	0.00500	0.00500	0.00500	0.00500	0.00500	0.00500	4-4-14:1
WAILUKU RIVER SP (BOILING POTS)	POTABLE	HAWAII	EAST MAUNA KEA						0.00500	0.00500	0.00500	2-3-27:1, 2-3-29:12, 2-5-10:1
KEKAHA KAI SP (MAHAIULA)	POTABLE	HAWAII	HUALALAI			0.00336	0.00662	0.00667	0.00673	0.00678	0.00695	NR

STATE WATER PROJECTS PLAN
PROJECTED WATER REQUIREMENTS BY ISLAND

				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)								
	PRIMARY			02001	02002	02003	02004	02005	02010	02015	02020	
PROJECT NAME	USE	ISLAND	SECTOR	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	TMK
			SWPP Statewide Project Demand Total=	**12.19**	**18.10**	**25.22**	**26.59**	**33.20**	**69.42**	**76.55**	**80.87**	
KEKAHA KAI SP (MAHAIULA)	NONPOTABLE USING POTABLE	HAWAII	HUALALAI			0.03869	0.07612	0.07675	0.07738	0.07801	0.07990	NR
OLD KONA AIRPORT SRA	POTABLE	HAWAII	HUALALAI		0.01008	0.01008	0.01008	0.01008	0.01008	0.01008	0.01008	7-5-05:7,72,73,74,79,82,83
OLD KONA AIRPORT SRA	NONPOTABLE USING POTABLE	HAWAII	HUALALAI		0.00592	0.00592	0.00592	0.00592	0.00592	0.00592	0.00592	7-5-05:7,72,73,74,79,82,83
KOHALA HISTORICAL SITES STATE MONUMENT	POTABLE	HAWAII	KOHALA	0.00006	0.00008	0.00178	0.00180	0.00182	0.00357	0.00357	0.00357	5-5-05:6,20, 5-6-01:75
KOHALA HISTORICAL SITES STATE MONUMENT	NONPOTABLE USING POTABLE	HAWAII	KOHALA	0.00097	0.00129	0.02793	0.02825	0.02857	0.05586	0.05586	0.05586	5-5-05:6,20, 5-6-01:75
LAPAKAHI SHP	POTABLE	HAWAII	KOHALA	0.00011	0.00015	0.00179	0.00183	0.00186	0.00358	0.00358	0.00358	5-7-01:22
STATE PARKS DIVISION CONT.												
LAPAKAHI SHP	NONPOTABLE USING POTABLE	HAWAII	KOHALA	0.00101	0.00135	0.01609	0.01643	0.01676	0.03218	0.03218	0.03218	5-7-01:22
KEALAKEKUA BAY SHP	POTABLE	HAWAII	SOUTH WEST MAUNA LOA	0.00080	0.00080	0.00080	0.00080	0.00080	0.00081	0.00081	0.00081	8-1-07:50 & OTHERS
KEALAKEKUA BAY SHP	NONPOTABLE USING POTABLE	HAWAII	SOUTH WEST MAUNA LOA	0.07936	0.07941	0.07946	0.07952	0.07957	0.07973	0.07973	0.07973	8-1-07:50 & OTHERS
HAPUNA BEACH SRA	POTABLE	HAWAII	WEST MAUNA KEA		0.05270	0.05270	0.05270	0.05270	0.05270	0.05270	0.05270	6-6-01:2, 6-6-02:32,34,35,41
HAPUNA BEACH SRA	NONPOTABLE	HAWAII	WEST MAUNA KEA						0.64995	0.64995	0.64995	6-6-01:2, 6-6-02:32,34,35,41
			DLNR SUBTOTAL=	**0.08871**	**0.15818**	**0.24501**	**0.28647**	**0.28792**	**0.99487**	**0.99556**	**0.99761**	
DEPARTMENT OF TRANSPORTATION												
AIRPORTS DIVISION												
KONA INTERNATIONAL AIRPORT MASTER PLAN	POTABLE	HAWAII	HUALALAI	0.12200	0.13200	0.14200	0.15200	0.16200	0.17200	0.20400	0.24200	7-3-10
HILO INTERNATIONAL AIRPORT MASTER PLAN	POTABLE	HAWAII	NORTH EAST MAUNA LOA	0.00400	0.00600	0.00800	0.01000	0.01200	0.01300	0.02000	0.02800	2-1-12
HARBORS DIVISION												
HAWAII COMMERCIAL HARBORS 2020 MASTER PLAN: DRY BULK CARGO TERMINALS	POTABLE	HAWAII	KOHALA		0.01800	0.01800	0.01800	0.01800	0.01800	0.01800	0.01800	3-6-1:03
HAWAII COMMERCIAL HARBORS 2020 MASTER PLAN: INTER-ISLAND CARGO TERMINAL	POTABLE	HAWAII	KOHALA						0.03300	0.06600	0.06600	3-6-1:03
HAWAII COMMERCIAL HARBORS 2020 MASTER PLAN: LIQUID BULK CARGO TERMINALS	POTABLE	HAWAII	KOHALA			0.06900	0.06900	0.06900	0.06900	0.06900	0.06900	3-6-1:03
HAWAII COMMERCIAL HARBORS 2020 MASTER PLAN: MILITARY CARGO TERMINAL	POTABLE	HAWAII	KOHALA		0.04800	0.04800	0.04800	0.04800	0.04800	0.04800	0.04800	3-6-1:03
HAWAII COMMERCIAL HARBORS 2020 MASTER PLAN: OVERSEAS CONTAINER TERMINAL	POTABLE	HAWAII	KOHALA					0.06300	0.06300	0.06300	0.06300	3-6-1:03
HAWAII COMMERCIAL HARBORS 2020 MASTER PLAN: PASSENGER TERMINAL-KAWAIHAE HARBOR	POTABLE	HAWAII	KOHALA							0.01500	0.01500	3-6-1:03
HAWAII COMMERCIAL HARBORS 2020 MASTER PLAN: OCEAN RESEARCH STATION	POTABLE	HAWAII	NORTH EAST MAUNA LOA							0.01200	0.01200	3-2-1-:07
HAWAII COMMERCIAL HARBORS 2020 MASTER PLAN: OVERSEAS CONTAINER TERMINAL	POTABLE	HAWAII	NORTH EAST MAUNA LOA				0.06000	0.06000	0.06000	0.06000	0.06000	3-2-1:09

