
Management Audit of the Commission on Water Resource Management

A Report to the
Governor
and the
Legislature of
the State of
Hawaii

Report No. 96-3
January 1996

THE AUDITOR
STATE OF HAWAII

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Submitted by

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Foreword

This report was prepared in response to House Concurrent Resolution 229, House Draft 2, Senate Draft 1 which requested that the State Auditor conduct a management audit of the Commission on Water Resource Management. This report evaluates the commission as established by Chapter 174C, Hawaii Revised Statutes and recommends some changes.

We wish to acknowledge the cooperation and assistance extended to us by officials and staff of the Division of Water Resource Management, the Department of Land and Natural Resources, the Commission on Water Resource Management, and other federal, state, and county departments.

Marion M. Higa
State Auditor

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Chapter 1

Introduction

House Concurrent Resolution 229, House Draft 2, Senate Draft 1, of the 1995 legislative session requested the State Auditor to conduct a management audit of the Commission on Water Resource Management. Noting that a review of the State Water Code had been completed in December 1994, the Legislature requested that the Auditor examine the management and operations of the commission to determine whether:

1. The commission is sufficiently funded and staffed to carry out its many duties under Chapter 174C, Hawaii Revised Statutes (HRS);
2. The commission is making the best use of its funding and staffing resources by establishing clear priorities of its duties;
3. The commission has undertaken duties neither mandated nor authorized by Chapter 174C, HRS;
4. The designation process set forth in Chapter 174C, HRS, and as implemented by the commission necessitates an inordinate amount of the Commission's funding and staffing resources;
5. The commission has issued water use permits in a fair, equitable, and timely manner;
6. The commission maintains an adequate system of indexing its decisions to ensure that precedents established through its decision-making process are equitably applied to all future decision making;
7. The current administrative rules to Chapter 174C, HRS, are adequate, especially as they pertain to procedures and standards for implementing the State Water Code; and
8. The Hawaii Water Plan as it currently exists satisfies the requirements of Chapter 174C, HRS.

Background

A reliable supply of fresh water is essential for Hawaii's economic growth and stability. All agricultural and commercial enterprises and residential communities are dependent on a reliable supply of water. Historically, Hawaii's sugar companies were the largest users and developers of water in the state. In the past, the sugar companies and the county governments argued that the major water users could effectively regulate and manage

water use without state intervention. This system prevailed until the mid 1970s when an extended drought resulted in a water shortage, over pumping of some wells, and fresh water contamination by salt water intrusion in other wells.

Delegates to the 1978 Constitutional Convention recognized that the State had no legal mandate to protect its water resources. They proposed a Constitutional amendment, "...The State has an obligation to protect, control and regulate the use of Hawaii's water resources for the benefit of its people." The proposed amendment, subsequently adopted as Section 7, Article XI of the Hawaii Constitution, directs the Legislature to establish an entity responsible for water resource management. In 1987, the Legislature enacted the State Water Code, codified as Chapter 174C, HRS, with the intent of fulfilling the constitutional mandate. The water code establishes the Commission on Water Resource Management.

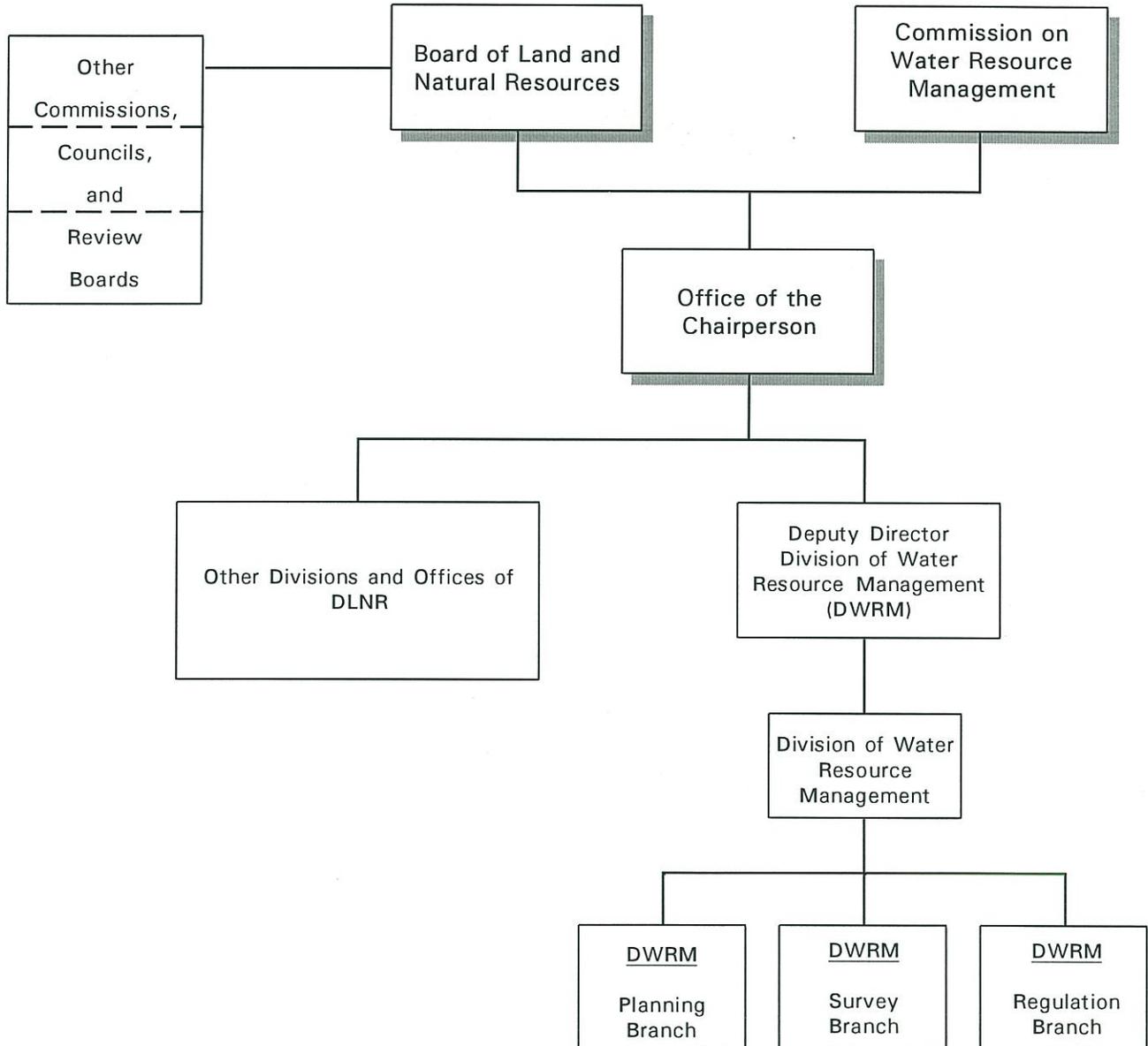
The Commission on Water Resource Management

The Commission on Water Resource Management is placed within the Department of Land and Natural Resources to which it is administratively attached. The organization of the commission and departmental support is shown in Exhibit 1.1. The commission consists of six commissioners—four public members who are appointed by the governor and confirmed by the Senate, and two ex-officio voting members, the director of health and the chairperson of the Board of Land and Natural Resources. The chairperson of the Board of Land and Natural Resources also serves as chair of the commission. Commissioners serve without compensation.

The commission is responsible for the general administration of the water code and has "final authority in all matters relating to the implementation and administration of the state water code." Among the specific powers granted to the commission are the regulation of both ground and surface water; designation of water management areas; control of water use within designated water management areas; and regulation of well drilling, pump installation and any alteration of stream channels. The commission is required to develop and maintain a Hawaii State Water plan to serve as a policy guide to implement the water code.

The commission's regulatory program to protect the state's water resources is authorized under Chapter 174C. The chapter requires all existing water users in the state to file a declaration of their water use within one year of the code's enactment. The commission, upon determining that the declared water use is reasonable and beneficial, issues a "certificate of use." The purposes of the declaration and issuance of certificates of use is to develop baseline information on then-current water use and users, and to facilitate the issuance of water use permits. This information serves as the starting point of the regulatory program. However, certificates of use do not give users the right to water.

Exhibit 1.1
Organization of the Commission Within the
Department of Land and Natural Resources (DLNR)



Certificates merely acknowledge that the user has duly registered and that the commission finds that a reasonable-beneficial use of water existed at the time the declaration was made.

In addition to establishing baseline information on water users, the commission must also protect areas where the water resources are threatened. A primary method of protection is designating endangered areas as water management areas. Designation allows the commission to implement more stringent controls on water use in order to protect each area's water resources.

The commission's second regulatory step requires water users, within a water management area, to apply for a water use permit. Water use permits are needed by continuing users of water, or new users of water within the designated area. The commission grants permit recipients the right to use water in accordance with the terms of the permit.

The Division of Water Resource Management

The commission is supported by staff from the department's Division of Water Resource Management, one of ten divisions within the department. One of the department's deputy directors oversees the division and administers the State Water Code in accordance with direction provided by the commission.

