APPENDIX B

Planning Context for the WRPP

Water Resource Protection Plan 2019 Update

B Planning Context for the WRPP

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B Planning Context for the WRPP

Water resource issues in Hawai‘i are constantly evolving, as they are increasingly subject to socio-cultural, economic, and political developments. Water resource management and the planning process must, therefore, be flexible and adaptable to changing parameters. The purpose of this appendix is to provide the reader with an informed examination of the legislative requirements and administrative influences that have contributed to the planning context for the current update to the WRPP. The following sections are intended to provide a historical review of the development of current water planning infrastructure and to demonstrate how legislation and regulation have contributed to contemporary water planning.

Background information is presented in two parts:

- **Legislative Context**. This section provides a chronological account of the development and scope of major legislation related to water resource planning in Hawai‘i. Such legislation has constructed legal constraints and obligations for specific government agencies. The intent and objectives of legislative actions are discussed, as well as the atmosphere in which such legislation was conceived.
- **Administrative Context**. This section provides a summary of statewide water planning efforts that preceded the WRPP, and indicates how past planning efforts have ultimately impacted and encouraged the development of this document.

An understanding of related events and themes will give the reader a more comprehensive perspective on the WRPP. The sections below provide ancillary information to supplement chapters one and two of the WRPP.

B.1 Legislative Context: A Historical Perspective of Water Regulation in Hawai‘i

B.1.1 Territorial Legislation and Early State Water Laws

Historically, governmental regulation of water development and use throughout the state was largely confined to O’ahu, mainly the Honolulu area, due to the rapid urbanization and industrialization of the island, the expansion of sugar and pineapple cultivation, the establishment of military activities and facilities, and the emergence of Honolulu as a transportation hub in the Pacific. During the early years of the territorial government, uncontrolled development and use of ground water resources gave rise to public concern over the steadily declining flow from artesian wells in Honolulu. In 1925, the Territorial Legislature created the Honolulu Sewer and Water Commission. This commission’s responsibility included the investigation of water resources on O‘ahu.

Public outcry for better management and operation of water systems continued until 1929, when the legislature created the Honolulu BWS. The Honolulu BWS was provided with complete responsibility for management, operation, and regulation of water works and artesian water development in Honolulu. In 1959, the Honolulu Board of Supervisors transferred the Suburban Water System to the Board of Water Supply. With this transfer, all water functions for the island were finally vested in the semi-autonomous Honolulu BWS. Water resources management for the remainder of the Territory was the responsibility of the Territorial Division of Hydrography.

The Hawai‘i Irrigation Authority was created by the Territorial Legislature in 1953 to construct and operate small irrigation systems throughout the islands. The Hawai‘i Water Authority replaced the Hawai‘i Irrigation Authority in 1959 and was made responsible for the collection and correlation of all water resource data in the Territory. Following statehood in 1959, water resource management became a function of the DLNR. The DLNR’s Division of Water and Land Development, now the Engineering Division, became responsible for carrying out the Water Development Program. “Under this program, the division investigates and develops traditional and alternative water sources to meet increasing demands of urban development, agriculture and other uses. Finite water resources and limited funding effects a closer look at alternative water sources. This program also promotes partnerships and cost sharing in the development of water projects to meet the goals of otherwise competing entities.”[1]

Under the leadership of the Honolulu BWS, water resource management on O‘ahu appeared to be under control. However, by the late 1970s, increasing public apprehension over the condition of the state’s water resources prompted the State to review the situation on O‘ahu. At the time, Chapters 177 and 178 HRS 1975 governed ground water resources. Chapter 177 was the Groundwater Use Act, which provided for the regulation of ground water resources in designated areas. Chapter 178 was the Artesian Well Law, which provided for the control of waste, notification of intent to drill, and transfer of a flowing artesian well from an individual to the county. Chapter 176 was the Water Resources Act, which provided the responsibilities and duties of the board of land and natural resources with regard to the compilation, inventorying, studying, and publication of statewide water resource information. Chapter 176D HRS, entitled Protection of Instream Uses of Water, directed the board of land and natural resources to establish and administer an instream use protection program to protect and enhance, where practicable, beneficial instream uses of water.

[1] Report to the Governor 1992-93, DLNR, State of Hawaii.