STATE WATER PROJECTS PLAN
PROJECTED WATER REQUIREMENTS BY ISLAND

				YEARLY PROJECTED CUMULATIVE AVERAGE DAY DEMAND (MGD)								
	PRIMARY			02001	02002	02003	02004	02005	02010	02015	02020	
PROJECT NAME	USE	ISLAND	SECTOR	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	TMK
			SWPP Statewide Project Demand Total=	**12.19**	**18.10**	**25.22**	**26.59**	**33.20**	**69.42**	**76.55**	**80.87**	
HAWAII COMMERCIAL HARBORS 2020 MASTER PLAN: PASSENGER TERMINAL-HILO HARBOR	POTABLE	HAWAII	NORTH EAST MAUNA LOA							0.01500	0.01500	3-2-1:07
HAWAII COMMERCIAL HARBORS 2020 MASTER PLAN: INTER-ISLAND CARGO TERMINAL	POTABLE	HAWAII	NORTH EAST MAUNA LOA					0.06000	0.06000	0.06000	0.06000	3-2-1:07
HIGHWAYS DIVISION												
QUEEN KAAHUMANU HWY WIDENING, KAILUA TO KEAHOLE	NONPOTABLE USING POTABLE	HAWAII	HUALALAI			0.24000	0.24000	0.24000	0.06000	0.06000	0.06000	NR
MAMALAHOA HWY, EMERGENCY REPLACE.OF PAAUAU STR.BRIDGE, REALIGN.OF KAMANI ST., ETC.	NONPOTABLE USING POTABLE	HAWAII	KILAUEA	0.03200	0.03200	0.00800	0.00800	0.00800	0.00800	0.00800	0.00800	9-6-23:43, 9-6-05:46, 9-6-12:12, 9-6-02:47, 9-6-13:05
			DOT SUBTOTAL=	**0.15800**	**0.23600**	**0.53300**	**0.60500**	**0.74000**	**0.60400**	**0.71800**	**0.76400**	
UNIVERSITY OF HAWAII												
UNIVERSITY OF HAWAII CENTER AT WEST HAWAII - EXTERIOR IMPROVEMENTS PHASE I	NONPOTABLE USING POTABLE	HAWAII	HUALALAI				0.03600	0.03600	0.03600	0.03600	0.03600	7-3-10:33
UNIVERSITY OF HAWAII CENTER AT WEST HAWAII - FOOD SERVICES FACILITY	POTABLE	HAWAII	HUALALAI				0.00695	0.00695	0.00695	0.00695	0.00695	7-3-10:33
UNIVERSITY OF HAWAII CENTER AT WEST HAWAII - FOOD SERVICES FACILITY	NONPOTABLE USING POTABLE	HAWAII	HUALALAI				0.00029	0.00029	0.00029	0.00029	0.00029	7-3-10:33
UNIVERSITY OF HAWAII CENTER AT WEST HAWAII - LEARNING RESOURCE CENTER	POTABLE	HAWAII	HUALALAI				0.00978	0.00978	0.00978	0.00978	0.00978	7-3-10:33
UNIVERSITY OF HAWAII CENTER AT WEST HAWAII - LEARNING RESOURCE CENTER	NONPOTABLE USING POTABLE	HAWAII	HUALALAI				0.00010	0.00010	0.00010	0.00010	0.00010	7-3-10:33
UNIVERSITY OF HAWAII CENTER AT WEST HAWAII - OPERATIONS & MAINTENANCE PHASE I	POTABLE	HAWAII	HUALALAI					0.00024	0.00024	0.00024	0.00024	7-3-10:33
UNIVERSITY OF HAWAII CENTER AT WEST HAWAII - OPERATIONS & MAINTENANCE PHASE I	NONPOTABLE USING POTABLE	HAWAII	HUALALAI					0.00004	0.00004	0.00004	0.00004	7-3-10:33
PACIFIC AQUACULT&COASTAL RESOURCS CTR	NONPOTABLE	HAWAII	N.E. MAUNA LOA		1.65000	1.65000	1.65000	1.65000	1.65000	1.65000	1.65000	2-1-9: 1 & 41, 2-1-11: 4
PACIFIC AQUACULTURE AND COASTAL RESOURCES CENTER, UHH FARM @ PANAEWA	NONPOTABLE	HAWAII	N.E. MAUNA LOA		0.75000	0.75000	0.75000	0.75000	0.75000	0.75000	0.75000	2-1-56: 56
HAWAII COMMUNITY COLLEGE HILO - EXTERIOR IMPROVEMENTS PHASE I	NONPOTABLE USING POTABLE	HAWAII	NORTH EAST MAUNA LOA					0.04000	0.04000	0.04000	0.04000	NR
HAWAII COMMUNITY COLLEGE HILO - LEARNING RESOURCE CENTER	POTABLE	HAWAII	NORTH EAST MAUNA LOA						0.00958	0.00958	0.00958	NR
HAWAII COMMUNITY COLLEGE HILO - LEARNING RESOURCE CENTER	NONPOTABLE USING POTABLE	HAWAII	NORTH EAST MAUNA LOA						0.00050	0.00050	0.00050	NR
HAWAII COMMUNITY COLLEGE HILO - OPERATIONS & MAINTENANCE, PHASE I	POTABLE	HAWAII	NORTH EAST MAUNA LOA						0.00024	0.00024	0.00024	NR
HAWAII COMMUNITY COLLEGE HILO - OPERATIONS & MAINTENANCE, PHASE I	NONPOTABLE USING POTABLE	HAWAII	NORTH EAST MAUNA LOA						0.00004	0.00004	0.00004	NR
INSTITUTE FOR ASTRONOMY FACILITY-HILO	POTABLE	HAWAII	NORTH EAST MAUNA LOA	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100	2-4-01:07
PANAEWA FARM WELL AND PUMP	NONPOTABLE	HAWAII	NORTH EAST MAUNA LOA	0.35000	0.35000	0.35000	0.35000	0.35000	0.35000	0.35000	0.35000	2-2-56:56
U.S. CHINA CENTER	POTABLE	HAWAII	NORTH EAST MAUNA LOA		0.04580	0.04580	0.04580	0.04580	0.13400	0.13400	0.13400	2-4-01:05 (POR.)
UNIVERSITY OF HAWAII AT HILO CAMPUS DEV	POTABLE	HAWAII	NORTH EAST MAUNA LOA	0.04200	0.05600	0.07000	0.07000	0.07000	0.14000	0.21000	0.28000	2-4-57:25,26
			UH SUBTOTAL=	**0.39300**	**2.85280**	**2.86680**	**2.91992**	**2.96020**	**3.12876**	**3.19876**	**3.26876**	