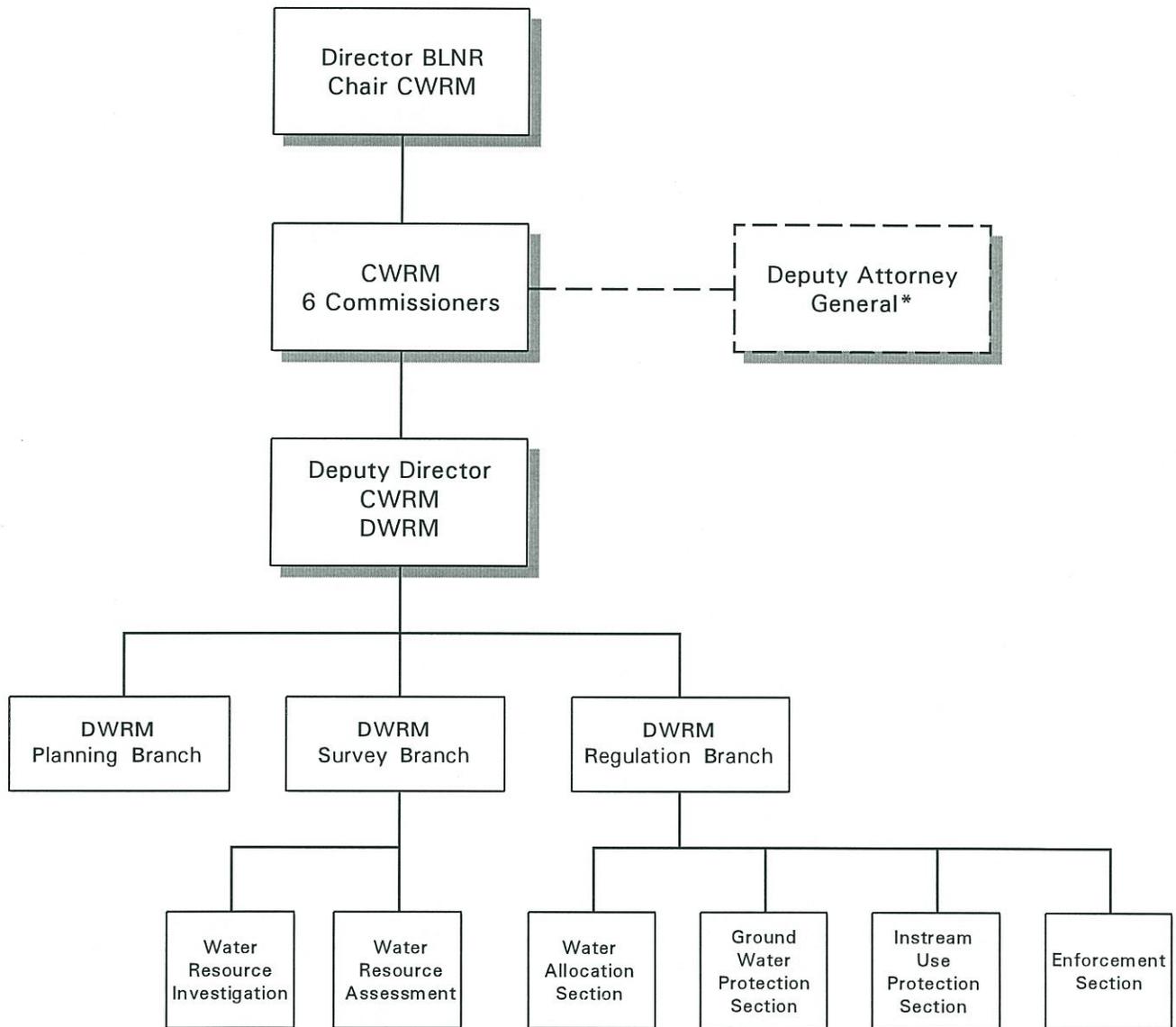
The Water Resources Management Division is organized into three branches: planning, survey, and regulation. The division had 18 authorized positions for Fiscal Biennium 1993-95 but this was reduced to 16 for FY1995-96. However, the actual staff count is 19, due to 3 borrowed positions from the Division of Water and Land Development. The current organization of the division is illustrated in Exhibit 1.2.

The division currently operates on an annual budget of approximately \$1.6 million. Exhibit 1.3 shows the division's projected and actual budgets for the fiscal years 1993-94 through 1995-96.

The division is primarily funded by general funds. For FY1993-94, personnel costs made up 43.5 percent of the budget (if personal services are included, then the percentage is 49.5 percent).

Other Current Expenses account for 48.6 percent of the FY1993-94 budget. In FY1993-94, fee-for-service contracts constituted approximately 82 percent of the Other Current Expenses category. The single largest fee for service contract, with the U.S. Geological Survey, provides technical services to the division and costs approximately \$450,000 per year.

Exhibit 1.2
Organization Chart
Division of Water Resource Management



BLNR = Board of Land and Natural Resources
 CWRM = Commission on Water Resource Management
 DWRM = Division of Water Resource Management
 *Advisory to Commission.

Exhibit 1.3
Actual and Projected Budgets
Division of Water Resource Management

	FY1993-94 \$	% of Budget	FY1994-95 \$	% of Budget	FY1995-96 \$	% of Budget
Personnel	726,792	43.5	771,584	48.4	693,240	44.4
Personal Services (other personnel)	101,578	6.0	2,042	0.1	48,629	3.1
Other current expenses	812,208	48.6	798,547	50.0	798,547	51.1
Equipment	30,872	1.9	22,500	1.4	22,500	1.4
Motor Vehicle	0	0.0	0	0.0	0	0.0
Total	1,671,450		1,594,673		1,562,916	

Note: FY1993-94 is actual expenditures. FY1994-95 is the projected budget as of 6/20/95. FY1995-96 is based upon funding appropriated by the Legislature and does not reflect the actual budget FY1995-96 allotment.

Objectives of the Audit

The objectives of this audit were to:

1. Determine whether the Commission on Water Resource Management is making the most efficient use of its resources and is carrying out the requirements under Chapter 174C, HRS.
2. Determine whether the Commission on Water Resource Management is issuing permits in an equitable, timely, and standardized manner.
3. Determine whether the Commission on Water Resource Management's administrative rules and the Hawaii State Water plan fulfill the requirements of Chapter 174C, HRS.
4. Make recommendations, as appropriate.

Scope and Methodology

In this audit, we evaluated the operations of the Commission on Water Resource Management. We also reviewed the operations of the Division of Water Resource Management, Department of Land and Natural Resources. We examined the division's staffing, funding, and operations. We also reviewed records and documents pertaining to water use permit

issuance, budget, and operations. We sampled applications for water use permits, and reviewed relevant laws and literature. We attended commission meetings and applicable hearings. We interviewed the commissioners, division staff, other state and county personnel, contractors, and members of the public who have had contact with the commission.

This audit assesses the commission's compliance with the statutory requirements of Chapter 174C, HRS. We evaluated the management controls of the Division of Water Resource Management and the commission, including the controls over the designation of water management areas and the permitting process.

We reviewed the final report of the Review Commission on the State Water Code for informational purposes. We did not review or assess the work or recommendations of the Review Commission itself.

Our work was performed from May 1995 to October 1995 in accordance with generally accepted government auditing standards (GAGAS).

Chapter 2

Findings and Recommendations

In this chapter, we review the management practices of the Commission on Water Resource Management in administering the provisions of Chapter 174C, the State Water Code. We found that staff limitations and certain management practices have limited the commission's ability to implement the requirements of the water code.

Summary of Findings

1. The Commission on Water Resource Management is making some progress, but must still address some serious problems before an effective water resource protection program can be implemented. We found that the commission has not issued certificates of water use in a timely manner and has not developed an adequate Hawaii Water Plan. The commission must also establish a comprehensive instream use protection program.
2. The water management designation process creates some management problems. The designation process itself is lengthy. Furthermore, in the past, subsequent issuance of water use permits was slow and poorly managed. We also found that the permitting process is delayed due to additional or unclear procedures.
3. The commission has failed to develop adequate administrative rules to manage its operations. The commission's administrative rules are unclear, incomplete, or outdated. Some of the administrative rules may not be in compliance with Chapters 91 and 92, HRS.

The Commission on Water Resource Management is Making Some Progress, But Must Still Address Serious Problems

The Commission on Water Resource Management was established in 1987, under Chapter 174C, HRS. The State Water Code, which the commission enforces, includes implementing the Hawaii Water Plan, designating water management areas, issuing certificates of use, and establishing instream use protection programs. All these requirements are part of a program to protect Hawaii's water resources. We found that while the commission has progressed somewhat in establishing its water resource protection program, the commission has yet to implement certain aspects of the code. Very few certificates of use have been issued and permanent instream flow standards have not been established. The Hawaii Water Plan does not comply with certain sections of the current law, and is inadequate to guide staff in protecting water resources. In addition, we found that the water management area designation process,

as required by the water code, presents significant management problems for the commission. We conclude that the broad requirements of the State Water Code, staff limitations, and the commission's poor management of its limited resources hamper the commission in meeting its statutory responsibilities. The issuance of certificates of use typifies the commission's difficulties.

Certificates of use have not been issued

The commission has issued very few certificates of use in response to declarations filed. Section 174C-26, HRS, requires all existing water users to submit "declarations of use" by the end of 1989, one year after the adoption of the rules for Chapter 174C. Between 1988-89, more than 7,000 declarations of use were received and filed with the commission. The law requires the commission to act on these declarations within six months of their filing. Upon determination by the commission that a declared use is reasonable and beneficial, it issues a certificate of use. Reasonable and beneficial use means that the use of water is economically necessary and efficiently utilized. Reasonable also means that the use is consistent with state and county land use plans and the public interest. We conclude that the commission should have acted on the declarations and issued certificates of use to comply with this requirement. To date, they have not fulfilled this requirement.