In 1977, a State Water Commission was appointed by the Governor to assess the state's water resources following a prolonged drought, during which O'ahu's ground water levels fell to record lows and hardship befell farmers and ranchers on other islands. In its report, submitted in early 1979, this commission made a number of recommendations, including the following:

1. Regulate the Pearl Harbor ground water resources through Chapter 177;
2. Establish a permit system for water development and use; and
3. Formulate a State Water Code.

In accordance with the Groundwater Use Act, the first designation of a water control area was made in 1979 when the Board of Land and Natural Resources designated the 'Ewa-Pearl Harbor and Wahiawā Districts.

Meanwhile, the State was taking steps to address water resources through a comprehensive, statewide approach. In 1978, the State of Hawai'i Constitutional Convention identified the State's "obligation to protect, control and regulate the use of Hawai'i's water resources for the benefit of its people." Under Article XI, Section 7, of the State Constitution:

> *"The legislature shall provide for a water resources agency which, as provided by law, shall set overall water conservation, quality and use policies; define beneficial and reasonable uses; protect ground and surface water resources, watersheds and natural stream environments; establish criteria for water use priorities while assuring appurtenant rights and existing correlative and riparian uses and establish procedures for regulating all uses of Hawaii's water resources."*

Thus, the initiative for the Commission on Water Resource Management emerged from the Constitutional Convention of 1978. However, CWRM was not established until 1987, when the Legislature enacted the State Water Code, Chapter 174C HRS. HRS Chapters 177 and 178, Groundwater Use Act and the Artesian Well Law, respectively, were repealed and superseded by the State Water Code. HRS Chapter 176 Water Resources and Chapter 176D Protection of Instream Uses of Water were also repealed and replaced by the State Water Code.

B.1.2 CWRM Administration

The State Water Code provides the legal basis for the establishment of CWRM and delineates the agency's authority and responsibilities. CWRM's primary responsibility is to administer the State Water Code. CWRM's general mission is to protect and enhance the water resources of the State of Hawai'i through wise and responsible management. As specified in the HRS §174C-2, the State Water Code "shall be liberally interpreted to obtain maximum beneficial use of the waters of the State for purposes declared to be in the public interest, such as domestic uses, aquaculture uses, irrigation and other agricultural uses, power development, and commercial and industrial uses." The State Water Code also specifies that, "adequate provision shall be made for the protection of traditional and customary Hawaiian rights, the protection and

procreation of fish and wildlife, the maintenance of proper ecological balance and scenic beauty, and the preservation and enhancement of waters of the State for municipal uses, public recreation, public water supply, agriculture, and navigation."

In conjunction with the State Water Code, CWRM also needed to enact new administrative rules within a two-year time period, as required by HRS §174C-8. Accordingly, chapters 13-167 to 13-171 of the Hawai'i Administrative Rules were adopted in 1988 to state and clarify definitions, rules, procedures, and provisions required by, but not specified in the State Water Code. CWRM operates under these rules through periodic updating and public participation based on the experience of implementing the State Water Code.

Several major amendments to the State Water Code occurred over the years as CWRM's experience broadened and more hydrologic information became available. Significant amendments to HRS §174C and the associated HAR are listed below:

Amendments to the State Water Code, HRS §174C:

- **Act 101 (AWUDP, 174C-31(e)):** The 1998 Legislature added the AWUDP as a fifth component to the HWP to ensure that the plantation irrigation systems affected by plantation closures would be rehabilitated and maintained for future agricultural use. The major objective of the AWUDP is to develop a long-range management plan that assesses state and private agricultural water use, supply and irrigation water systems.
- **Water resource management fund (174C-5.5):** This section was added to the State Water Code to provide a consistent source of funding to allow CWRM to implement monitoring, management, resource protection programs/activities, and enforcement necessary to sustain the State's resources. The funds would also allow the development and regular updating of the HWP using state-of-the art methods such as integrated resource planning.
- **Dual line systems (174C-51.5):** This measure was added to the State Water Code in 2000 to allow CWRM to require the use of dual line water supply systems in new industrial and commercial developments in designated water management areas. This new section helps to further CWRM's policy favoring the use of alternate water sources, such as reclaimed water, as a measure to conserve higher quality water for higher uses.
- **Administrative violation system (174C-15.5):** The 2004 Legislature added this section to allow CWRM to use the DLNR's civil natural resource violations system with the mutual consent of both CWRM and DLNR. Also in 2004, the Legislature increased the maximum fine under 174C-15(b) HRS from $1,000 to $5,000.