APPENDIX D
SWPP DEMAND TABLE BY AQUIFER

STATE WATER PROJECTS PLAN
PROJECTED WATER REQUIREMENTS BY AQUIFER SECTOR/SYSTEM

PROJECT NAME	PRIMARY USE	ISLAND	SECTOR	AQUIFER SYSTEM	02001 MGD	02002 MGD	02003 MGD	02004 MGD	02005 MGD	02010 MGD	02015 MGD	02020 MGD	TMK
				SWPP Statewide Project Demand Total=	**12.19**	**18.10**	**25.22**	**26.59**	**33.20**	**69.42**	**76.55**	**80.87**	
ISLAND OF HAWAII													
HYDROLOGICAL SECTOR = EAST MAUNA KEA 802				**SECTOR 802 TOTAL=**	**0.00543**	**0.00543**	**0.01494**	**0.01494**	**0.01494**	**0.02104**	**0.02104**	**0.02104**	
LAPAHOEHOE HIGH/ELEM NEW BAND/CHORUS	POTABLE	HAWAII	EAST MAUNA KEA	HAKALAU	0.00043	0.00043	0.00043	0.00043	0.00043	0.00043	0.00043	0.00043	3-5-004: 059
				AQUIFER SECTOR = HAKALAU 80203	**0.00043**	**0.00043**	**0.00043**	**0.00043**	**0.00043**	**0.00043**	**0.00043**	**0.00043**	
HONOKAA ELEMENTARY NEW 4 CLASSROOM	POTABLE	HAWAII	EAST MAUNA KEA	HONOKAA			0.00720	0.00720	0.00720	0.00720	0.00720	0.00720	4-5-003: 020
HONOKAA ELEMENTARY NEW ADMINISTRATION	POTABLE	HAWAII	EAST MAUNA KEA	HONOKAA			0.00031	0.00031	0.00031	0.00031	0.00031	0.00031	4-5-003: 020
HONOKAA HIGH SCHOOL NEW 15 CLASSROOM	POTABLE	HAWAII	EAST MAUNA KEA	HONOKAA			0.00093	0.00093	0.00093	0.00093	0.00093	0.00093	4-5-003: 020
HONOKAA HIGH SCHOOL NEW 6 CLASSROOM	POTABLE	HAWAII	EAST MAUNA KEA	HONOKAA			0.00037	0.00037	0.00037	0.00037	0.00037	0.00037	4-5-003: 020
				AQUIFER SECTOR = HONOKAA 80201	**0.00000**	**0.00000**	**0.00881**	**0.00881**	**0.00881**	**0.00881**	**0.00881**	**0.00881**	
HAAHEO ELEMENTARY NEW 4 CLASSROOM	POTABLE	HAWAII	EAST MAUNA KEA	ONOMEA			0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	2-6-020:038
HAAHEO ELEMENTARY NEW CAFETERIA	POTABLE	HAWAII	EAST MAUNA KEA	ONOMEA						0.00060	0.00060	0.00060	2-6-020: 038
HAAHEO ELEMENTARY NEW LIBRARY	POTABLE	HAWAII	EAST MAUNA KEA	ONOMEA			0.00046	0.00046	0.00046	0.00046	0.00046	0.00046	2-6-020: 038
KALANIANIOLE ELEM 8-CLASSROOM BUILDING	POTABLE	HAWAII	EAST MAUNA KEA	ONOMEA						0.00050	0.00050	0.00050	2-7-22:2,3, 2-7-25:4
WAILUKU RIVER SP (BOILING POTS)	POTABLE	HAWAII	EAST MAUNA KEA	ONOMEA						0.00500	0.00500	0.00500	2-3-27:1, 2-3-29:12, 2-5-10:1
				AQUIFER SECTOR = ONOMEA 80204	**0.00000**	**0.00000**	**0.00070**	**0.00070**	**0.00070**	**0.00680**	**0.00680**	**0.00680**	
KALOPA SRA	POTABLE	HAWAII	EAST MAUNA KEA	PAAUILO	0.00500	0.00500	0.00500	0.00500	0.00500	0.00500	0.00500	0.00500	4-4-14:1
				AQUIFER SECTOR = PAAUILO 80202	**0.00500**	**0.00500**	**0.00500**	**0.00500**	**0.00500**	**0.00500**	**0.00500**	**0.00500**	
HYDROLOGICAL SECTOR = HUALALAI 809				**SECTOR 809 TOTAL=**	**0.93291**	**1.27128**	**1.94930**	**2.25310**	**2.36407**	**3.09475**	**3.72744**	**4.98749**	
HOLUALOA ELEM SCHOOL REPLACEMENT OF CAFÉ AND RELOCATION OF PORTABLE P-12	POTABLE	HAWAII	HUALALAI	KEAUHOU	0.00263	0.00263	0.00263	0.00263	0.00263	0.00263	0.00263	0.00263	7-6-04:02, 37; 7-6-05:15
HOLUALOA ELEM SCHOOL REPLACEMENT OF FIRE-DAMAGED PORTABLE CLASSROOMS	POTABLE	HAWAII	HUALALAI	KEAUHOU	0.00045	0.00045	0.00045	0.00045	0.00045	0.00045	0.00045	0.00045	7-6-04: 02,37; 7-6-05:15
KAHAKAI ELEM ADMIN BUILDING/LIBRARY	POTABLE	HAWAII	HUALALAI	KEAUHOU	0.00442	0.00442	0.00442	0.00442	0.00442	0.00442	0.00442	0.00442	7-5-20:77
NEW KONA MULTI-AGENCY MAINTENANCE FAC	POTABLE	HAWAII	HUALALAI	KEAUHOU	0.00083	0.00083	0.00083	0.00083	0.00083	0.00083	0.00083	0.00083	NR
NATURAL ENERGY LABORATORY OF HAWAII	POTABLE	HAWAII	HUALALAI	KEAUHOU	0.40000	0.60000	0.80000	0.90000	0.90000	1.50000	1.60000	1.80000	7-3-43:POR 4, 5
KEALAKEHE PLANNED COMMUNITY (LA'I'OPUA)	POTABLE	HAWAII	HUALALAI	KEAUHOU	0.29310	0.39080	0.48850	0.58650	0.68400	0.97700	1.46550	2.46204	7-4-20:1-06;7-4-21:1-19;7-4-8:POR56
KEALAKEHE PLANNED COMMUNITY (LA'I'OPUA)	NONPOTABLE USING POTABLE	HAWAII	HUALALAI	KEAUHOU	0.00690	0.00920	0.01150	0.01350	0.01600	0.02300	0.03450	0.05796	7-4-20:1-06;7-4-21:1-19;7-4-8:POR56
HOLUALOA ELEM NEW LIBRARY/ADMINISTRATION	POTABLE	HAWAII	HUALALAI	KEAUHOU	0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	7-6-004: 002
HOLUALOA ELEMENTARY NEW 6 CLASSROOM	POTABLE	HAWAII	HUALALAI	KEAUHOU			0.01080	0.01080	0.01080	0.01080	0.01080	0.01080	7-6-004: 002
KEALAKEHE ELEM - PLAYFIELD/RETENTION BASIN	NONPOTABLE USING POTABLE	HAWAII	HUALALAI	KEAUHOU		0.01200	0.01200	0.01200	0.01200	0.01200	0.01200	0.01200	7-4-019:044

STATE WATER PROJECTS PLAN
PROJECTED WATER REQUIREMENTS BY AQUIFER SECTOR/SYSTEM

PROJECT NAME	PRIMARY USE	ISLAND	SECTOR	AQUIFER SYSTEM	02001 MGD	02002 MGD	02003 MGD	02004 MGD	02005 MGD	02010 MGD	02015 MGD	02020 MGD	TMK
				SWPP Statewide Project Demand Total=	**12.19**	**18.10**	**25.22**	**26.59**	**33.20**	**69.42**	**76.55**	**80.87**	
KEALAKEHE ELEM NEW LIBRARY/ADMIN	POTABLE	HAWAII	HUALALAI	KEAUHOU			0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	7-4-008: 015
KEALAKEHE ELEMENTARY NEW 6 CLASSROOM	POTABLE	HAWAII	HUALALAI	KEAUHOU		0.00037	0.00037	0.00037	0.00037	0.00037	0.00037	0.00037	7-4-008: 015
KEALAKEHE HIGH SCHOOL NEW 13 CLASSROOM	POTABLE	HAWAII	HUALALAI	KEAUHOU	0.00081	0.00081	0.00081	0.00081	0.00081	0.00081	0.00081	0.00081	7-4-20: 8
KEALAKEHE II ELEM 1ST & 2ND INCRE	POTABLE	HAWAII	HUALALAI	KEAUHOU			0.06000	0.06000	0.06000	0.06000	0.06000	0.06000	NEW
KEALAKEHE INTER SCH NEW LIBRARY/ADMIN	POTABLE	HAWAII	HUALALAI	KEAUHOU	0.00102	0.00102	0.00102	0.00102	0.00102	0.00102	0.00102	0.00102	7-4-008: 015
KEALAKEHE INTER SCHOOL NEW 8 CLASSROOM	POTABLE	HAWAII	HUALALAI	KEAUHOU			0.01440	0.01440	0.01440	0.01440	0.01440	0.01440	7-4-008: 015
LAIOPUA VILLAGE 4	POTABLE	HAWAII	HUALALAI	KEAUHOU	0.10000	0.10000	0.10000	0.10000	0.10000	0.10000	0.10000	0.10000	
KEKAHA KAI SP (MAHAIULA)	POTABLE	HAWAII	HUALALAI	KEAUHOU			0.00336	0.00662	0.00667	0.00673	0.00678	0.00695	NR
KEKAHA KAI SP (MAHAIULA)	NONPOTABLE USING POTABLE	HAWAII	HUALALAI	KEAUHOU			0.03869	0.07612	0.07675	0.07738	0.07801	0.07990	NR
OLD KONA AIRPORT SRA	POTABLE	HAWAII	HUALALAI	KEAUHOU		0.01008	0.01008	0.01008	0.01008	0.01008	0.01008	0.01008	7-5-05:7,72,73,74,79,82,83
OLD KONA AIRPORT SRA	NONPOTABLE USING POTABLE	HAWAII	HUALALAI	KEAUHOU		0.00592	0.00592	0.00592	0.00592	0.00592	0.00592	0.00592	7-5-05:7,72,73,74,79,82,83
QUEEN KAAHUMANU HWY WIDENING, KAILUA TO KEAHOLE	NONPOTABLE USING POTABLE	HAWAII	HUALALAI	KEAUHOU			0.24000	0.24000	0.24000	0.06000	0.06000	0.06000	NR
KONA INTERNATIONAL AIRPORT MASTER PLAN	POTABLE	HAWAII	HUALALAI	KEAUHOU	0.12200	0.13200	0.14200	0.15200	0.16200	0.17200	0.20400	0.24200	7-3-10
UNIVERSITY OF HAWAII CENTER AT WEST HAWAII - EXTERIOR IMPROVEMENTS PHASE I	NONPOTABLE USING POTABLE	HAWAII	HUALALAI	KEAUHOU				0.03600	0.03600	0.03600	0.03600	0.03600	7-3-10:33
UNIVERSITY OF HAWAII CENTER AT WEST HAWAII - FOOD SERVICES FACILITY	POTABLE	HAWAII	HUALALAI	KEAUHOU				0.00695	0.00695	0.00695	0.00695	0.00695	7-3-10:33
UNIVERSITY OF HAWAII CENTER AT WEST HAWAII - FOOD SERVICES FACILITY	NONPOTABLE USING POTABLE	HAWAII	HUALALAI	KEAUHOU				0.00029	0.00029	0.00029	0.00029	0.00029	7-3-10:33
UNIVERSITY OF HAWAII CENTER AT WEST HAWAII - LEARNING RESOURCE CENTER	POTABLE	HAWAII	HUALALAI	KEAUHOU				0.00978	0.00978	0.00978	0.00978	0.00978	7-3-10:33
UNIVERSITY OF HAWAII CENTER AT WEST HAWAII - LEARNING RESOURCE CENTER	NONPOTABLE USING POTABLE	HAWAII	HUALALAI	KEAUHOU				0.00010	0.00010	0.00010	0.00010	0.00010	7-3-10:33
UNIVERSITY OF HAWAII CENTER AT WEST HAWAII - OPERATIONS & MAINTENANCE PHASE I	POTABLE	HAWAII	HUALALAI	KEAUHOU					0.00024	0.00024	0.00024	0.00024	7-3-10:33
UNIVERSITY OF HAWAII CENTER AT WEST HAWAII - OPERATIONS & MAINTENANCE PHASE I	NONPOTABLE USING POTABLE	HAWAII	HUALALAI	KEAUHOU					0.00004	0.00004	0.00004	0.00004	7-3-10:33
				AQUIFER SECTOR = KEAUHOU 80901	**0.93291**	**1.27128**	**1.94930**	**2.25310**	**2.36407**	**3.09475**	**3.72744**	**4.98749**	
HYDROLOGICAL SECTOR = KILAUEA 808				**SECTOR 808 TOTAL=**	**0.10307**	**0.10307**	**0.17226**	**0.17219**	**0.17219**	**1.71299**	**1.71299**	**1.71299**	
KAU HIGH SCH&PAHALA ELEM SCH 10-CLSRM BLD	POTABLE	HAWAII	KILAUEA	KEAIWA			0.01800	0.01800	0.01800	0.01800	0.01800	0.01800	9-6-5:8,9
KAU HIGH SCH&PAHALA ELEM SCH 3-CLSRM BLD	POTABLE	HAWAII	KILAUEA	KEAIWA			0.00019	0.00019	0.00019	0.00019	0.00019	0.00019	9-6-5:8,9
KAU HIGH SCHOOL PAHALA NEW 12 CLASSROOM	POTABLE	HAWAII	KILAUEA	KEAIWA			0.00074	0.00074	0.00074	0.00074	0.00074	0.00074	9-6-005: 008
MAMALAHOA HWY, EMERGENCY REPLACE.OF PAAUAU STR.BRIDGE, REALIGN.OF KAMANI ST., ETC.	NONPOTABLE USING POTABLE	HAWAII	KILAUEA	KEAIWA	0.03200	0.03200	0.00800	0.00800	0.00800	0.00800	0.00800	0.00800	9-6-23:43, 9-6-05:46, 9-6-12:12, 9-6-02:47, 9-6-13:05
				AQUIFER SECTOR = KEAIWA 80804	**0.03200**	**0.03200**	**0.02693**	**0.02693**	**0.02693**	**0.02693**	**0.02693**	**0.02693**	