Before issuing certificates of use, the commission sends out field investigators to verify the reported information. Once information in the declaration is verified, and if no objections are filed, the commission can then issue the certificates of use. The commission has issued only three certificates of use to date, almost five years after the declarations were filed. Most of the field investigations on Oahu and Molokai have been completed. In addition, contracts totaling \$220,000 have been issued to contractors to conduct neighbor island investigations and prepare certificates of use. Fieldwork investigation has yet to be initiated for the islands of Hawaii and Lanai. Exhibit 2.1 shows the number of declarations of use filed, the current status of field investigations and the number of certificates of use issued.

Division staff whom we interviewed stated that they have not met the statutory deadline for issuing the certificates of use. They did note that issuing the certificates of use would simplify the processing of all water permits by establishing reasonable-beneficial use, verifying existing uses, and providing baseline information on total water use. Division staff also noted that by issuing certificates of use, the water management area designation process could be expedited because of the important data provided by the verified certificates. Despite the work completed to date and staff opinions that certificates of use would facilitate meeting the water code objectives, the commission has not prioritized certificate issuance.

Exhibit 2.1
Status of the Issuance of Certificates of Use

Area	Number of Declarations Filed	% of Field Investigations Completed	Number of Certificates Issued
Oahu			
Waianae	127	80	0
Windward	871	60	0
Honolulu	279	20	0
North	194	20	0
Central	29	20	0
Pearl Harbor	263	20	0
Molokai	454	99	3
Kauai	1292	10	0
Maui	2344	10	0
Hawaii	1143	0	0
Lanai	21	0	0
Total	7017		3

The reasons for delays in issuing certificates are mixed. Division staff indicated that the lack of resources, or insufficient personnel and funds, is the primary reason that the certificates have not been issued. Funds for neighbor island field investigations are unavailable and staff prioritize the issuance of water use permits over the issuance of certificates of use. Division staff indicated that they should be able to complete the issuance of certificates of use in the near future.

A potential legal issue is another reason for the delay. The commission's legal counsel opined that because the law states that issuance of a certificate constitutes a determination of reasonable and beneficial use, such a determination establishes precedent and may make it difficult for the commission to deny subsequent applications. However, we found that the commission has not taken steps to secure amendments to the law if it agrees that a legal problem exists.

While we agree that the issuance of water use permits takes precedence (because it establishes a right to water use), we believe that the commission needs to determine whether issuing the certificates is useful to the commission and for what purposes. While a significant amount of the commission's resources has already been expended on this requirement, it is questionable whether issuing certificates of use can be completed due to staff and financial limitations. In addition, the usefulness of this requirement may need evaluation since the original intent was to provide a base of existing water use in 1987-88.

The commission should take a leadership role in determining the certificates' usefulness. It should then take appropriate action by either establishing issuance as a priority or proposing amendments to the code to remove the requirement.

The Hawaii Water Plan has shortcomings

The commission is responsible for implementing the Hawaii Water Plan as specified in Section 174C-31, HRS. The purpose of the Hawaii Water Plan is to attain maximum reasonable-beneficial use of water, conserve and develop the waters of the State, control waters for public purposes, attain adequate water quality, and implement water resource policies. The plan consists of four major parts: 1) a water resource protection plan, developed by the commission; 2) a water use and development plan, prepared by the counties; 3) a state water projects plan, prepared by agencies with jurisdiction over the projects; and 4) a water quality plan, prepared by the Department of Health. The commission adopted the Hawaii Water Plan in 1990.

Although most of the plan was adopted within the statutory deadline, we found that the plan does not sufficiently meet current legislative requirements. The plan lacks accurate data, is non-standardized, and does not serve as a decision-making tool. The commission failed to effectively guide, coordinate, and manage the development of the plan's different elements. The commission was given a short time frame and limited staff resources to develop the plan. Problems with the county water use and development plans are typical of the Hawaii Water Plan's shortcomings.

County water use and development plans vary in usefulness

Section 174C-31, HRS, requires that each county prepare its own water use and development plan to be incorporated in the Hawaii Water Plan. In 1988, the commission allocated \$880,000 to the counties to prepare their water use and development plans (refer to Exhibit 2.2). Division staff indicated that the short time frame to develop the plan and the commission's limited staff resources affected their ability to oversee the development of the county plans. Each county hired outside consultants to prepare the plans without much guidance. The plans were completed by the end of 1989, and conditionally adopted by the commission in 1990.

Several interviewees, including some division staff and former commissioners, indicated that the county water use and development plans lack accurate data, are not standardized, and do not serve as a decision-making tool. The quality and usefulness of the plans vary from county to county.

According to division staff and other water experts, the major problem with the water use and development plans is the lack of accurate hydrological data, especially data on the sustainable yield of aquifers.

Exhibit 2.2 Hawaii Water Plan Contract Funding Summary

Section of Plan	Original Contract	Initial Revisions	Total
Water Resources Protection	\$100,000	\$50,000	\$150,000
Water Quality Plan	\$100,000	0	\$100,000
State Water Projects	\$80,000	\$25,000	\$105,000
Oahu Water Management	\$150,000	\$40,000	\$190,000
Maui County WUD*	\$150,000	\$30,000	\$180,000
Hawaii County WUD*	\$150,000	\$20,000	\$170,000
Kauai County WUD*	\$150,000	\$20,000	\$170,000
TOTAL	\$880,000	\$185,000	\$1,065,000

*WUD = Water Use District

The sustainable yield figures used in county plans are suspect because data was very limited except for the Pearl Harbor Aquifer on Oahu and the Iao Aquifer on Maui. The Hawaii, Kauai, and Maui county plans used figures based on the “water budget method,” or estimates of the rates of natural recharge and discharge from a ground-water reservoir. This method may not be sufficient for understanding the impacts of stresses on the hydrology or other complex planning decisions for water management and protection. Interviewees also indicated that the county plans lack adequate data on private water systems.

The commission’s inability to account for private water systems deters the commission from determining how much water is being used. Board of water supply officials said that the impact of these private water systems is not known. Division staff and commissioners have indicated that, due to this type of data limitation, more specific information must be collected about the water resources in the area before any permitting or water use decisions can be made. As a result, the county water use and development plans are not useful for planning or decision-making.

The water use and development plans do not comply with current requirements of Section 174C-31, HRS amended in 1991. The law requires that current and future water needs of the Department of Hawaiian Home Lands be incorporated by the commission and each county into the Hawaii Water Plan. The commission allocated \$185,000 to the counties to update their plans (refer to Exhibit 2.2). Updates were completed and submitted to the commission by March 1992. However, the updated plans have not been adopted by the commission because they do not meet the commission’s needs. As a result the current Hawaii Water Plan is not in compliance with Section 174C-31 as amended.

The Water Quality Plan does not fulfill commission needs

The Water Quality Plan, as prepared by the Department of Health, is another element of the Hawaii Water Plan. It should include the requirements for environmental quality (Chapter 342, HRS) and safe drinking water (Chapter 340E, HRS). In addition, the Water Quality Plan should establish criteria to be used in the designation of water management areas. The State Water Code suggests that the Water Quality Plan should consider the quality of water needed for existing and contemplated uses and assist in the attainment of adequate water quality. The division staff reported that the current Water Quality Plan is not a plan but a description of all the laws that affect water quality. Ideally a plan should begin with a mission statement, goals and objectives, actions or implementation steps, monitoring and evaluation procedures, and recommendations for improvement. We found that the Water Quality Plan has some of these elements, but is poorly organized and provides little guidance for protecting water quality.

Short planning time and resource limitations create problems

One reason for the water plan's weakness is the short time span given for its development. Division staff said that they were not given adequate time to develop and implement the Hawaii Water Plan. The staff was required to carry out a number of requirements, which then reduced the actual amount of time to develop the Hawaii Water Plan. Instead of three years to develop the plan, the staff had approximately one year.

In addition, the components of the Hawaii Water Plan were supposed to be developed sequentially, rather than concurrently. State level plans were to be developed first, then the counties' water use and development plans were to follow. The commission's water resource protection plan was to serve as a guide to the counties. However, all plans were developed concurrently due to time constraints.

Resource limitations created further problems. Staff limitations made it difficult to both develop a water resource protection plan and oversee the development of the county plans. As a result, coordinating and integrating the county water use and development plans with the commission's water resource protection plan was not done until after the plans were completed. Coordination and guidance was provided for subsequent drafts, but the drafts have not been adopted by the commission.

The commission should have provided adequate guidance or a structure for the plans during the initial phases. Developing a useful strategic plan that provides direction and guidance to protect the state's water resources is more critical than meeting a statutory deadline. The commission has since prioritized other projects over the revision of the Hawaii Water

Plan. The decision to prioritize other projects over the revision of the plan means that the commission is without a strategic plan to provide direction in protecting and conserving the state's water resources.

The commission should assign sufficient staff to develop an adequate plan. The commission needs to identify the resources necessary to develop and adopt a revised Hawaii Water Plan, and develop a staffing plan with specific positions to justify the need for more staff. While the plan will not be a panacea for the commission, the document should provide direction and general guidance for making water use decisions. The plan should be useful to state and county staff and be updated regularly.

Instream protection is lagging

To protect surface or instream waters, the commission is required to establish instream flow standards, develop an instream use protection program, and issue stream diversion permits. The commission is also able to designate certain areas as surface water management areas for the purpose of 1) preserving diminishing surface water levels for future needs, 2) controlling adverse effects to public health or existing instream uses due to the reduction of the surface water's capacity to assimilate pollutants, and 3) administering serious disputes regarding the use of surface water in the area. We found that the commission has made little progress with this mandate. Overall activity in the area of surface water protection has been limited.