Amendments to the associated HAR:

- HAR Chapter 13-169 was amended in 1988 and 1989 to establish interim instream flow standards for perennial streams statewide.
- HAR Chapter 13-171 was amended in 1993 and 1994 to effectuate the following: (1) authorize CWRM to adopt specific water reservations in water management areas as necessary for purposes consistent with public interests, including current and foreseeable development and use of Hawaiian Home Lands; (2) delineate the procedure by which water reservations would be established; and (3) establish water reservations for Hawaiian Home Lands in Honolulu, Leeward and Windward Oʻahu, and in Kualapuʻu, Molokaʻi.
- HAR Chapter 13-168 was amended in 1997 and 2004 to establish and revise the State standards for well construction and pump installation.

The State Water Code and the administrative rules represent the culmination of intense efforts by the Legislature, State and county agencies, community and professional organizations, and various private interests. The State Water Code contains the collective input of many entities and attempts to address various competing interests.

In addition to the State Water Code, other laws may contribute to water resource management and related issues. The Legislature, during the 2007 session, passed Senate Bill 1853 toward the creation of an Aha Moku Council System. The Aha Moku Council System will enable another means for CWRM and other agencies to gain public input and feedback on water resource management issues.

Act 212, Session Laws of Hawaiʻi, enacted on July 1, 2007, created a framework for the establishment of an ʻAha Moku council. The purpose of Act 212 is “to initiate the process to create a system of best practices that is based upon the indigenous resource management practices of moku (regional) boundaries, which acknowledges the natural contours of land, the specific resources located within those areas, and the methodology necessary to sustain resources and the community. Pursuant to the Act, the ʻAha Kiole Advisory Committee members were appointed on November 1, 2007. According to the Report to the Twenty-Fourth Legislature, 2008 Regular Session, Interim Report, ʻAha Kiole Advisory Committee, dated December 28, 2007, the ʻAha Kiole Advisory Committee determined a schedule of meetings and events to be held in each moku during 2008. The purpose of these meetings is to engage in discussion with the community to develop consensus on establishing an ʻAha Moku Council System and ʻAha Moku Council Commission. It is anticipated that the future Aha Moku Councils will provide government agencies and other organizations with input on regional natural resource management methods and practices.

B.1.3 State Water Code Implementation and the Hawai‘i Water Plan

CWRM implements and utilizes comprehensive water resource planning to regulate and manage the State's ground and surface water resources. The State Water Code sets forth the requirements for the development of the Hawai‘i Water Plan (HWP) to guide CWRM in executing its general powers, duties, and responsibilities to assure economic development, good municipal water service, agricultural stability, and environmental protection. CWRM is responsible for assembling the eight-part HWP, which consists of the following components:

- WRPP, prepared by CWRM;
- WQP, prepared by the DOH;
- SWPP, prepared by the Department of Land and Natural Resources (DLNR);
- AWUDP, prepared by the Department of Agriculture (DOA), and the
- WUDPs, prepared by each county.