STATE WATER PROJECTS PLAN
PROJECTED WATER REQUIREMENTS BY AQUIFER SECTOR/SYSTEM

PROJECT NAME	PRIMARY USE	ISLAND	SECTOR	AQUIFER SYSTEM	02001 MGD	02002 MGD	02003 MGD	02004 MGD	02005 MGD	02010 MGD	02015 MGD	02020 MGD	TMK
				SWPP Statewide Project Demand Total=	**12.19**	**18.10**	**25.22**	**26.59**	**33.20**	**69.42**	**76.55**	**80.87**	
HAWAIIAN PARADISE PARK ELEMENTARY SCHOOL	POTABLE	HAWAII	KILAUEA	PAHOA			0.06000	0.06000	0.06000	0.06000	0.06000	0.06000	NEW
KEAAU HIGH SCHOOL 2ND INCREMENT	POTABLE	HAWAII	KILAUEA	PAHOA	0.04800	0.04800	0.04800	0.04800	0.04800	0.04800	0.04800	0.04800	NEW
KEAAU HIGH SCHOOL 3RD INCREMENT	POTABLE	HAWAII	KILAUEA	PAHOA	0.01200	0.01200	0.01200	0.01200	0.01200	0.01200	0.01200	0.01200	NEW
KEAAU HIGH SCHOOL 4TH INCREMENT	POTABLE	HAWAII	KILAUEA	PAHOA	0.00960	0.00960	0.00960	0.00960	0.00960	0.00960	0.00960	0.00960	NEW
KEAAU INTERMEDIATE NEW 8 CLASSROOM	POTABLE	HAWAII	KILAUEA	PAHOA			0.00050	0.00043	0.00043	0.00043	0.00043	0.00043	7-6-3: 59
KEAAU INTERMEDIATE NEW ADMINISTRATION	POTABLE	HAWAII	KILAUEA	PAHOA			0.00043	0.00043	0.00043	0.00043	0.00043	0.00043	7-6-3: 59
KEAAU INTERMEDIATE SCHOOL NEW BAND BLDG	POTABLE	HAWAII	KILAUEA	PAHOA	0.00040	0.00040	0.00040	0.00040	0.00040	0.00040	0.00040	0.00040	7-6-3: 59
KEONEPOKO ELEM NEW LIBRARY/ADMINISTRATN	POTABLE	HAWAII	KILAUEA	PAHOA	0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	1-5-009: 009
KEONEPOKO ELEM SCHOOL NEW 4 CLASSROOM	POTABLE	HAWAII	KILAUEA	PAHOA			0.00720	0.00720	0.00720	0.00720	0.00720	0.00720	1-5-009: 009
MOUNTAIN VIEW ELEM NEW 12 CLASSROOM	POTABLE	HAWAII	KILAUEA	PAHOA			0.00074	0.00074	0.00074	0.00074	0.00074	0.00074	1-8-001: 007
MOUNTAIN VIEW ELEM NEW ADMINISTRATION	POTABLE	HAWAII	KILAUEA	PAHOA			0.00031	0.00031	0.00031	0.00031	0.00031	0.00031	1-8-001: 007
PAHOA ELEMENTARY NEW 10 CLASSROOM	POTABLE	HAWAII	KILAUEA	PAHOA			0.00062	0.00062	0.00062	0.00062	0.00062	0.00062	1-5-114: 025
PAHOA ELEMENTARY NEW ADMINISTRATION	POTABLE	HAWAII	KILAUEA	PAHOA	0.00031	0.00031	0.00031	0.00031	0.00031	0.00031	0.00031	0.00031	1-5-114: 025
PAHOA HIGH SCHOOL NEW ADMINISTRATION	POTABLE	HAWAII	KILAUEA	PAHOA			0.00046	0.00046	0.00046	0.00046	0.00046	0.00046	2-4-001: 015
PAHOA HIGH SCHOOL NEW GYMNASIUM	POTABLE	HAWAII	KILAUEA	PAHOA			0.00400	0.00400	0.00400	0.00400	0.00400	0.00400	2-4-001: 015
MAKUU - FARM LOTS (2 ACRES)	POTABLE	HAWAII	KILAUEA	PAHOA						0.02000	0.02000	0.02000	NR
MAKUU - FARM LOTS (2 ACRES) (IRRIG)	NONPOTABLE	HAWAII	KILAUEA	PAHOA						0.20000	0.20000	0.20000	NR
MAKUU - FARM LOTS (5 ACRE)	POTABLE	HAWAII	KILAUEA	PAHOA						0.05080	0.05080	0.05080	NR
MAKUU - FARM LOTS (5 ACRE) (IRRIG)	NONPOTABLE	HAWAII	KILAUEA	PAHOA						1.27000	1.27000	1.27000	NR
				AQUIFER SECTOR = PAHOA 80801	**0.07107**	**0.07107**	**0.14533**	**0.14526**	**0.14526**	**1.68606**	**1.68606**	**1.68606**	
HYDROLOGICAL SECTOR = KOHALA 801				**SECTOR 801 TOTAL=**	**1.82855**	**1.89527**	**2.01919**	**2.01991**	**2.08363**	**2.25088**	**3.69888**	**3.69888**	
KOHALA PUBLIC LIBRARY	POTABLE	HAWAII	KOHALA	HAWI						0.00057	0.00057	0.00057	NR
KOHALA PUBLIC LIBRARY	NONPOTABLE USING POTABLE	HAWAII	KOHALA	HAWI						0.00073	0.00073	0.00073	NR
				AQUIFER SECTOR = HAWI 80101	**0.00000**	**0.00000**	**0.00000**	**0.00000**	**0.00000**	**0.00130**	**0.00130**	**0.00130**	
WAIMEA READINESS CENTER	POTABLE	HAWAII	KOHALA	MAHUKONA			0.00115	0.00115	0.00115	0.00115	0.00115	0.00115	6-6-03
KOHALA ELEM NEW LIBRARY/ADMINISTRATION	POTABLE	HAWAII	KOHALA	MAHUKONA			0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	5-4-007: 014
KOHALA ELEMENTARY NEW 4 CLASSROOM	POTABLE	HAWAII	KOHALA	MAHUKONA			0.00720	0.00720	0.00720	0.00720	0.00720	0.00720	5-4-007: 014
KOHALA HIGH SCHOOL NEW 4 CLASSROOM	POTABLE	HAWAII	KOHALA	MAHUKONA			0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	5-4-007: 014
KOHALA HIGH SCHOOL NEW AUTO/TECH SHOP	POTABLE	HAWAII	KOHALA	MAHUKONA			0.00041	0.00041	0.00041	0.00041	0.00041	0.00041	5-4-007: 014
KOHALA HIGH SCHOOL NEW MUSIC BUILDING	POTABLE	HAWAII	KOHALA	MAHUKONA			0.00043	0.00043	0.00043	0.00043	0.00043	0.00043	5-4-007: 014