The commission established interim stream standards using the natural flow of streams in 1987 rather than developing specific criteria or measurements. The intent was to establish permanent standards and a protection program over a period of time. The commission has yet to establish permanent instream flow standards. The commission has issued stream alteration/diversion permits and accepted petitions for the designation of surface water management areas, but lacks adequate resources to carry out further mandates.

The commission's task force—Stream Protection and Management (SPAM)—developed recommendations for protecting surface water in 1994, but the commission has yet to use the recommendations in developing an overall program. It needs to identify the staffing and funding requirements necessary for carrying out a surface water protection program and proceed to obtain these resources.

Permanent instream flow standards not established

The commission's permanent instream flow standards for specific streams must be codified in the administrative rules. We found that the commission has yet to establish any permanent instream flow standards.

Interviewees indicated that there were several technical and logistical difficulties associated with developing instream flow standards, and managing surface water in general.

In order to set instream flow standards, stream flow data needs to be collected and analyzed. The commission staff has limited technical expertise in collecting stream flow data. In addition, there are logistical difficulties in evaluating stream flows. Stream flow data collection is time consuming and subject to environmental conditions. To get accurate flow data, measurements must be made over a period of at least 20 years. The commission relies mainly on the U.S. Geological Survey to collect stream flow (and related) data through a cooperative research program. The commission has contracted a private consultant to study the Maunawili Stream to determine its characteristics. The commission can then develop permanent standards for that stream.

The commission is reactive and fails to take a leadership role

The commission has two significant management problems which have hindered its progress: its reactive management style and its failure to provide adequate leadership. The commission tends to react to crisis rather than work to prevent problems, which makes it difficult to stick to its established priorities. The division reallocates staff resources in order to meet the crisis, leaving previously established priorities on the “back burner.”

In some cases, such as a controversial contested case, the hearing takes precedence, while statutory requirements and priorities are delayed. In other cases, externally mandated requirements, such as coordinating a statewide Water Conservation Conference, interfere with the commission’s priority work. We found, however, that the commission willingly took on some of these other responsibilities. In the case of the Water Conservation Conference, the commission testified in favor of putting on the conference, even though it was behind in its mandates.

Reacting to crises rather than planning ahead affects the commission’s ability to protect the state’s water resources. Much of the commission’s focus is on short-term rather than long-term objectives. The commission’s activities focus on day-to-day operations such as processing permit applications and other regulatory functions, at the expense of proactive measures, such as developing a strategic water plan with its long-term implications. The commission’s reactive management and limited staff resources lead to a neglect of statutory requirements which have long-term strategic implications and require longer staff commitments (such as developing a strategic water plan).

However, we note that the division used several effective management techniques to extend limited staff resources. For example, to address native Hawaiian water rights and surface water protection, the division

formed the Hawaiian Rights and the Stream Protection and Management task forces. Task forces members were volunteers representing varied community sectors, and only one or two staff members were needed to work with the group. This allowed the commission and division to receive input from various interested parties and experts with little cost or use of staff.

Another effective and efficient use of staff resources was the development and use of the Molokai Working Group. This group increased community input and participation and appears to have worked well. However, the commission has other management problems that impact its ability to operate effectively and efficiently.

The Water Management Designation Process Creates Management Problems

One of the tools that the commission has to protect the state's water resources is its ability to designate water management areas. The commission declares a water management area upon determining that an area's water resources are threatened or require some form of control. An area is considered threatened if the Department of Health determines that the water quality is being degraded, or if the increase in or authorized planned water use exceeds 90 percent of an aquifer's sustainable yield. An area may also need some form of control if it is deemed necessary 1) to preserve the diminishing ground water supply for future needs, 2) to prevent or curtail chloride or salt water intrusion, 3) to address serious disputes, or 4) to ensure that resources are not wasted.

Designating areas establishes administrative control over water use. The designation process begins either with the commission chairperson's determination that an area needs designation or a petition requesting designation. Once the commission receives the recommendation, it must conduct research in the area, coordinate with local water officials, and hold public hearings in the affected area in accordance with Chapter 91, HRS, the Hawaii Administrative Procedure Act.

The criteria for designation are outlined in the Chapter 174C, HRS. We found that while the commission is following these requirements, the requirements themselves contribute to the commission's management problems. The designation process requires staff time. Staff resources are drawn away from other responsibilities in order to evaluate a proposed designation. This delays or prevents other commission responsibilities from being met. Because the designation process is lengthy, staff and resources may be diverted from other areas for extended periods of time.

Establishing administrative control is a lengthy process and can interfere with protecting water resources

We found that the designation process, from acceptance of the petition to designation, can take over three years. Section 174C-48, HRS, requires that once an area is designated, water users within the water management area are required to apply for water use permits. We found that permitting existing users can take up to three years to complete. For example, in Windward Oahu, the commission is still processing water use permits for existing users three years after designation. Overall, we found that the entire process of establishing administrative control can take up to six years. The review of the designation process records indicate that conducting research in the area and coordinating with other agencies lengthens the process and takes up to several months of the division's staff time.

During the entire process, existing users can continue to use water, and even increase use. Administrative controls are not established until the entire designation and permitting process is completed. Thus the commission may not be able to adequately protect the threatened water resource—the process is so lengthy and no regulation or control exists during the interim.

Part of the commission's management function is to review processes to ensure that they are necessary and beneficial, and that they do not put unnecessary burdens on water resource protection efforts. The designation process should be done in the most efficient way. Current practices are not efficient or effective. The commission should evaluate alternatives to streamline the process to be more timely. The commission should seek changes to the code if needed.

Issuance of water use permits is slow

The commission is required to issue water use permits for all existing and new water use in designated water management areas. The commission must notify all existing water users in the designated area of the permit requirement. The commission has 90 days to take action on applications for water use permits and initiate public hearings if objections to the applications are received. The commission then has 180 days to act on the application. Our review of the permitting records showed that the commission was not meeting the statutory deadlines. We also found that unclear or new procedures added to delays in issuing water use permits.

As shown in Exhibit 2.3, 55 percent of the 62 applications we sampled were not acted on within the 90 or 180 day time limits as required by the code and the administrative rules. In 16 percent of the cases, the commission took action within the statutory deadlines. The commission delayed its final action in the remaining 29 percent of the applications. The initial action was within the statutory deadline, but final action was delayed beyond the 90 or 180 day deadlines. We note that the statute requires that the commission act on the permit application within 90 days,

not make a final decision. Although legally in compliance, the commission frequently delays permit applications for months beyond the deadlines.

Exhibit 2.3 Water Use Permits (WUP) Processing

Commission's Action:	# of WUP applications	% of WUP applications
On Time	10	16
On Time but Final Action Delayed	18	29
Subtotal	28	45
Applications Past Deadline	34	55
Total	62	100

Water use permit process poorly managed

We found that the initial problem with water use permit issuance delays was due to management's failure to anticipate and plan for the designation's impact. After the commission designated Molokai and Windward Oahu as water management areas, more than 200 applications for water use permits for existing uses were submitted to the commission. However, the commission had only two people processing the applications. The large number of permit applications and the lack of personnel to process permits led to an immediate backlog. While staff limitations played a significant role in the backlog, we found no evidence that the commission anticipated and prepared for the large number of applications that would be submitted, or had developed a plan to address additional work load. In some cases, the backlog was further aggravated by commission deferrals due to a lack of information or lack of quorum.

Additional or unclear procedures cause delays

Although the commission approved more than 600 water use permits, we found that the commission failed to issue the actual permit to the majority of these applicants. Applicants rely on the minutes of the particular commission meeting in which their application was approved as proof of a water use permit. It is difficult for us to determine whether the water use permits were issued in an equitable and standardized manner when no actual permit document exists. The number of conditions imposed on water use permits has increased over the years. Division staff reported difficulties in knowing which conditions were attached to permits issued in the past. The commission's rationale for delaying the issuance of the actual permit is that an additional review by the attorney general is needed

on the conditions being attached to the water use permits. However, some applicants have waited more than three years due to this additional requirement.

In other cases, the commission's unclear procedures cause delays. For example, in the Ko'olau Agriculture case, the question was whether an applicant should apply for a water use or a well construction permit. This resulted in a delay of more than three years.

Delays in issuing water use permits affect the commission's ability to protect and manage the state's water resources because these permits are a form of administrative control. Delays in issuing the water use permits also impact the commission's ability to protect the water resources. Existing user applicants are allowed to continue using water during the application review. Delays in the process also affect the public's perception of the commission. Interviews with people who deal with the commission indicated that there are concerns about the unclear permitting process, lengthiness, and unclear criteria for granting permits.

These complaints need to be addressed by the commission so that the permitting process is clear, timely, and equitable. The issuance of certificates of use could help expedite the water use permitting process because in some cases, water use would already be verified and accepted as reasonable and beneficial. Division staff also mentioned that changing the objection procedure could expedite permit processing. The commission should review its water use permitting process and procedures and eliminate unnecessary procedures. It should add necessary procedures to the administrative rules and ensure that these procedures are clearly defined.

The Administrative Rules of the Water Commission are Deficient

We found the commission's administrative rules neither adequately establish the commission's operating procedures nor provide the necessary management controls to implement the code. Specific problems include:

- The administrative rules are not clear: most of the rules simply repeat the language of the code without providing further guidance.
- The commission's rules are not current: the division has adopted informal guidelines and procedures that are not codified in the administrative rules.
- Some of the administrative rules may not be in compliance with the Hawaii Administrative Procedure Act.