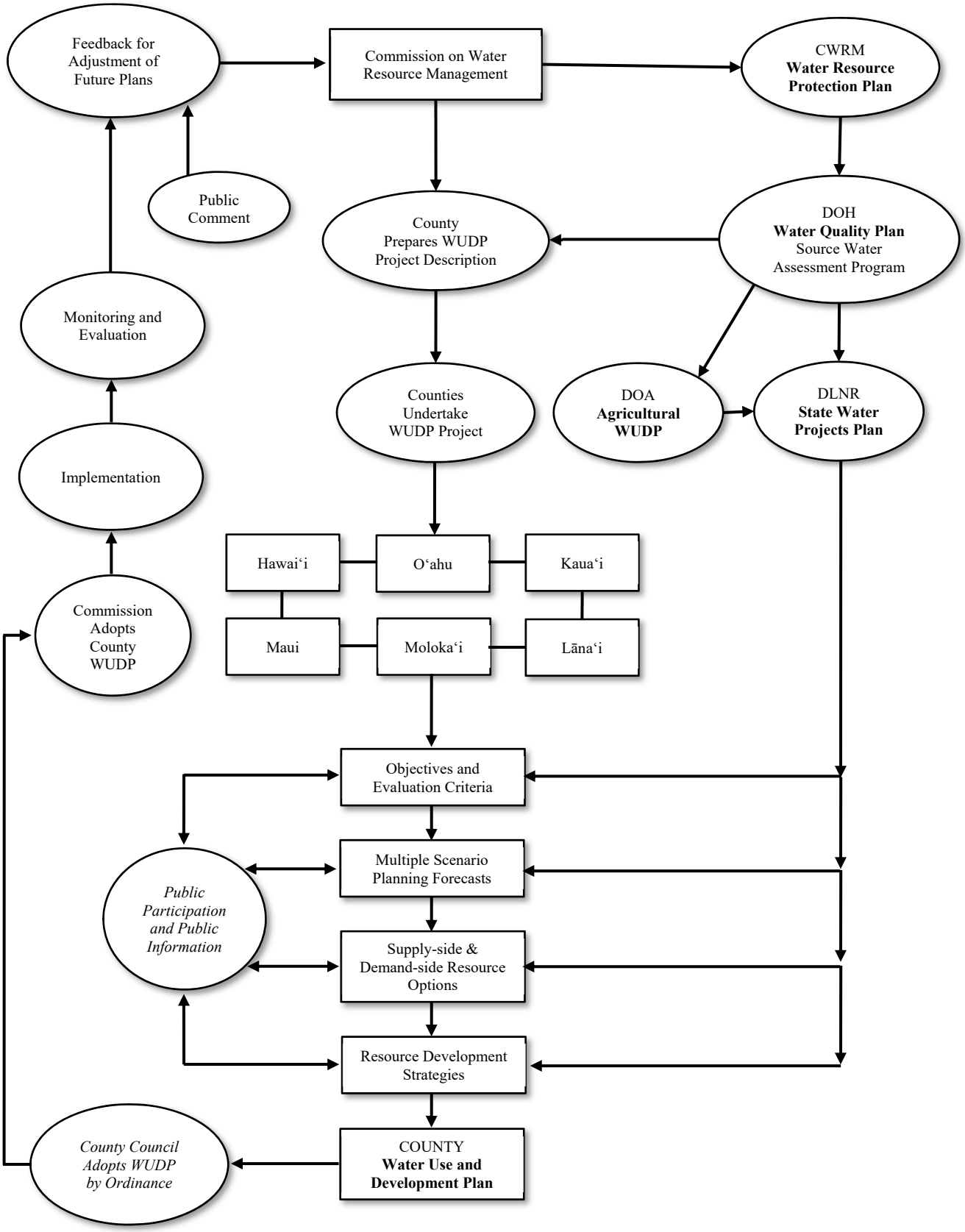
The State Water Code provides that each HWP plan component, with the exception of the WQP, must be *adopted* by CWRM. The DOH’s Water Quality Plan is *accepted* and incorporated by CWRM into the HWP. CWRM will integrate the plan components from various agencies into a cohesive tool for managing, protecting, and studying water resources statewide.

The State Water Code imposed a December 31, 1989 deadline for adoption of the HWP. The responsible State and county agencies were able to publish the HWP components in 1990; however, the deadline did not allow for the construction of a truly comprehensive plan. As reflected in the recommendations of the 1990 plan components, more information and additional study would be required to achieve a document that addresses the full extent of the State Water Code requirements.

Specific plan recommendations that emanated from the 1990 HWP clearly identified the need for further studies, assessments and follow-up actions that should be undertaken by government agencies. In 1992, the State and each county prepared draft updates to their respective HWP components, but CWRM’s adoption of the 1992 draft HWP update was deferred, pending refinement of the individual plan components and availability of additional information.

As agencies struggled to execute an earlier effort to update the HWP in 1992, a consensus arose among State and county agencies that a comprehensive water resource planning process was needed to address the problems of supply, demand, and conservation of water. Accordingly, CWRM developed a framework document to guide the updating process.

Figure B-1 Framework for the Hawai‘i Water Plan



B.1.4 Adoption of the Statewide Framework for Updating the Hawai‘i Water Plan

CWRM adopted the Statewide Framework for Updating the Hawai‘i Water Plan in 2000, under the authority of HRS 174C-31 which provides that CWRM may add to the HWP any other information, directions, or objectives it feels necessary or desirable for the guidance of the counties in the administration and enforcement of code provisions. As such, the Framework is intended to provide focus and additional “guidance” to each agency responsible for updating specific components of the plan. The Framework should be viewed as a long-term vision to preparation of a “living document” which over several plan iterations will result in a truly comprehensive water resource plan.