STATE WATER PROJECTS PLAN
PROJECTED WATER REQUIREMENTS BY AQUIFER SECTOR/SYSTEM

PROJECT NAME	PRIMARY USE	ISLAND	SECTOR	AQUIFER SYSTEM	02001 MGD	02002 MGD	02003 MGD	02004 MGD	02005 MGD	02010 MGD	02015 MGD	02020 MGD	TMK
				SWPP Statewide Project Demand Total=	**12.19**	**18.10**	**25.22**	**26.59**	**33.20**	**69.42**	**76.55**	**80.87**	
KAWAIHAE - MASTER PLAN AREA	POTABLE	HAWAII	KOHALA	MAHUKONA							1.40000	1.40000	NR
KAWAIHAE - RESIDENCE LOTS (MAKAI)	POTABLE	HAWAII	KOHALA	MAHUKONA						0.00880	0.00880	0.00880	NR
KAWAIHAE - RESIDENTIAL LOTS (MAUKA)	POTABLE	HAWAII	KOHALA	MAHUKONA						0.07800	0.07800	0.07800	NR
KOHALA HISTORICAL SITES STATE MONUMENT	POTABLE	HAWAII	KOHALA	MAHUKONA	0.00006	0.00008	0.00178	0.00180	0.00182	0.00357	0.00357	0.00357	5-5-05:6,20, 5-6-01:75
KOHALA HISTORICAL SITES STATE MONUMENT	NONPOTABLE USING POTABLE	HAWAII	KOHALA	MAHUKONA	0.00097	0.00129	0.02793	0.02825	0.02857	0.05586	0.05586	0.05586	5-5-05:6,20, 5-6-01:75
LAPAKAHI SHP	POTABLE	HAWAII	KOHALA	MAHUKONA	0.00011	0.00015	0.00179	0.00183	0.00186	0.00358	0.00358	0.00358	5-7-01:22
LAPAKAHI SHP	NONPOTABLE USING POTABLE	HAWAII	KOHALA	MAHUKONA	0.00101	0.00135	0.01609	0.01643	0.01676	0.03218	0.03218	0.03218	5-7-01:22
KAWAIHAE BOAT HARBOR IMPROVEMENTS	POTABLE	HAWAII	KOHALA	MAHUKONA	0.00140	0.00140	0.00140	0.00140	0.00140	0.00140	0.00140	0.00140	6-1-03
HAWAII COMMERCIAL HARBORS 2020 MASTER PLAN: DRY BULK CARGO TERMINALS	POTABLE	HAWAII	KOHALA	MAHUKONA		0.01800	0.01800	0.01800	0.01800	0.01800	0.01800	0.01800	3-6-1:03
HAWAII COMMERCIAL HARBORS 2020 MASTER PLAN: INTER-ISLAND CARGO TERMINAL	POTABLE	HAWAII	KOHALA	MAHUKONA						0.03300	0.06600	0.06600	3-6-1:03
HAWAII COMMERCIAL HARBORS 2020 MASTER PLAN: LIQUID BULK CARGO TERMINALS	POTABLE	HAWAII	KOHALA	MAHUKONA			0.06900	0.06900	0.06900	0.06900	0.06900	0.06900	3-6-1:03
HAWAII COMMERCIAL HARBORS 2020 MASTER PLAN: MILITARY CARGO TERMINAL	POTABLE	HAWAII	KOHALA	MAHUKONA		0.04800	0.04800	0.04800	0.04800	0.04800	0.04800	0.04800	3-6-1:03
HAWAII COMMERCIAL HARBORS 2020 MASTER PLAN: OVERSEAS CONTAINER TERMINAL	POTABLE	HAWAII	KOHALA	MAHUKONA					0.06300	0.06300	0.06300	0.06300	3-6-1:03
HAWAII COMMERCIAL HARBORS 2020 MASTER PLAN: PASSENGER TERMINAL-KAWAIHAE HARBOR	POTABLE	HAWAII	KOHALA	MAHUKONA							0.01500	0.01500	3-6-1:03
				AQUIFER SECTOR = MAHUKONA 80103	**0.00355**	**0.07027**	**0.19419**	**0.19491**	**0.25863**	**0.42458**	**1.87258**	**1.87258**	
WAIMEA IRRIGATION SYSTEM	NONPOTABLE	HAWAII	KOHALA	WAIMANU	1.82500	1.82500	1.82500	1.82500	1.82500	1.82500	1.82500	1.82500	NR
				AQUIFER SECTOR = WAIMANU 80102	**1.82500**	**1.82500**	**1.82500**	**1.82500**	**1.82500**	**1.82500**	**1.82500**	**1.82500**	
HYDROLOGICAL SECTOR = NORTHEAST MAUNA LOA 804				**SECTOR 804 TOTAL=**	**0.52736**	**2.98992**	**3.03206**	**3.09406**	**3.19606**	**4.41612**	**4.52012**	**4.59812**	
PACIFIC AQUACULT&COASTAL RESOURCS CTR	NONPOTABLE	HAWAII	NORTH EAST MAUNA LOA	HILO		1.65000	1.65000	1.65000	1.65000	1.65000	1.65000	1.65000	2-1-9: 1 & 41, 2-1-11: 4
DE SILVA ELEM ARCHITECTRL BARRIER REMOV	POTABLE	HAWAII	NORTH EAST MAUNA LOA	HILO	0.00743	0.00743	0.00743	0.00743	0.00743	0.00743	0.00743	0.00743	2-5-08:13
HILO DAGS BASEYARD	POTABLE	HAWAII	NORTH EAST MAUNA LOA	HILO			0.00179	0.00179	0.00179	0.00179	0.00179	0.00179	2-1-12: LOT 7 (APPROXIMATE)
HILO JUDICIARY COMPLEX	POTABLE	HAWAII	NORTH EAST MAUNA LOA	HILO						0.01718	0.01718	0.01718	2-2-15:33
HILO JUDICIARY COMPLEX	NONPOTABLE USING POTABLE	HAWAII	NORTH EAST MAUNA LOA	HILO						0.00682	0.00682	0.00682	2-2-15:33
CHIEFESS KAPIOLANI ELEM 4-CLASSROOM BLDG	POTABLE	HAWAII	NORTH EAST MAUNA LOA	HILO						0.00025	0.00025	0.00025	2-2-20:1
DESILVA ELEM SCHOOL 4-CLASSROOM BUILDING	POTABLE	HAWAII	NORTH EAST MAUNA LOA	HILO						0.00025	0.00025	0.00025	2-5-8:13
DeSILVA ELEMENTARY NEW ADMINISTRATION	POTABLE	HAWAII	NORTH EAST MAUNA LOA	HILO			0.00031	0.00031	0.00031	0.00031	0.00031	0.00031	2-5-008:013
HILO HIGH SCHOOL 4-CLASSROOM BUILDING	POTABLE	HAWAII	NORTH EAST MAUNA LOA	HILO			0.00720	0.00720	0.00720	0.00720	0.00720	0.00720	2-3-15:1,26
HILO HIGH SCHOOL NEW ADMINISTRATION	POTABLE	HAWAII	NORTH EAST MAUNA LOA	HILO			0.00046	0.00046	0.00046	0.00046	0.00046	0.00046	2-3-015: 001
HILO HIGH SCHOOL NEW GYMNASIUM	POTABLE	HAWAII	NORTH EAST MAUNA LOA	HILO			0.00400	0.00400	0.00400	0.00400	0.00400	0.00400	2-3-015: 001
HILO INTERMEDIATE - RENOVATE BLDG A PHASE 1 & 2 ADMIN, LIBRARY, 35 CLASSROOMS	POTABLE	HAWAII	NORTH EAST MAUNA LOA	HILO			0.00317	0.00317	0.00317	0.00317	0.00317	0.00317	2-3-021: 058