- The administrative rules are not comprehensive; there are no rules on native Hawaiian water rights, Chapter 174C, Part IX, HRS.

These problems with the administrative rules have resulted in delays of certain commission duties and caused confusion over many of the commission's procedures.

The commission has failed to develop adequate administrative rules

Administrative rules implement legislation and establish operating procedures for state agencies. The Hawaii Administrative Procedure Act, Chapter 91, HRS, requires that administrative rules be each agency's statement of general or particular applicability and future effect that implements, interprets, or prescribes law or policy, or describes the organization, procedure or practice requirements of any agency. The Hawaii Administrative Procedure Act requires that each agency adopt rules of practice that set forth the nature and requirements of all formal and informal procedures available, and include a description of all forms and instructions used by the agency. Administrative rules should clarify the interpretation of law and the formal and informal procedures used by the agency to serve the public. The rules must be clear, current, valid, and comprehensive. They carry the force of law.

The commission's administrative rules are not clear

Administrative rules should interpret the law and facilitate its implementation. We found that the commission's administrative rules simply restate Chapter 174C, HRS, and therefore do not fulfill the interpretive requirement.

For example, Section 174C-13, HRS, of the water code states "The commission shall adopt, pursuant to Chapter 91, procedural rules for the processing of citizen complaints including the right of appeal to the commission." The administrative rule covering this section of the code (13-167-82) simply duplicates the remainder of Section 174C-13, HRS, with the only addition or clarification being that all complaints related to water quality should be filed directly with the Department of Health. This rule does not meet the requirements of the administrative procedure act, "setting forth the nature and requirements of all formal and informal procedures available, and including a description of all forms and instructions used by the agency." Although the commission does have a form and an informal guideline for filing citizen complaints, neither the form nor this procedure are incorporated in the administrative rules.

Procedural rules allow the parties before the commission to have a "level playing field," and ensure the prompt handling of regulatory requirements. Rules outline the process by which decision making takes place. Rules must be clear so that the public has a good understanding of what to expect. In one case before the commission, confusion over whether the party should apply for a water use permit or a drilling permit resulted in a

three-year delay to the applicant. In another case, there was confusion over when parties could request a contested case hearing, *before* the commission makes a decision, or *by* the end of the commission meeting. In both cases, the issue does not revolve around the commission's ultimate decision, but rather on procedural issues. In a third example, parties were asked to fill out a questionnaire without further explanation as to its purpose. Parties to the case expressed concern over the questionnaire's purpose.

The commissioners argue that the hydrology, location and competing uses of each case require flexibility. The commissioners believe that decisions should be made on a case-by-case basis, so that the interpretation of the code may be established over time. But having clear procedural rules should not impact the commission's ability to make decisions on a case-by-case basis. On the other hand, unclear procedural rules, developed on a case-by-case basis, will lead to perceptions of inequity and arbitrariness. The commission must ensure that procedural rules are clearly defined and readily available to the public.

The lack of clearly defined rules and procedures delays the processing of permits, and makes it difficult for the public to understand commission procedures. Unclear rules create additional work for the division and delay completion of statutory requirements.

The commission has no formal system for indexing decisions

The commission states the importance of keeping its administrative rules general and flexible. The commission wants the flexibility to create its own "administrative common law," based on precedents set forth over time. However, in order to establish a system of "administrative common law," the commission needs an organized, systematic way of tracking its decisions. These previous decisions would, as in common law, serve as the basis for future decisions.

The commission, however, has no organized indexing system to track its decisions. An organized indexing system is important so that the public has access to information and understands what precedents the commission has established. The lack of an organized indexing system makes it difficult for the public to understand the process and gives the impression that decisions are random and without precedent.

In order to have a clearly structured decision-making process, there needs to be a mechanism to track prior decisions. The criteria, standards, and reasoning established in these previous decisions should serve as a basis for making future decisions. Without the ability to track past decisions there is no assurance that decisions aren't haphazard and arbitrary.

The commission's administrative rules are not current

The division has adopted a set of informal guidelines that establish procedures such as water use permits, well construction and pump installation permits, emergency issuance of permits, and filing of complaints. In addition, declaratory orders are kept on file to clarify procedures in existing administrative rules. While these documents may be available to the public upon request, it is not immediately apparent that these guidelines dictate the procedures and policies of the water commission. Guidelines that are used on a regular basis to implement the water code and that affect private rights must be codified in the administrative rules. Informal procedures must also be codified in the rules.

The commission indicated that, as experience and knowledge is gained, the rules will be clarified and updated. In 1993, the division suggested revisions to many sections of the administrative rules but these changes have not yet been adopted. Updated rules should provide continuity to the commission. A staff member indicated that with the review of the State Water Code in progress, it may be more economical to wait until the code is changed before making revisions to the administrative rules.

Meanwhile, nearly all the commissioners have completed their terms, with no changes to the rules. The current rules have not been updated and do not reflect the experience and knowledge gained by the staff or the commission. All policies and procedures that affect the public must be added to the administrative rules to keep the rules current. We believe the rules should be updated on a regular basis, within the term of the commissioners so that experience gained during each four-year term can be incorporated into the rules.

Some of the commission's administrative rules may not be in compliance with the current statute

Some of the commission's administrative rules do not comply with the Hawaii Administrative Procedure Act, Chapter 91, HRS. Several of the commission's rules on public hearings, meetings, and rulemaking are in conflict with Chapter 91 and with Chapter 92, HRS, the Public Agency Meetings and Records Act. Given the controversial nature of the contested cases and issues before the commission, it is important that the commission ensure that the administrative rules are in compliance with Chapters 91 and 92. This will prevent costly and time consuming litigation in the future.

The commission's administrative rules are not comprehensive

The current administrative rules do not address native Hawaiian water rights. There are three types of Hawaiian water rights: 1) appurtenant and surface water rights which include taro rights on land, 2) Hawaiian Home Land claims for future use reservations, and 3) traditional customary rights, such as those linked to gathering rights. The absence of administrative rules for native Hawaiian water rights and appurtenant rights makes it difficult to develop instream flow standards.

The administrative rules to Chapter 174C, were originally drafted without a section on native Hawaiian water rights, even though these water rights are guaranteed in the State Constitution and are the most senior of all water rights. In 1993, the commission formed a task force to look into native Hawaiian rights. Now, eight years after the enactment of the water code, a draft of proposed rules on native Hawaiian water rights is going through the public hearings process. Although the commission has made a good effort to include members of the Hawaiian community and representatives from various interest groups in drafting administrative rules on native Hawaiian water rights, this effort is long overdue. The commission must promptly complete the public hearing process and submit rules on native Hawaiian water rights to the governor's office for approval.

Conclusion

The goal of establishing a State Water Commission was to have a proactive agency that would plan, coordinate, and protect all water use in the State. The Legislature established the Commission on Water Resource Management and gave it the complex task of allocating and protecting Hawaii's water resources.

The water code mandates many duties, but the commission is responsible for determining the most effective and efficient way of implementing these duties. The commission's management responsibility is to prioritize and set clear policies and procedures for implementing the code. No water issue is simple, so flexibility and discretion allow for learning and adaptation. However, in having flexibility, it is the commission's management responsibility to ensure that procedures and decision-making process are clear and published. Clear rules are essential to having a fair decision-making process.

The commission has taken significant steps towards fulfilling the many requirements of the State Water Code. However, the commission has failed to complete some requirements of the water code, focusing its efforts mainly on regulation at the expense of the planning and research components of the water code. In some cases, the commission's reactive management approach makes it difficult to carry out requirements of the code.

The commission has failed to establish planning as a priority. It failed to manage the resources allocated for its planning efforts. Currently the two staff members in the division's planning branch are burdened with too many other tasks to do adequate planning. Division staff and some of the commissioners admit that the Hawaii Water Plan is inadequate. Yet the water code clearly states that the water plan should be a guide for developing and implementing "a program of comprehensive water

resources planning to address the problems of supply and conservation of water” (174C-2(b)). The existing Hawaii Water Plan does not serve this function. Such a strategic plan, while not a panacea for protecting the state’s water resources, would direct and prioritize the commission’s activities in research and regulation of water.

Recommendations

1. The Commission on Water Resource Management should develop a plan to meet specific goals and timeframes for areas that need improvement. The commission should: a) identify the necessary staff resources needed to carry out its established goals, b) develop a staffing plan that identifies specific positions and responsibilities, and, c) provide justifications for any additional positions. It should seek to obtain the resources it identifies as needed. Once this is done, the commission should establish clear priorities and dedicate the appropriate staff and resources to these priorities.
2. The commission should revise and adopt the amended Hawaii Water Plan, ensure that revisions are coordinated and that the plan developed is useful to the staff, the commissioners, and other agencies; and
3. The commission should propose legislation to streamline the regulatory function to minimize the staff time required for these duties. Specifically, the commission should:
 - a. Review the water use permitting process and identify areas that could be improved and streamlined; and
 - b. Review whether the designation process is necessary and beneficial. It should request changes to the code that would streamline the process so that it can be implemented in a more timely manner.
4. The Commission on Water Resource Management should revise its administrative rules, and ensure that the rules are updated on a regular basis, at least once every four years.