The Framework incorporates techniques to address current complexities associated with planning, regulation, and management of water resources. The integrated resource planning (IRP) approach described in the Framework was used to identify nexuses between HWP components and develop strategies to manage these relationships.

The objectives of the Framework are as follows:

- To achieve integration of land use and water planning efforts that are undertaken by federal, State, county, and private entities so that a consistent and coordinated plan for the protection, conservation and management of our water resources is achieved;
- To recommend guidelines for the HWP update so that the plan and its component parts are useful to CWRM, other State agencies, the counties, and the general public;
- To develop a dynamic planning process that results in a “living document” for each component of the HWP, which will provide county and State decision-makers with well-formulated options and strategies for addressing future water resource management and development issues;
- To better define roles and responsibilities of all State and county agencies with respect to the development and updating of the HWP components;
- To describe and outline the techniques and methodologies of integrated resource planning as the basic approach that should be utilized in developing and updating the County WUDPs;
- To facilitate permitting and to identify potential critical resource areas where increased monitoring or baseline data gathering should proceed;
- To establish an overall schedule for phased updating of the HWP; and
- To outline an implementation plan for near-term and long-term actions.

The framework document is organized into four sections. Section I briefly outlines the objectives of establishing a statewide framework for updating the HWP and its various component plans. Section II discusses the overall framework for the HWP, including the IRP approach, elements

of the IRP process, relationships between HWP components, and the importance of implementing management strategies at the county level. Section III describes the roles and responsibilities of those agencies charged with preparing/updating the various components of the HWP. This section also identifies the minimum requirements of each component plan and the recommended elements that should be included within an IRP approach. Lastly, Section IV outlines a schedule and preliminary implementation plan for the phased updating of the HWP components.

B.2 Administrative Context: A Historical Perspective of Water Resource Planning in Hawai‘i

It should be emphasized that the State Water Code is a relatively young chapter of the HRS that seeks to address an ambitious spectrum of water management issues and resource protection goals. Of the HWP components, the WQP and the WRPP are critical to balancing use and resource protection. The development of the WRPP is itself an evolving process. Despite the ways popular issues can shift from year to year, and public perception can be persuaded by politics and other influences, the challenge remains to sustain flexibility in the document and encourage a planning process that acknowledges and embraces issues, as they arise without compromising the intent of the State Water Code. This section describes the previous efforts toward statewide water resource planning that have contributed to the overall planning context surrounding the current WRPP update.

B.2.1 The 1979 Hawai‘i Water Resources Plan

The Hawai‘i Water Resources Plan, published in 1979, was the product of regional water planning efforts that began in the mid-1960s. During a period in U.S. history when nationwide public awareness of environmental degradation rapidly escalated, the Water Resources Planning Act of 1965 created a national policy to encourage the conservation, development, and utilization of water and related land resources on all levels of government and by private entities. The act established the groundwork for comprehensive studies designed to facilitate water resources planning and created a coordinating agency called the U.S. Water Resources Council. In 1968, the Council designated the State of Hawai‘i Department of Land and Natural Resources as chair to an ad hoc committee of government agencies charged with the preparation of a preliminary plan of study for a regional plan of Hawai‘i water resources.

The Hawai‘i Water Resources Plan is conceptually broad and represents the first coordinated multi-agency water planning effort. The plan is noteworthy and timely considering the multiplicity of plans and planning agencies that sprouted nationwide during the 1960s and 1970s in reaction to increasing environmental pollution. “The need to coordinate water planning, management, protection, and use at all levels of government has become increasingly apparent,” notes the plan’s introduction.

In 1973, the *ad hoc* Hawai‘i Water Resources Coordinating Committee’s study was funded with $580,000 appropriated by the Hawai‘i State Legislature and $200,000 authorized by Congress. The Hawai‘i Water Resources Regional Study was supported by a total budget of $1.78 million over a period of three and one-half years. A review draft of the Hawai‘i Water Resources Plan was published in 1977, followed by publication of the final document in 1979.