STATE WATER PROJECTS PLAN
PROJECTED WATER REQUIREMENTS BY AQUIFER SECTOR/SYSTEM

PROJECT NAME	PRIMARY USE	ISLAND	SECTOR	AQUIFER SYSTEM	02001 MGD	02002 MGD	02003 MGD	02004 MGD	02005 MGD	02010 MGD	02015 MGD	02020 MGD	TMK
				SWPP Statewide Project Demand Total=	12.19	18.10	25.22	26.59	33.20	69.42	76.55	80.87	
HILO UNION NEW 6 CLASSROOM	POTABLE	HAWAII	NORTH EAST MAUNA LOA	HILO			0.00037	0.00037	0.00037	0.00037	0.00037	0.00037	2-3-016: 037
KALANIANIOLE ELEMENTARY NEW LIBRARY	POTABLE	HAWAII	NORTH EAST MAUNA LOA	HILO			0.00046	0.00046	0.00046	0.00046	0.00046	0.00046	2-7-022: 002
KAUMANA ELEMENTARY NEW 4 CLASSROOM	POTABLE	HAWAII	NORTH EAST MAUNA LOA	HILO			0.00720	0.00720	0.00720	0.00720	0.00720	0.00720	2-5-005: 084
KEAUKAHA ELEM NEW LIBRARY/ADMINISTRATION	POTABLE	HAWAII	NORTH EAST MAUNA LOA	HILO			0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	2-1-020: 001
KEAUKAHA ELEMENTARY NEW CAFETERIA	POTABLE	HAWAII	NORTH EAST MAUNA LOA	HILO	0.00108	0.00108	0.00108	0.00108	0.00108	0.00108	0.00108	0.00108	2-1-020: 001
WAIAKEA ELEM NEW LIBRARY/ADMINISTRATION	POTABLE	HAWAII	NORTH EAST MAUNA LOA	HILO		0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	2-4-001: 015
WAIAKEA INTER NEW PE LOCKER/SHOWER	POTABLE	HAWAII	NORTH EAST MAUNA LOA	HILO			0.00042	0.00042	0.00042	0.00042	0.00042	0.00042	2-4-001: 015
WAIAKEAWAENA ELEMENTARY NEW CAFETERIA	POTABLE	HAWAII	NORTH EAST MAUNA LOA	HILO	0.00285	0.00285	0.00285	0.00285	0.00285	0.00285	0.00285	0.00285	2-2-042: 017
HAWAII EAST SCTRD LOT	POTABLE	HAWAII	NORTH EAST MAUNA LOA	HILO	0.04400	0.04400	0.04400	0.04400	0.04400	0.04400	0.04400	0.04400	VARIOUS
HUMUULA - PASTURE LOTS	POTABLE	HAWAII	NORTH EAST MAUNA LOA	HILO						0.00480	0.00480	0.00480	NR
KEAUKAHA - RESIDENCE LOTS UNIT 2	POTABLE	HAWAII	NORTH EAST MAUNA LOA	HILO						0.03320	0.03320	0.03320	2-1-20,21,22,23
PANAEWA - FARM LOTS (AUWAE ST)	POTABLE	HAWAII	NORTH EAST MAUNA LOA	HILO						0.03000	0.03000	0.03000	NR
PANAEWA - FARM LOTS (AUWAE ST) (IRRIG)	NONPOTABLE	HAWAII	NORTH EAST MAUNA LOA	HILO						0.64000	0.64000	0.64000	NR
PANAEWA - FARM LOTS PUNA PAPAYA	POTABLE	HAWAII	NORTH EAST MAUNA LOA	HILO						0.01000	0.01000	0.01000	2-1-25:25-40,67-71,74,77-83
PANAEWA - FARM LOTS PUNA PAPAYA (IRRIG)	NONPOTABLE	HAWAII	NORTH EAST MAUNA LOA	HILO						0.30000	0.30000	0.30000	NR
PANAEWA RESIDENCE LOTS	POTABLE	HAWAII	NORTH EAST MAUNA LOA	HILO	0.02400	0.02400	0.02400	0.02400	0.02400	0.02400	0.02400	0.02400	
WAIAKEA - RESIDENCE LOTS UNIT 2A-5	POTABLE	HAWAII	NORTH EAST MAUNA LOA	HILO						0.00800	0.00800	0.00800	NR
HAWAII COMMERCIAL HARBORS 2020 MASTER PLAN: OCEAN RESEARCH STATION	POTABLE	HAWAII	NORTH EAST MAUNA LOA	HILO							0.01200	0.01200	3-2-1-:07
HAWAII COMMERCIAL HARBORS 2020 MASTER PLAN: OVERSEAS CONTAINER TERMINAL	POTABLE	HAWAII	NORTH EAST MAUNA LOA	HILO				0.06000	0.06000	0.06000	0.06000	0.06000	3-2-1:09
HAWAII COMMERCIAL HARBORS 2020 MASTER PLAN: PASSENGER TERMINAL-HILO HARBOR	POTABLE	HAWAII	NORTH EAST MAUNA LOA	HILO							0.01500	0.01500	3-2-1:07
HAWAII COMMERCIAL HARBORS 2020 MASTER PLAN: INTER-ISLAND CARGO TERMINAL	POTABLE	HAWAII	NORTH EAST MAUNA LOA	HILO					0.06000	0.06000	0.06000	0.06000	3-2-1:07
HILO INTERNATIONAL AIRPORT MASTER PLAN	POTABLE	HAWAII	NORTH EAST MAUNA LOA	HILO	0.00400	0.00600	0.00800	0.01000	0.01200	0.01300	0.02000	0.02800	2-1-12
INSTITUTE FOR ASTRONOMY FACILITY-HILO	POTABLE	HAWAII	NORTH EAST MAUNA LOA	HILO	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100	2-4-01:07
UNIVERSITY OF HAWAII AT HILO CAMPUS DEV	POTABLE	HAWAII	NORTH EAST MAUNA LOA	HILO	0.04200	0.05600	0.07000	0.07000	0.07000	0.14000	0.21000	0.28000	2-4-57:25,26
HAWAII COMMUNITY COLLEGE HILO - EXTERIOR IMPROVEMENTS PHASE I	NONPOTABLE USING POTABLE	HAWAII	NORTH EAST MAUNA LOA	HILO					0.04000	0.04000	0.04000	0.04000	NR
HAWAII COMMUNITY COLLEGE HILO - LEARNING RESOURCE CENTER	POTABLE	HAWAII	NORTH EAST MAUNA LOA	HILO						0.00958	0.00958	0.00958	NR
HAWAII COMMUNITY COLLEGE HILO - LEARNING RESOURCE CENTER	NONPOTABLE USING POTABLE	HAWAII	NORTH EAST MAUNA LOA	HILO						0.00050	0.00050	0.00050	NR
HAWAII COMMUNITY COLLEGE HILO - OPERATIONS & MAINTENANCE, PHASE I	POTABLE	HAWAII	NORTH EAST MAUNA LOA	HILO						0.00024	0.00024	0.00024	NR
HAWAII COMMUNITY COLLEGE HILO - OPERATIONS & MAINTENANCE, PHASE I	NONPOTABLE USING POTABLE	HAWAII	NORTH EAST MAUNA LOA	HILO						0.00004	0.00004	0.00004	NR
U.S. CHINA CENTER	POTABLE	HAWAII	NORTH EAST MAUNA LOA	HILO		0.04580	0.04580	0.04580	0.04580	0.13400	0.13400	0.13400	2-4-01:05 (POR.)
				AQUIFER SECTOR = HILO 80401	0.12636	1.83892	1.88106	1.94306	2.04506	3.26512	3.36912	3.44712	