Glossary

1. **Appurtenant Rights** - A right, privilege, or minority property that is considered incident to the principal property for purposes such as passage of title, conveyance, or inheritance.
2. **Aquifer** - A geological formation or group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water.
3. **Certificate of Use** - A certificate issued by the Commission on Water Resource Management once a declaration of use is filed and the information is verified.
4. **Declaration of Use** - A declaration made by an existing water user, notifying the commission that water is being used.
5. **Developer of water** - A person or organization that seeks to develop a water source so that it may be used in some way.
6. **Discharge** - The aggregate pumpage and spring discharge from a source.
7. **Fieldwork investigation** - Work done at the site location to investigate and/or verify information on the water source or use.
8. **Future Use Reservations** - A reservation of water resources to be used some time in the future.
9. **Hydrology** - The scientific study of the properties, distribution, and effects of water on the earth's surface, in the soil and underlying rocks, and in the atmosphere.
10. **Instream flow standard** - Means the flow or depth of water which is required to protect fishery, wildlife, recreational, and other beneficial instream uses.
11. **Instream Use** - Means the use of streams without removing water.
12. **Private Water Systems** - Water systems that are privately owned and not necessarily connected to or controlled by any public agency.
13. **Recharge** - The process of addition of water to the zone of saturation. This is made up of natural recharge (rainfall and subsurface flow), and artificial recharge (water applied to the ground surface, such as in irrigation).
14. **Stream Diversion** - Diverting the natural course or flow of a stream.

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15. **Sustainable yield** - The ability to have continuous long-term ground water production without progressive storage depletion. This may include estimated yield in undeveloped or partially developed sources.
 16. **Water Budget** - An accounting of the inflow to, outflow from, and storage changes in a hydrological unit.
 17. **Water Management Area** - A geographic area which has been designated in pursuant to Chapter 174C-41 as requiring management of ground or surface water resources, or both.
 18. **Water User** - An individual or organization that uses water. This does not include users who get their water from a county board of water supply.

Notes

Chapter 1

1. Section 174C-7, Hawaii Revised Statutes.

Chapter 2

1. Section 174C-71, Hawaii Revised Statutes.
2. Section 174C-41, Hawaii Revised Statutes.

Response of the Affected Agency

Comments on Agency Response

We transmitted a draft of this management audit to the Commission on Water Resource Management on December 22, 1995. A copy of the transmittal letter to the commission is included as Attachment 1. The response from the commission is included as Attachment 2.

The commission concurred with our findings that it had made some progress in implementing the mandates of the Water Code, and that the commission's staffing and resource limitations make it difficult to carry out mandates of the code.

The commission expressed concern about the use of and conclusions drawn from a sample of the water use permit applications. We conducted a systematic sample of the applications in accordance with generally accepted sampling techniques. We therefore stand by the figures reported in the audit. The commission did provide alternative statistics in its response. However, we are unable to verify the figures and do not know upon what criteria they are based. The commission also provided additional information to clarify several points made in the report, some of which has been incorporated in our final report.

ATTACHMENT 1

STATE OF HAWAII
OFFICE OF THE AUDITOR
465 S. King Street, Room 500
Honolulu, Hawaii 96813-2917



MARION M. HIGA
State Auditor
(808) 587-0800
FAX: (808) 587-0830

December 20, 1995

COPY

The Honorable Michael D. Wilson, Chair
Commission on Water Resource Management
Department of Land and Natural Resources
Kalanimoku Building
1151 Punchbowl Street
Honolulu, Hawaii 96813

Dear Mr. Wilson:

Enclosed for your information are 7 copies, numbered 6 to 12 of our draft report, *Management Audit of the Commission on Water Resource Management*. We ask that you telephone us by Friday, December 22, 1995, on whether or not you intend to comment on our recommendations. Please distribute the copies to the members of the commission. If you wish your comments to be included in the report, please submit them no later than Tuesday, January 2, 1996.

The Governor and presiding officers of the two houses of the Legislature have also been provided copies of this draft report.

Since this report is not in final form and changes may be made to it, access to the report should be restricted to those assisting you in preparing your response. Public release of the report will be made solely by our office and only after the report is published in its final form.

Sincerely,

Marion M. Higa
State Auditor

Enclosures

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



STATE OF HAWAII
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COMMISSION ON WATER RESOURCE MANAGEMENT
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DEPUTY

JAN 2 1996

Ms. Marion M. Higa
State Auditor
Office of the Auditor
465 S. King Street, Room 500
Honolulu, Hawaii 96813-2917

RECEIVED
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OFC. OF THE AUDITOR
STATE OF HAWAII

Dear Ms. Higa:

Thank you for the opportunity to comment on the draft management audit report. The report's findings and recommendations are helpful to the Commission on Water Resource Management (Commission), as it points to areas of the Water Code which need more attention. We have been aware of our limitations in fully implementing all aspects of the Water Code. However, full implementation requires more time, staff and funding than are currently available to us and more than was originally contemplated by the Legislature.

As we read the report, these findings are clear: 1) the Water Commission has made significant progress in implementing the many mandates of the Water Code, and 2) inadequate staffing and funding have limited the Commission's ability to carry out its mandates. We appreciate your reporting of these important observations. We believe, however, that the conclusions drawn in the audit report detract from these important findings. The audit report tends to take a "sampling" approach to fact-finding, then draws conclusions based on this limited sample.

One example of how this "sampling" approach could lead to erroneous conclusions is the audit report's use of a sample of 62 water use permits to determine "past deadline" actions. The Commission acted on 532 water use permit applications (WUPAs) since its inception in 1987. Of the 532 WUPAs, 17% were acted upon past the deadline, instead of the 55% indicated in the auditor's report. When considering scheduling difficulties, which caused many WUPAs to be delayed due to lack of quorum, cancelled meetings, or simply meeting dates which were scheduled only a few days after the deadline, the WUPAs "past deadline" were reduced to just 6% of the 532 WUPAs. This can be compared to the audit report's erroneous conclusion that 55% were "past deadline".

Further still, the use of a "sampling" approach can lead to erroneous conclusions about the Commission's leadership and

management capabilities. The Commission's duties are far more numerous than the five areas reviewed in the audit report, and the full spectrum of our duties are listed in Attachment 1. Given the Commission's broad responsibilities, it is not as simple as the audit report suggests, to "assign sufficient staff to develop an adequate plan". The flexibility to reassign or add staff does not exist, as our staff is fully committed to accomplishing the numerous other tasks mandated by the Water Code.

The Commission has set priorities consciously in order to best meet its statutory and constitutional mandates within the limitations of its current staff and funding. First and foremost is the Commission's responsibility to protect the ground and surface waters of the State, and the processing and issuance of permits is a major vehicle by which the Commission ensures protection. Also, the Commission is obligated to process permits in a timely manner to prevent a regulatory bottleneck and economic hardship. We agree that progress on many of the other Water Code mandates could be expedited with additional staff and funding, but the selected rate of progress has never risked harm to the resource.

The audit report fails to realize that, at its core, the field of water resources is highly empirical in nature and cannot be reduced to simple formulas either physically or administratively. Add to that the competing and evolving nature of water rights and the complexity is more than doubled. At times, the Commission has worked for years to resolve a situation before acting, especially in its designation decisions. To its credit, the Commission has chosen not to be reactive, but to act prospectively and carefully, focusing on obtaining adequate information and clarifying the law, in recognition of the long-term implications of its decisions.

We have thoroughly reviewed the audit report and include our detailed comments as an attachment. Again, thank you for the opportunity to review the report.

Sincerely,



Michael D. Wilson
Chairperson

Attachments

cc: Honorable Benjamin Cayetano
President Norman Mizuguchi
Speaker Joe Souki
Commissioners

DETAILED COMMENTS
 Management Audit of the
 Commission on Water Resource Management

1. In addition to the five areas reviewed in the audit report (certificates of use, water use permits, Hawaii Water Plan, Instream Use Protection Program, and rules), the Commission is also constitutionally and statutorily responsible for:

- o setting overall policies relating to water conservation, water quality, and water use;
- o defining reasonable and beneficial use and obtaining maximum beneficial use of the waters of the State;
- o protecting ground and surface water resources, watersheds and natural stream environments;
- o establishing criteria for water use priorities;
- o assuring appurtenant rights, existing correlative and riparian uses;
- o establishing procedures for regulating all uses of Hawaii's water resources;
- o issuing stream channel alteration permits, interim instream flow standard amendments, diversion works permits, well construction permits, and pump installation permits;
- o topographic surveys, research and investigations into all aspects of water use and water quality;
- o preparing, publishing, and issuing pamphlets and bulletins to disseminate information to the public;
- o identifying, by continued study, those areas of the state where salt water intrusion is a threat to fresh water resources;
- o planning and coordinating programs for the development, conservation, protection, control, and regulation of water resources based upon the best available information;
- o hearing any dispute regarding water resources state-wide;
- o investigation of complaints;
- o cataloguing and maintaining an inventory of all water uses and water resources; and
- o protecting traditional and customary Hawaiian water rights including those of the Department of Hawaiian Home Lands.

2. Page 4, fifth paragraph, line 5.

Division of Land and Water Development should be Division of Water and Land Development.

3. Page 9, Summary of Findings, last sentence of 1. "The commission must also establish a comprehensive instream use protection program."

The Commission has made considerable progress in its mandate to protect instream uses. Early in its history, the

Commission realized that setting permanent instream standards was going to be a difficult, if not impossible task, due to the flashy nature of Hawaii's streams and the lack of an adequate data base. From June 15, 1988 to April 19, 1989, the Commission adopted interim instream flow standards for East Maui, Kauai, Hawaii, Molokai, West Maui, Leeward Oahu, and Windward Oahu. The actions by the commission established the interim instream flow standard as the "status quo" as of the effective date of the standard, except as could be modified by the Commission under certain conditions. Any new or expanded diversions after the effective date of the standards requires Commission approval. The establishment of the interim "status quo" effectively protects all streams from further diversions unless permitted by the Commission.