Nearly 50 agencies from all levels of government, numerous private entities, and the interested public participated in the planning process, which, according to the plan’s executive summary, contributed to a “comprehensive plan of action to achieve the balanced conservation, development, and use of Hawai‘i’s water resources and related land resources.” The planning period encompassed the decade from 1990 to 2000, and the study was designed to suggest solutions to long-range problems and needs on a coordinated basis by federal, State and county governments and the private sector.

The overall goal of the Hawai‘i Water Resources Regional Study was to promote and enhance the quality of life, despite a growing population within a limited land area with limited resources. The study sought to address these issues by:

- Identifying the water and related land resource problems and needs;
- Reflecting public attitudes and preferences in the measures or alternatives proposed to satisfy those problems and needs; and
- Suggesting a schedule to implement recommended actions.

The study was organized to cover 15 subjects, or elements, and a study team was assigned to each planning subject. The planning process and results are captured in 19- study element reports and supplements that were prepared for use by the plan-formulation team, the general public, and participating agencies. Preliminary drafts of the Hawai‘i Water Resources Plan allowed participants to identify major planning concerns and formulate specific water resource planning objectives. Management alternatives were identified with respect to planning objectives, and these alternatives were subsequently assembled into three plans: the economic development plan; the environmental quality plan; and the balanced plan, which included compatible actions that contributed significantly to both economic and environmental objectives. The relative social, economic, environmental, and regional development impacts were evaluated, and conflicts were resolved to the extent practicable to arrive at a comprehensive list of recommendations and specific actions.

The plan concludes with an implementation schedule, cost estimates, and a suggested institutional arrangement for implementing, revising, and updating the plan. Priority recommendations are highlighted, as well as cost-sharing opportunities.

Many of the Hawai‘i Water Resources Plan’s priority recommendations and specific actions regarding water management legislation have been gradually implemented through the emergence of the initiative for the Water Commission through the Hawai‘i Constitutional

Convention of 1978, and through the enactment of the State Water Code and the formal establishment of the Water Commission in 1987. The intents of other plan recommendations are captured within the HWP Framework and amendments to the Water Code and Hawai‘i Administrative Rules. Still, other recommendations retain their validity and contribute to the objectives of the WRPP.

B.2.2 The 1990 Hawai‘i Water Plan and Water Resource Protection Plan

The objectives of the HWP and CWRM's responsibilities in preparing the HWP and the WRPP, as set forth in the State Water Code, are listed below.

Objectives of the HWP:

> *The Hawaii water plan shall be directed toward the achievement of the following objectives:*
>
> (1) *The attainment of maximum reasonable-beneficial use of water for such purposes as those referred to in subsection (a);*
>
> (2) *The proper conservation and development of the waters of the State;*
>
> (3) *The control of the waters of the State for such public purposes as navigation, drainage, sanitation, and flood control;*
>
> (4) *The attainment of adequate water quality as expressed in the water resource protection and water quality plans; and*
>
> (5) *The implementation of the water resources policies expressed in section 174C-2. (§174C-31(g))*

CWRM Responsibilities in the Preparation of the HWP:

> *The Hawaii water plan shall divide each county into sections which shall each conform as nearly as practicable to a hydrologic unit. The commission shall describe and inventory:*
>
> (1) *All water resources and systems in each hydrologic unit;*
>
> (2) *All presently exercised uses;*
>
> (3) *The quantity of water not presently used within that hydrologic unit; and*
>
> (4) *Potential threats to water resources, both current and future. (§174C-31(h))*

Within each hydrologic unit the commission shall establish the following:

(1) *An instream use and protection program for the surface watercourses in the area; and*

(2) *Sustainable yield. The sustainable yield shall be determined by the commission using the best information available and shall be reviewed periodically. Where appropriate the sustainable yield may be determined to reflect seasonal variation. (§174C-31(i))*

The commission may add to the Hawaii water plan any other information, directions, or objectives it feels necessary or desirable for the guidance of the counties in the administration and enforcement of this chapter. (§174C-31(n))

In formulating or revising the plans, each county and the commission shall consult with and carefully evaluate the recommendations of concerned federal, state, and county agencies. (§174C-31(o))

The commission shall not adopt, approve, or modify any portion of the Hawaii water plan which affects a county or any portion thereof without first holding a public hearing on the matter on the island on which the water resources are located. At least 90 days in advance of such hearing, the commission shall notify the affected county and shall give notice of such hearing by publication within the affected region and statewide. (§174C-31(p))