STATE WATER PROJECTS PLAN
PROJECTED WATER REQUIREMENTS BY AQUIFER SECTOR/SYSTEM

PROJECT NAME	PRIMARY USE	ISLAND	SECTOR	AQUIFER SYSTEM	02001 MGD	02002 MGD	02003 MGD	02004 MGD	02005 MGD	02010 MGD	02015 MGD	02020 MGD	TMK
				SWPP Statewide Project Demand Total=	**12.19**	**18.10**	**25.22**	**26.59**	**33.20**	**69.42**	**76.55**	**80.87**	
PACIFIC AQUACULTURE AND COASTAL RESOURCES CENTER, UHH FARM @ PANAEWA	NONPOTABLE	HAWAII	NORTH EAST MAUNA LOA	KEAAU		0.75000	0.75000	0.75000	0.75000	0.75000	0.75000	0.75000	2-1-56: 56
KEAAU HIGH SCHOOL (1ST INCREMENT)	POTABLE	HAWAII	NORTH EAST MAUNA LOA	KEAAU	0.02400	0.02400	0.02400	0.02400	0.02400	0.02400	0.02400	0.02400	1-6-003:003
KEAAU II ELEMENTARY SCHOOL 2ND INCREMENT	POTABLE	HAWAII	NORTH EAST MAUNA LOA	KEAAU	0.02700	0.02700	0.02700	0.02700	0.02700	0.02700	0.02700	0.02700	1-6-003: 008
PANAEWA FARM WELL AND PUMP	NONPOTABLE	HAWAII	NORTH EAST MAUNA LOA	KEAAU	0.35000	0.35000	0.35000	0.35000	0.35000	0.35000	0.35000	0.35000	2-2-56:56
				AQUIFER SECTOR = KEAAU 80402	**0.40100**	**1.15100**	**1.15100**	**1.15100**	**1.15100**	**1.15100**	**1.15100**	**1.15100**	
HYDROLOGICAL SECTOR = NORTHWEST MAUNA LOA 807				**SECTOR 807 TOTAL=**	**0.00000**	**0.00000**	**0.00000**	**0.00000**	**0.00000**	**0.00500**	**0.00500**	**0.00500**	
PUAKO BOAT RAMP	POTABLE	HAWAII	NORTH WEST MAUNA LOA	ANAEHOOMALU						0.00500	0.00500	0.00500	NR
				AQUIFER SECTOR = ANAEHOOMALU 80701	**0.00000**	**0.00000**	**0.00000**	**0.00000**	**0.00000**	**0.00500**	**0.00500**	**0.00500**	
HYDROLOGICAL SECTOR = SOUTHEAST MAUNA LOA 805				**SECTOR 805 TOTAL=**	**0.00285**	**0.00285**	**0.02237**	**0.02237**	**0.02237**	**0.03237**	**0.05237**	**0.05237**	
KAMAOA - PASTURE LOTS	POTABLE	HAWAII	SOUTH EAST MAUNA LOA	KALAE						0.01000	0.01000	0.01000	NR
KAMAOA - PUUEO FARM LOTS	POTABLE	HAWAII	SOUTH EAST MAUNA LOA	KALAE							0.02000	0.02000	NR
				AQUIFER SECTOR = KALAE 80504	**0.00000**	**0.00000**	**0.00000**	**0.00000**	**0.00000**	**0.01000**	**0.03000**	**0.03000**	
NAALEHU ELEMENTARY NEW 6 CLASSROOM	POTABLE	HAWAII	SOUTH EAST MAUNA LOA	NAALEHU			0.01080	0.01080	0.01080	0.01080	0.01080	0.01080	9-5-009: 006
NAALEHU ELEMENTARY NEW LIBRARY	POTABLE	HAWAII	SOUTH EAST MAUNA LOA	NAALEHU			0.00046	0.00046	0.00046	0.00046	0.00046	0.00046	9-5-009: 006
NAALEHU DIST COURT AND MULTI-PURPOSE BLD	POTABLE	HAWAII	SOUTH EAST MAUNA LOA	NAALEHU			0.00099	0.00099	0.00099	0.00099	0.00099	0.00099	NR
NAALEHU DIST COURT AND MULTI-PURPOSE BLD	NONPOTABLE USING POTABLE	HAWAII	SOUTH EAST MAUNA LOA	NAALEHU			0.00727	0.00727	0.00727	0.00727	0.00727	0.00727	NR
				AQUIFER SECTOR = NAALEHU 80503	**0.00000**	**0.00000**	**0.01952**	**0.01952**	**0.01952**	**0.01952**	**0.01952**	**0.01952**	
MOUNTAIN VIEW ELEMENTARY SCH CAFETERIA	POTABLE	HAWAII	SOUTH EAST MAUNA LOA	OLAA	0.00285	0.00285	0.00285	0.00285	0.00285	0.00285	0.00285	0.00285	1-8-01:07
				AQUIFER SECTOR = OLAA 80501	**0.00285**	**0.00285**	**0.00285**	**0.00285**	**0.00285**	**0.00285**	**0.00285**	**0.00285**	
HYDROLOGICAL SECTOR = SOUTHWEST MAUNA LOA 806				**SECTOR 806 TOTAL=**	**0.08140**	**0.08542**	**0.08875**	**0.09000**	**0.09006**	**0.11022**	**0.11022**	**0.11822**	
HOOKENA ELEMENTARY NEW 8 CLASSROOM	POTABLE	HAWAII	SOUTH WEST MAUNA LOA	KAAPUNA	0.00050	0.00050	0.00050	0.00050	0.00050	0.00050	0.00050	0.00050	8-6-010: 009
HOOKENA ELEMENTARY NEW ADMINISTRATION	POTABLE	HAWAII	SOUTH WEST MAUNA LOA	KAAPUNA			0.00031	0.00031	0.00031	0.00031	0.00031	0.00031	8-6-010: 009
HOOKENA ELEMENTARY NEW LIBRARY	POTABLE	HAWAII	SOUTH WEST MAUNA LOA	KAAPUNA		0.00151	0.00151	0.00151	0.00151	0.00151	0.00151	0.00151	8-6-010: 009
HOOKENA ELEMENTARY SCHOOL CAFETERIA	POTABLE	HAWAII	SOUTH WEST MAUNA LOA	KAAPUNA		0.00093	0.00093	0.00093	0.00093	0.00093	0.00093	0.00093	8-6-10:9,12
KEALAKEKUA BAY SHP	POTABLE	HAWAII	SOUTH WEST MAUNA LOA	KAAPUNA	0.00080	0.00080	0.00080	0.00080	0.00080	0.00081	0.00081	0.00081	8-1-07:50 & OTHERS
KEALAKEKUA BAY SHP	NONPOTABLE USING POTABLE	HAWAII	SOUTH WEST MAUNA LOA	KAAPUNA	0.07936	0.07941	0.07946	0.07952	0.07957	0.07973	0.07973	0.07973	8-1-07:50 & OTHERS
				AQUIFER SECTOR = KAAPUNA 80602	**0.08066**	**0.08315**	**0.08351**	**0.08357**	**0.08362**	**0.08378**	**0.08378**	**0.08378**	