The Commission further protects streams through its statewide surface water permitting process which requires a stream channel alteration permit for altering any stream (except for routine streambed and drainageway maintenance activities), a stream diversion works permit to build any structure that could divert a stream, and an amendment to the interim instream flow standard for any new or expanded diversion. In addition, the construction and withdrawal of ground water from any well that affects streamflow would require an amendment of the interim instream flow standard for the affected stream.

The Commission's statewide surface water permitting process includes participation in stream related issues by various Federal, State, and County agencies, and allows input from the general public. The instream use permit program has resulted in an increase in public and private sector awareness of the need to care for Hawaii's streams. The permit process has produced agreements among users of stream water, as well as monetary fines and settlements for violations.

4. Page 9, Summary of Findings, number 3. "Some of the administrative rules may not be in compliance with Chapters 91 and 92, HRS."

The administrative rules were passed after public hearings and review by the Attorney General. We would be more than happy to correct any areas of noncompliance if something was missed by the public and the Attorney General.

5. Page 10, last paragraph. "Despite the work completed to date and staff opinions that certificates of use would facilitate meeting the water code objectives, the commission has not prioritized certificate issuance."

We agree that if a declaration has been field verified, it may obviate the need for another field verification for water use permit issuance in designated areas if there has been no change in location, use, and quantity. However, to conclude that the certificates should therefore be given higher

priority is erroneous. The chance of accruing this benefit, when reviewed in light of the numerous mandates of the Commission, has been the reason that certificate issuance is a lower priority task. We note that although all Windward Oahu declarations were field verified, no time was saved for the Windward Oahu water use permits because there were changes in location, use, and quantity.

Further, we disagree that "the issuance of certificates of use typifies the Commission's difficulties" and its "poor management of its limited resources". Again, it is not as simple as to reallocate resources to do this work. Our assessment of what it would take to complete all certificates is about \$1 million. These "extra" resources simply do not exist.

6. Hawaii Water Plan section, pages 12 to 15

We recommend that the first sentence on page 13 be amended to: "The sustainable yield figures [laid out] used in county plans are suspect because [only the Oahu plan used hard data] data was very limited except for the Pearl Harbor Aquifer on Oahu and the Iao Aquifer on Maui."

"Developing a useful strategic plan that provides direction and guidance to protect the state's water resources is more critical than meeting a statutory deadline." (page 14) The Commission recognized that developing comprehensive plans will be an iterative process. We disagree with the statements that the plans are not useful and that "the commission is without a strategic plan to provide direction". The plans as they exist are useful and we view them as "living" documents that will continuously need refinement and revision.

The statement on page 15, paragraph 1, that "the commission needs to ... develop a staffing plan with specific positions to justify the need for more staff" contradicts the statement on page 24, last paragraph, that the commission "failed to manage the resources allocated for its planning efforts".

7. Page 15 and 16, section entitled "Permanent instream flow standards not established."

We disagree with the heading "instream protection is lagging". Although permanent standards have not been established, we know of no evidence that surface water has been harmed or misused and therefore lacked protection.

Although the management audit acknowledges the technical and logistical problems of developing instream flow standards, and acknowledges the lack of staffing for the instream program, it fails to address the complexity of setting permanent instream flow standards because of competing social and economic needs over the use of stream water. The process of setting

permanent instream flow standards, if even technically possible, would require considerable resources to meet due process requirements to balance competing interests.

The statement on page 15 that the "commission has yet to use the (SPAM) recommendations in developing an overall program" is in error. The Commission approved the draft stream protection rules in November, 1995, and is in the process of taking them to public hearing.

8. Page 16, second paragraph. Recommend that the appropriate sentences be revised as follows (Ramseyer format):

To get accurate flow data, [several] measurements must be made over a period of at least 20 years. The commission relies mainly on the U.S. Geological [Service] Survey to collect stream flow (and related) data through a cooperative research program.

9. Page 16, paragraph 3. "In some cases, such as a controversial contested case, the hearing takes precedence, while statutory requirements and priorities are delayed."

Contested case hearings are due process hearings required by statute and the Constitution. Staff resources are reallocated to support contested case hearings, which will result in regulatory decisions that will help protect the resource. Of the 1,667 permit decisions by the Commission, only three have triggered contested case hearings. This is an example of how the commission has been extraordinarily successful in resolving issues without time-consuming contested case hearings.

10. Page 16, paragraph 3. "In other cases, externally mandated requirements such as coordinating a statewide Water Conservation Conference, interfere with the commission's priority work. We found, however, that the commission willingly took on some of these other responsibilities. In the case of the Water Conservation Conference, the commission testified in favor of putting on the conference, even though it was behind in its mandates".

The purpose of the Water Conservation Conference, as described by the legislative resolution, was to create a state-wide conservation plan. Setting overall policies relating to water conservation is one of the Commission's mandates (Constitution, Art. XI, Section 7). We do not agree that the Conference interfered with the Commission's priority work or that the Conference was held in lieu of meeting the Commission's mandates.

Conservation is critical to water management. It is important to communicate to the public about conserving water resources and affecting the culture. Water conservation has been

described by water professionals around the country as an issue of highest importance and of preeminent value in determining values in water management.

On Oahu, there are 415 mgd of available ground water that will not interfere with surface water. Current allocations are about 340 mgd. The remaining 75 mgd may be committed within 25 years, since Oahu's water appetite grows at about two to three mgd per year. One of the keys to stretching these remaining resources is common understanding of the critical need for conservation. It will also mean looking at more expensive alternatives like reusing treated wastewater, treating surface water, and desalting brackish or ocean water. Right now, Oahu releases about 110 mgd of sewage effluent into the ocean daily.

A fundamental step in the state's water resource management efforts was for the state to get together with the counties about planning for the future. The Water Conservation Conference was an important meeting where all counties were represented as well as many state agencies, and discussions were held with some of the country's leading water managers about water conservation techniques.

11. Page 16, paragraph 4. "Reacting to crises rather than planning ahead affects the commission's ability to protect the state's water resources."

We are not aware of any evidence to justify the auditor's belief that our regulatory function (processing permits) affects our ability to protect water resources. We believe that it is proactive to proceed with permit processing especially in areas where water use is great and competition is great. The conditions that we place on these permits, the data that we require to be submitted, and the analyses that we conduct all assist in our mandate to protect the resource.

In eight years, the Commission acted on 1,667 permits. Of these, only three have triggered contested case hearings. We believe this exemplifies coherent, timely, and professional administration of the water code, not crisis management. However, we agree that more staff is needed to do an adequate job in planning.

12. Pages 18 and 19, Issuance of water use permits is slow.

Commission staff reviewed all the existing water use permits received and acted upon by the commission since its inception in 1987. Of the 532 water use permits processed, 90 were not acted upon within the 90 or 180 day time limits. This constitutes 17% of the 532 applications compared to 55% of the 62 applications sampled in the auditor's report. Applications processed on time increased from 16% to 71%. Deferred (on time but final action delayed) applications decreased from 29%

to 12%. Considering the commission's scheduling difficulties, only 34 or 6% of the 532 applications were more than 30 days past the 90 or 180 day time limit. A revised Exhibit 2.3 is included as Attachment 2, along with a printout of the water use permit applications data used to prepare the revised exhibit.

13. Page 18, paragraph 1, "We found that the permitting process has taken up to three years to complete."

Permitting is never "complete" in a water management area; water use permits will always be required for new water uses.

14. Page 18, paragraph 2, "Administrative controls are not established until the entire designation and permitting process is completed. Thus the commission may not be able to adequately protect the threatened water resource..."

Administrative control is established as of the date of designation. All existing and new water uses must be permitted in accordance with the Code. We request the auditor to provide evidence that the resource was not adequately protected prior to a designation decision or during the establishment of existing uses. In addition to designation, the Commission has authority to order an emergency (HRS 174C-62(g)) should there be an immediate threat to the resource.

15. Page 20, paragraph 2, "Delays in the issuing the water use permits also impact the commission's ability to protect the water resources".

In eight years, the Commission acted on 1,667 permit applications. As we stated earlier, 17% of the water use permits were acted on beyond the statutory deadline. When considering scheduling difficulties, only 6% were beyond the deadline. Decisions were on the whole timely, and allowed the permittee to move ahead. Permittees do not wait for the permit document to proceed.

16. Page 20, paragraph 3, "The complaints need to be addressed by the commission so that the permitting process is clear, timely, and equitable".

The audit contains no explanation of the complaints referred to in this statement. In light of the number of permits processed (1,667) and the number of instances the parties chose to complain (one motion for reconsideration and three contested case hearings), there have been very few complaints. Additionally, as previously stated, just 6% of the water use permits were not completed on time.

The Water Code provides for a formal complaint process (HRS 174C-13) and the Commission maintains forms and a database to

address these complaints.

17. Page 24, Conclusion, last paragraph. "Currently the two staff members in the division's planning branch are burdened with too many other tasks to do adequate planning."

We believe the development of the Stream Protection and Management Plan, the work of the Hawaiian Water Rights Task Force, and the development of a water conservation plan to be water resource planning tasks. Accordingly, staff has completed important planning tasks. However, as noted in the attached letter to the counties, the Commission needs additional resources to engage in adequate planning.