In formulating or revising each county's water use and development plan, the state water projects plan, the water resource protection plan and the water quality plan, each county and the commission shall incorporate the current and foreseeable development and use needs of the department of Hawaiian home lands for water as provided in section 221 of the Hawaii Homes Commission Act. (§174C-31(q))

Respective portions of the water resource protection and water quality plans, and the water use and development plans of each county, shall be developed together to achieve maximum coordination. (§174C-32)

The development of the Hawaii water plan or any portion thereof shall proceed in coordination with and with attention to the Hawaii state plan described in chapter 226. (§174C-32)

The Hawaii water plan and its constituent parts, except for the water quality plan, shall be adopted by the commission not later than three years from July 1, 1987. The commission shall receive the water quality plan from the department of health and incorporate this part in the Hawaii water plan. (§174C-32)

The initial HWP, including the WRPP, was prepared by various State and county agencies and formally adopted by CWRM in 1990. The preparation of the 1990 WRPP was an enormous undertaking, since the plan sought to address all ground water and surface water resource issues in the State.

In order to complete the HWP by the December 31, 1989 deadline imposed by the State Water Code, CWRM had to rely on incomplete information and estimates. The Legislature likely realized the uncertainty of the data, as evidenced by the discussion of the crucial item of sustainable yields; the law provides that the "sustainable yield shall be determined by the Water Commission using the best information available and shall be reviewed periodically." The Legislature wisely provided the means for CWRM to further develop, review, adjust, and fine-tune sustainable yields based on experience and availability of additional information and findings.

CWRM adoption of the 1992 update to the WRPP was deferred pending further refinement of plan components. While it may be argued that the current WRPP and other HWP components fall short of their intended objectives, sufficient provisions established in the 1990 plan, together with policies subsequently adopted by CWRM, provide for appreciable guidance to the CWRM in carrying out its duties and responsibilities. However, this is not to say that the current plan should not be updated or that specific elements do not require further revision and/or modification.

Specific plan recommendations that emanated from the initial preparation of the HWP clearly identified the need for further studies, assessments, and follow-on actions that should be undertaken by each responsible agency. This inherent need to improve upon the existing plans formed the basis for the HWP Framework, adopted by CWRM in 2000. In the interim, the existing HWP and WRPP comprised the first steps toward "comprehensive water resource planning." More importantly, the 1990 WRPP remains a valid planning and resource-management tool until more recent updates can be adopted.

B.2.3 Integration of the Water Resource Protection Plan with other Hawai‘i Water Plan Components

Because different State and county agencies prepare the separate components of the HWP, it is critical that the components are interrelated in order for the overall result to be cohesive. The relationships between the various component plans are described below.

The WQP and the WRPP are the two plan components that are critical to determining both water usage and water development strategies. These two plans outline the regulations, standards, and resource management policies that define the availability of ground and surface water resources and the quality to be maintained in these resources. In addition, the quantity of ground and surface water resources that can be withdrawn on a sustainable basis is determined as part of the WRPP. The WQP and WRPP therefore provide critical inputs to the SWPP, the

AWUDP, and the County WUDPs developed by the four counties. The SWPP, AWUDP, and County WUDPs must be consistent with the 1990 WRPP and WQP until subsequent updates are developed.

The relationships between the plans prepared by the State and the WUDPs prepared by the four counties are best understood by noting that the County WUDP must, by statute, encompass *all* water usage and planned water development plans projected throughout the county. Since the various state agencies ultimately build their projects within one of the four counties, their water use demands and their proposals for developing various resources to meet those demands must be factored into the overall water demands and development strategies of each of the counties. This relationship is depicted in **Figure B-1 Framework for the Hawai‘i Water Plan** as input from the state level to the county level. In practice, the relationship should be more in the nature of a cooperative dialogue and joint planning effort, if a cohesive HWP is to be achieved.

The Framework principally guides the updating of the various County WUDPs. As part of each county’s WUDP update, a county-specific project description shall be prepared by each county and submitted to CWRM. The County WUDP project description should present specific issues, planning activities, a schedule, and objectives to be met by the county in its update of the plan. Integration of the State-level planning effort will be achieved by bringing the results of the State planning into the county planning process.

