

4 SUMMARY OF CONCLUSIONS AND GENERAL RECOMMENDATIONS

Specific recommendations were presented for each aquifer sector area in Chapter 3; however, the Hawaii Water Use and Development Plan Update promotes several common key themes which are applicable island-wide.

1) Reserve the Highest Quality of Water for the Most Valuable End Use

The highest quality water should be reserved for the most valuable end use, thus the “need” for water is emphasized. Potable water is considered the highest quality water; and the sustenance of life is considered the most valuable end use. Landscaping is viewed as a luxury, not a necessity for life; hence, usage of potable water for landscaping is considered unessential and is discouraged. Lower quality nonpotable water, such as reclaimed wastewater, brackish groundwater and untreated surface water, should be utilized for landscaping and agriculture where feasible, thereby reserving potable water for human consumption. Usage of nonpotable water can be promoted by installing nonpotable systems in the proximity of concentrated development. Proper community planning and development is necessary to ensure the success of this process.

2) Promote Water Conservation

Water should not be considered a commodity to be bought and sold, but rather, a public trust and a valuable resource, which is the right of all people to share responsibly. Potable water usage above the County standard of 400 gpd per household is considered excessive, and is therefore discouraged. Both end users and water purveyors should work together to conserve potable water. End users can follow the demand-side conservation practices described in Chapter 2 to reserve potable water only for the sustenance of life, and water purveyors can follow the supply-side conservation measures described in Chapter 2. County Planning can to an extent limit future development water usage in potential water-short areas through land use and zoning policies and by requiring LEED certified construction.

3) Initiate More Monitoring and Studies

The data and analyses presented in the WUDP are based on groundwater hydrologic units; therefore, the accuracy of these units is essential. Additional monitoring and studies are recommended to determine the “safe” sustainable yields of groundwater. The aquifer system area sustainable yields currently are being updated in the WRPP; subsequent updates to the WUDP should reflect the updated sustainable yields. The Framework also requires data and analyses to be based on surface water hydrologic units; therefore, additional information on surface water hydrologic units is required for future updates of the WUDP. Permitted use of stream diversions is “status quo” until instream flow standards have been determined.

Data and analysis presented within each aquifer sector area chapter is specific to the individual aquifer sector area. However, as demonstrated by the water transfers, source availability and

water usage are not confined within each individual aquifer sector area, but rather, are interrelated between neighboring aquifer sector areas. Particularly in West Hawaii, there are areas that will eventually begin to see significant competition for water resources. As such, it is expected that the magnitude and extent of water transfers will increase in the future. **Figures 4-1** and **4-2** show the location of present and expected future water transfers, respectively. Because of these interdependencies, it is strongly recommended that regional studies be initiated that examine such issues in greater depth and on a broader scale.

The WUDP proposes to create overall resource management practices that, where possible, will include obtaining water development easements and sites for well fields, water tanks, reservoirs, and transmission lines, as well as identifying hydraulic service zones on State lands to facilitate strategic transmission between hydrologic zones proximate to lands designated for growth. Qualified utility development of these resources will facilitate a long-term management and protection strategy to the benefit of the greater community. Such development, whether on government or privately-owned lands, will preclude undue competition for the resources as they become more limited. To promote aquifer integrity, future updates of the WUDP should promote a policy of well-planned source development.

The Department of Water Supply, as the largest purveyor of potable water on the island, plays a key role in the use and protection of water resources. The goals and policies of DWS are described in detail in Appendix C.

Water development coordination and cooperation between public and private sectors are emphasized to assist the success of future planning. Involvement of collaborative and advisory groups has had a positive impact on water resources planning, and it is encouraged that these groups continue to provide input and insight.