18. Page 25, Recommendation 1.

Attached is a briefing paper on the Water Commission. The Water Commission was created partially in response to the state's emergency situation in 1977, the year before the passage of the constitutional amendment. It is the first state-wide water resource management agency. The Water Commission took over regulation of the ground water control areas previously administered by the State Board of Land and Natural Resources.

We already have gone through the exercise of identifying the necessary staff resources needed to carry out what we believe to be our responsibilities under the Water Code. Doubling our staff, we believe, would give the Commission a more realistic chance of carrying out most of the mandates of the Water Code. We have thus far found it very difficult, if not impossible, to add to our staff. In fact, our budget these last few years has decreased steadily. In our budget testimonies, we have mentioned the need for more staff but have not been allowed to make a formal request.

Exhibit 2.3 (from pg. 19 of auditor's report)

Commission Action	Auditor's Report		Total CWRM History	
	# WUPAs	% of WUPAs	# WUPAs	% of WUPAs
On Time	10	16	378	71
On Time but Final Action Delayed	18	29	64	12
Applications Past Deadline	34	55	90	17
Total	62	100	532	100
Considering Scheduling Difficulties				
On Time			378	71
On Time but Final Action Delayed			64	12
Applications within 1 to 30 Days Past Deadline			56	11
Applications Past Deadline + 30 Days			34	6
Total			532	100

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
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RAE M. LOUI, P.E.
DEPUTY

December 19, 1995

The Honorable Jeremy Harris
Mayor, City & County of Honolulu
City Hall
Honolulu, Hawaii 96813

Dear Mayor Harris:

The Commission on Water Resource Management plans to convene a series of meetings with each county to discuss the major issues surrounding limits to Hawai'i's freshwater resources.

We feel that water resource management is one of the most critical challenges facing our State today. Hawai'i is approaching its limit on developing freshwater resources in some parts of the State.

On O'ahu, for example, there are 415 million gallons per day (mgd) of available ground water that will not interfere with surface water. Current allocations are approximately 340 mgd.

O'ahu's water appetite grows at about two to three mgd per year. This means that the remaining 75 mgd may be committed within twenty-five years, requiring the use of more expensive alternatives like reusing treated wastewater, treating surface water, and desalting brackish or ocean water. The limits to ground water supply mean that as a State, we no longer have an adequate amount available for future growth.

As water resources become scarce, it is even more critical that adequate data is available for decision-making about the availability and use of our resources. Water Commission estimates of water availability throughout the State are based on inadequate data. For example, on Moloka'i, water allocation decisions were made based on an estimate of seven mgd for a particular aquifer, of which the majority has been either allocated or reserved. Recent estimates indicate that the aquifer may yield only three to five mgd.

These examples raise two major issues: the need to collect accurate, adequate data for decision-making about the use of our resources; and, the need to affect land use planning through the consideration of such data.

The Honorable Jeremy Harris
December 19, 1995
Page Two

Although the Commission is responsible for data collection, planning and management, we have inadequate staff and funding to conduct the work completely. The Commission's primary obligation is to process water use permits in a timely manner to prevent a regulatory bottleneck.

Faced with these issues, we propose to convene a series of meetings with each county to discuss the problems unique to each county. We hope to discuss the need to improve data collection and monitoring. Further, we intend to convene a panel of hydrologists to propose better methods to estimate water availability and collect data.

My Deputy, Rae Loui, will be calling you to set up meetings at times convenient to you. Thank you for your attention to this important matter.

Sincerely,



MICHAEL D. WILSON
Chairperson

Briefing Paper on the Commission on Water Resource Management

History

The State was in an emergency situation in 1977, the year before the passage of the constitutional amendment creating the Commission on Water Resource Management (Water Commission). The State saw prolonged dry weather and periodic droughts, all-time low groundwater levels in Pearl Harbor, moratoriums in some counties because of inadequate water supply, voluntary cutbacks called by water departments, environmental concerns over water development projects, and water rights litigation. The State's designation of Pearl Harbor, Honolulu, and Waialua as ground water control areas led to improved public confidence, improved water use measurement, a plan for step-down of use, and development of emergency shortage plans.

The 1978 Constitutional Amendment (Art. XI, Section 7) called for the legislature to establish:

"a water resources agency which... 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."

Nine years later, the Legislature passed the State Water Code, Chapter 174C, HRS. The State Water Code established the Water Commission, which was the first state-wide water resource management agency. The Water Commission took over regulation of the ground water control areas previously administered by the State Board of Land and Natural Resources.

The Legislature recognized a need to reassess the role of the Water Commission as well as unresolved issues within the Water Code itself when the Code was adopted in 1987. It called for establishment of a Code Review Commission, which just concluded its review.

Water Commission Duties

Although the Water Commission is responsible for data collection, planning, regulation, dispute resolution, and management, the current emphasis is processing permits. Not only are there statutory deadlines, but the Water Commission is obligated to process permits in a timely manner to prevent a regulatory bottleneck.

The jurisdiction of the Water Commission does not overlap the regulations of the county water departments and Department of Land and Natural Resources' Water and Land Development (W&LD). The county water departments and W&LD do not have responsibility for protecting the resource. Their functions are to develop water, and in the case of the counties, also to deliver water.

The Water Commission is not restricting the development of water resources sorely needed by the counties. In eight years, the Water Commission acted on 1,667 permits. Of these, 1,602 were approved and 65 denied. Of the denials, 62 were denied without prejudice because there was no water usage. The remaining three denials were the Honolii and Waialua Hydro projects and the Makaleha Springs Development Project.

Allocation

The State Water Code requires the Water Commission to issue water use permits in water management areas (Molokai and most of Oahu). The Code establishes that the counties shall set forth in plans the allocation of water to land use in that county (HRS 174C-31). These plans are the County Water Use and Development Plans, which are a part of the Hawaii Water Plan. The Code further requires that allocations of water (i.e., water use permits) follow the land use plans and policies of the counties. This is the way that the Code ensures that water allocation decisions follow land use. The Counties' plans primarily discussed specific source development rather than providing guidance about allocation. Oahu's most recent draft plan, for example, states that allocation should be first come, first served.

Allocation must be handled by a neutral entity, whether it is at the state or county level. The boards of water supply have mandates to supply water to the public and may not be able to objectively decide between competing uses.

The Water Commission's responsibilities go beyond ensuring availability and quality of water in the State. Further, these responsibilities were placed on one agency, not four county agencies. Delegation to the counties would require a constitutional amendment, identification of a neutral agency that could balance protection and regulation issues, some means to ensure adequate funding, and confidence that the critical situation in 1977 would not happen again. The State has a duty, as trustee of the resource, to adjudicate water resource issues and to protect water resources for the people of the State.

Current Situation is Critical

We are approaching the limits to developing our water resources in some parts of the state. On Oahu, there are 415 million gallons per day (mgd) of ground water available which would not affect stream flows. Water allocations total about 340 mgd, leaving about 75 mgd unallocated. Oahu's water appetite grows at about 2 to 3

mgd per year. This means that the remaining 75 mgd of ground water may be committed within 25 years, requiring the use of more expensive alternatives like reusing treated wastewater, treating surface water, and desalting brackish or ocean water.

Our present estimates of water availability throughout the state are based on inadequate data. This raises a problem when we approach the limits of the resource. For example, on Molokai water allocation decisions were made based on an estimate of 7 mgd for a particular aquifer, of which the majority has been either allocated or reserved. Recent estimates indicate that the aquifer may yield only 3 to 5 mgd.

On Maui, the county's inability to manage the water development situation has threatened the island's major aquifer. The aquifer is in danger of overpumping because no new sources have been developed in other aquifers which are available to meet growing demand. Although the Water Commission has not designated the aquifer as a state water management area, it may be necessary, given the possibility of harm to the aquifer.

These situations raise two major issues:

The Need for Land Use Planning Decisions to Consider Water Availability: Approaching the limits of our "natural" ground water means that an adequate amount may not be available for future growth. We will need to start to consider whether this should affect our land use planning decisions. Full build-out of the Second City in Ewa is projected to require an additional 50 mgd, most of what is remaining on Oahu. The projected demand may be reduced through water conservation, and alternative sources could be used to meet the irrigation portion of the 50 mgd demand. These and other use, conservation, and preservation measures should be related to land use planning decisions.

The Need for Water Resource Data: As water resources become scarce, it is even more critical that adequate data are available for decision-making about the availability and use of our resources. We presently have insufficient staff and funds to get adequate data. Of our 375 perennial streams in the state, only 40, or 10% are continuously gaged. Our ground water data network is extremely limited, as we can measure the extent of the freshwater lens in only two areas in the state. There is little baseline water quality information for either surface or ground water, and inadequate staff and funds to collect water quality or quantity information statewide.

State Position

The State, as trustee of water resources, has the constitutionally-mandated responsibility to set policies, protect resources, define uses, establish priorities while assuring rights and uses, and establish regulatory procedures. Given the critical water resource

problems facing some areas of the state, the Water Commission's role is even more critical.

The State Water Code provides for coordination between the county and State to allocate water resources. More effort should go into making the current process work through the Hawaii Water Plan. The Hawaii Water Plan includes Water Use and Development Plans for each county which shall be prepared by each separate county and adopted by ordinance, setting forth the allocation of water to land use in that county. The Water Commission and the counties must work together to develop useful plans that provide direction and guidance to protect the state's water resources. Discussions must also take place between the State and the counties to solve the need for improved data collection and monitoring. Discussions could involve optimization of the data network to more closely support resolution of the issues unique to each county.