STATE WATER PROJECTS PLAN
PROJECTED WATER REQUIREMENTS BY AQUIFER SECTOR/SYSTEM

PROJECT NAME	PRIMARY USE	ISLAND	SECTOR	AQUIFER SYSTEM	02001 MGD	02002 MGD	02003 MGD	02004 MGD	02005 MGD	02010 MGD	02015 MGD	02020 MGD	TMK
				SWPP Statewide Project Demand Total=	**12.19**	**18.10**	**25.22**	**26.59**	**33.20**	**69.42**	**76.55**	**80.87**	
KONA CIVIC CENTER	POTABLE	HAWAII	SOUTH WEST MAUNA LOA	KEALAKEKUA						0.00800	0.00800	0.00800	NR
KONA CIVIC CENTER	NONPOTABLE USING POTABLE	HAWAII	SOUTH WEST MAUNA LOA	KEALAKEKUA						0.01200	0.01200	0.02000	NR
HONAUNAU ELEM NEW LIBRARY/ADMINISTRATION	POTABLE	HAWAII	SOUTH WEST MAUNA LOA	KEALAKEKUA			0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	8-3-013: 021
HONAUNAU ELEMENTARY NEW CAFETERIA	POTABLE	HAWAII	SOUTH WEST MAUNA LOA	KEALAKEKUA			0.00090	0.00090	0.00090	0.00090	0.00090	0.00090	8-3-013: 021
KONAWAENA HIGH SCHOOL NEW LIBRARY	POTABLE	HAWAII	SOUTH WEST MAUNA LOA	KEALAKEKUA			0.00088	0.00088	0.00088	0.00088	0.00088	0.00088	8-1-002: 038
KONAWAENA INTER - RENOVATE 12 CLASSROOMS	POTABLE	HAWAII	SOUTH WEST MAUNA LOA	KEALAKEKUA	0.00074	0.00074	0.00074	0.00074	0.00074	0.00074	0.00074	0.00074	8-1-002:038,068
KONAWAENA INTER SCHOOL NEW ADMINISTRATN	POTABLE	HAWAII	SOUTH WEST MAUNA LOA	KEALAKEKUA			0.00043	0.00043	0.00043	0.00043	0.00043	0.00043	8-1-002: 038
KONAWAENA MIDDLE SCH - RENOV 17 CLASSRMS	POTABLE	HAWAII	SOUTH WEST MAUNA LOA	KEALAKEKUA		0.00153	0.00153	0.00153	0.00153	0.00153	0.00153	0.00153	NR
KONAWAENA MID SCH, NEW PE LOCKR&SHOWR	POTABLE	HAWAII	SOUTH WEST MAUNA LOA	KEALAKEKUA				0.00120	0.00120	0.00120	0.00120	0.00120	8-1-2: 38
				AQUIFER SECTOR = KEALAKEKUA 80603	**0.00074**	**0.00227**	**0.00524**	**0.00644**	**0.00644**	**0.02644**	**0.02644**	**0.03444**	
HYDROLOGICAL SECTOR = WEST MAUNA KEA 803				**SECTOR 803 TOTAL=**	**0.07095**	**0.12414**	**0.18496**	**0.18496**	**0.18496**	**15.66112**	**15.66112**	**15.66112**	
WAIMEA CIVIC CENTER, STATE OFC BLDG NO.3	POTABLE	HAWAII	WEST MAUNA KEA	WAIMEA						0.00059	0.00059	0.00059	NR
WAIMEA CIVIC CENTER, STATE OFC BLDG NO.3	NONPOTABLE USING POTABLE	HAWAII	WEST MAUNA KEA	WAIMEA						0.05881	0.05881	0.05881	NR
FUTURE SUBDIVISION IN HONOKAA	NONPOTABLE	HAWAII	WEST MAUNA KEA	WAIMEA						7.00000	7.00000	7.00000	VARIOUS
FUTURE SUBDIVISION IN PAAUILO	NONPOTABLE	HAWAII	WEST MAUNA KEA	WAIMEA						1.25000	1.25000	1.25000	6-3-6
FUTURE SUBDIVISION IN WAIMEA	NONPOTABLE	HAWAII	WEST MAUNA KEA	WAIMEA						0.80000	0.80000	0.80000	6-3-6
WAIMEA/PAAUILO WATERSHED PROJECT	NONPOTABLE	HAWAII	WEST MAUNA KEA	WAIMEA						4.00000	4.00000	4.00000	
WAIKOLOA ELEM SCH 3RD INCR 8 CLSRM/LIBRY	POTABLE	HAWAII	WEST MAUNA KEA	WAIMEA	0.00095	0.00095	0.00095	0.00095	0.00095	0.00095	0.00095	0.00095	6-8-2:31
WAIMEA ELEMENTARY 1ST INCREMENT	POTABLE	HAWAII	WEST MAUNA KEA	WAIMEA			0.03600	0.03600	0.03600	0.03600	0.03600	0.03600	6-7-002: 015
WAIMEA ELEMENTARY 2ND INCREMENT	POTABLE	HAWAII	WEST MAUNA KEA	WAIMEA			0.02400	0.02400	0.02400	0.02400	0.02400	0.02400	6-7-002: 015
WAIMEA INTER NEW PE LOCKER/SHOWER	POTABLE	HAWAII	WEST MAUNA KEA	WAIMEA			0.00042	0.00042	0.00042	0.00042	0.00042	0.00042	6-7-002: 015
WAIMEA INTERMEDIATE NEW 8 CLASSROOM	POTABLE	HAWAII	WEST MAUNA KEA	WAIMEA		0.00050	0.00050	0.00050	0.00050	0.00050	0.00050	0.00050	6-7-002: 015
WAIMEA INTERMEDIATE NEW MUSIC BUILDING	POTABLE	HAWAII	WEST MAUNA KEA	WAIMEA			0.00040	0.00040	0.00040	0.00040	0.00040	0.00040	6-7-002: 015
LALAMILO RESIDENCE LOTS	POTABLE	HAWAII	WEST MAUNA KEA	WAIMEA	0.07000	0.07000	0.07000	0.07000	0.07000	0.07000	0.07000	0.07000	
PUUKAPU - FARM LOTS UNITS 2, 2A	POTABLE	HAWAII	WEST MAUNA KEA	WAIMEA						0.03000	0.03000	0.03000	NR
PUUKAPU - FARM LOTS UNITS 2, 2A (IRRIG)	NONPOTABLE	HAWAII	WEST MAUNA KEA	WAIMEA						1.60000	1.60000	1.60000	NR
PUUKAPU - PASTURE LOTS	POTABLE	HAWAII	WEST MAUNA KEA	WAIMEA						0.07360	0.07360	0.07360	NR
PUUKAPU - RESIDENTIAL LOTS (PUU PELEHU)	POTABLE	HAWAII	WEST MAUNA KEA	WAIMEA						0.01320	0.01320	0.01320	NR
HAPUNA BEACH SRA	POTABLE	HAWAII	WEST MAUNA KEA	WAIMEA		0.05270	0.05270	0.05270	0.05270	0.05270	0.05270	0.05270	6-6-01:2, 6-6-02:32,34,35,41
HAPUNA BEACH SRA	NONPOTABLE	HAWAII	WEST MAUNA KEA	WAIMEA						0.64995	0.64995	0.64995	6-6-01:2, 6-6-02:32,34,35,41
				AQUIFER SECTOR = WAIMEA 80301	**0.07095**	**0.12414**	**0.18496**	**0.18496**	**0.18496**	**15.66112**	**15.66112**	**15.66112**	