In addition to the coordination of Hawai‘i Water Plan Components described in the Framework, inter-agency collaboration on water-related planning is promoted through other agency programs. The Department of Land and Natural Resources participates in the policy and working groups established in the CZM’s Ocean Resource Management Plan (ORMP). The ORMP is an integrated, place-based approach to management of ocean resources based on land-sea links, the role of human activities, and improved collaboration in governance. Since the ORMP is a living document to be updated every five years, there is great flexibility to coordinate appropriate aspects of the Water Resource Protection Plan and other Hawai‘i Water Plan components.

B.3 Current Update of the Water Resource Protection Plan

CWRM is responsible for the preparation, implementation, and updating of the WRPP, the key component of the Hawai‘i Water Plan. The scope of the WRPP, as provided by the State Water Code in HRS §174C-31, is as follows:

(1) Study and inventory the existing water resources of the State and the means and methods of conserving and augmenting such water resources;

(2) Review existing and contemplated needs and uses of water including State and County land use plans and policies and study their effect on the environment, procreation of fish and wildlife, and water quality;

(3) Study the quantity and quality of water needed for existing and contemplated uses, including irrigation, power development, geothermal power, and municipal uses;

(4) Identify rivers or streams, or a portion of a river or stream, which appropriately may be placed within a wild and scenic rivers system, to be preserved and protected as part of the public trust. For the purposes of this paragraph, the term "wild and scenic rivers" means rivers or streams, or a portion of a river or stream of high natural quality or that possess significant scenic value, including but not limited to, rivers or streams which are within the natural area reserves system. The commission shall report its findings to the legislature twenty days prior to the convening of each regular legislative session; and

(5) Study such other related matters as drainage, reclamation, flood hazards, flood plan zoning, dam safety, and selection of reservoir sites, as they relate to the protection, conservation, quantity and quality of water.

§174C-31, HRS further provides that:

The Water Resource Protection Plan shall include, but not be limited to:

(1) Nature and occurrence of water resources in the State;

(2) Hydrologic units and their characteristics, including the quantity and quality of available resource, requirements for beneficial instream uses and environmental protection, desirable uses worthy of preservation by permit, and undesirable uses for which permits may be denied;

(3) Existing and contemplated uses of water, as identified in the water use and development plans of the State and the counties, their impact on the resources, and their consistency with objectives and policies established in the water resource protection quality plan;

(4) Programs to conserve, augment, and protect the water resource; and

(5) Other elements necessary or desirable for inclusion in the plan.

Thereafter, the commission, in coordination with the counties and the department of health, shall formulate an integrated, coordinated program for the protection, conservation and management of the waters in each county based on the above studies. This program, with such amendments, supplements, and additions as may be necessary, shall be known as the water resource protection and quality plan.

The initial WRPP was completed and adopted by CWRM in 1990. As new and better information becomes available (e.g., hydrologic information and land use changes), CWRM must periodically update the WRPP. The 1990 WRPP provided the means by which to address many issues, including but not limited to estimates of sustainable ground water yields by island, description of aquifer sectors and aquifer systems, and an initial evaluation of current and projected water needs for the State and the counties.

This current update to the WRPP includes policies, program directives, resource inventories, and recommendations across a broad spectrum of resource management issues. Efforts supporting this update focused on the following tasks:

- Declaration of CWRM policies, goals, and objectives;
- Update of ground water hydrologic units and sustainable yields;
- Establishment of surface water hydrologic units and a stream coding system, and the development of a surface water diversion database;
- Explanation and description of CWRM's surface water management program and implementation plan;
- Development of statewide ground and surface water monitoring program priorities;
- Examination of water conservation and augmentation alternatives, drought preparedness and mitigation actions, and watershed protection programs; and
- Development of recommendations for future actions and funding requirements.

This update of the WRPP is intended to provide for more successful coordination and integration of State and county efforts related to sustainable water resource development and to enable CWRM to more effectively implement the statutory objectives of the State Water Code. Regularly updating this and other components of the HWP will facilitate the counties' integration of updated information into their respective WUDPs. Preparation and revision of HWP components through a "living document" approach provides county and State decision makers with well-formulated options and strategies for addressing future water resource management and development issues.

B.4 Conclusion

The collective effect of the legislative and administrative history described above is the emergence of a dynamic planning context for water resource management—one that the current update to the WRPP acknowledges and strives to address to the fullest extent possible.