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¹² Abstract (Purpose, method, results, conclusions) <p>During the nine years since the enactment of the amendment to the state constitution calling for a water code, those proposing various codes have faced four main problems identified here as (1) the ownership question, (2) the question of which agency shall ultimately control water allocation, (3) relationship between the state and counties, and (4) the question of Native Hawaiian water rights. Early debate on various codes focused on the issue of ownership. Many parties incorrectly assumed that government regulation could only be based on government ownership of water. The confusion was exacerbated by the decision in <u>McBryde v. Robinson</u> which purported to give corporeal ownership of the water to the state. This report discusses limited duration permit systems that grant the government the power to allocate water without reliance on ownership. Two of the major issues focus on the proper governmental agency for regulation of water. The counties have opposed statewide control over water allocation for fear that the decisions made in Honolulu will not reflect local concerns and out of a concern that county land-use planning decisions will not be supported by water allocation decisions made by a state agency. Secondly, the Department of Health expressed fears that its water quality decisions could be bypassed by powers lodged in the Department of Land and Natural Resources. The last major issue focused on respect for traditional Native Hawaiian water rights that are not clearly defined. The various codes present the possibility that such claims would be nullified. Such a scenario would represent a perpetuation of harm done to the Native Hawaiian which began with the alienation of land from the Hawaiian in the middle nineteenth century.</p>	

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**WATER CODE DEVELOPMENT IN HAWAI'I:
HISTORY AND ANALYSIS, 1978-1987**

Williamson B.C. Chang

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Project Completion Report

for

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The Advisory Study Commission on Water Resources, 1982-1985

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ABSTRACT

During the nine years since the enactment of the amendment to the state constitution calling for a water code, those proposing various codes have faced four main problems identified here as (1) the ownership question, (2) the question of which agency shall ultimately control water allocation, (3) relationship between the state and counties, and (4) the question of Native Hawaiian water rights.

Early debate on various codes focused on the issue of ownership. Many parties incorrectly assumed that government regulation could only be based on government ownership of water. The confusion was exacerbated by the decision in McBryde v. Robinson which purported to give corporeal ownership of the water to the state. This report discusses limited duration permit systems that grant the government the power to allocate water without reliance on ownership.

Two of the major issues focus on the proper governmental agency for regulation of water. The counties have opposed statewide control over water allocation for fear that the decisions made in Honolulu will not reflect local concerns and out of a concern that county land-use planning decisions will not be supported by water allocation decisions made by a state agency. Secondly, the Department of Health expressed fears that its water quality decisions could be bypassed by powers lodged in the Department of Land and Natural Resources. The last major issue focuses on respect for traditional Native Hawaiian water rights that are not clearly defined. The various codes present the possibility that such claims would be nullified. Such a scenario would represent a perpetuation of harm done to the Native Hawaiian which began with the alienation of land from the Hawaiian in the middle nineteenth century.

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INTRODUCTION

The starting point for the drive to develop a statewide water code for Hawai'i was the state Constitutional Convention of 1978. Article XI, Section 7, calls upon the legislature to provide for the creation of a state water resources agency to set overall water conservation, quality, and use policies.¹ The impetus for the amendment was the dual concern with possible water shortages and continuing uncertainty over ownership of water as evidenced by the protracted McBryde litigation.

Since 1978 the legislature has considered various proposals for a water code in each legislative session. There have been two commissions formed to study the issues and draft water codes.² Moreover, the Board of Land and Natural Resources (BLNR) initiated the implementation of its powers under Chapter 177 (Ground-Water Use Act) by establishing a water permit system for groundwater withdrawals from the Pearl Harbor, Waialua, and Honolulu aquifers.³

Thus, the constant exposure of the legislature to proposed water codes, the increasing experience of the Department of Land and Natural Resources (DLNR) with the permitting process and the completion of the work of the Advisory Study Commission on Water Resources in early 1985 have led to concrete hopes for passage of a water code in the 1986 and 1987 legislative sessions.

A number of difficulties, however, remain. Questions that need resolution are the following:

1. A Resolution of the Approach to be Taken by the Code: Government Regulation v. Free Market (herein "The Problem of Consistent Approach")
2. A Resolution of Concern Over Ownership of Water and the Problem that a Water Code Would Amount to an Unconstitutional Taking of Property Without Just Compensation (herein "The Ownership/Taking Question")
3. A Resolution of the Concerns of the Counties that a Statewide Water Code Would Displace a Proper Function of the Counties (herein "The Objection of the Counties")
4. A Resolution of the Possible Conflict of Authority Between the Department of Health and the Quantity Permitting Agency (herein

"The Quantity/Quality Priority Problem")

5. A Resolution of the Concern that a Water Code Would Implicitly Nullify Native Hawaiian Claims to Water (herein "Native Hawaiian Claims to Water").

Each of these concerns constitute a substantial possible obstacle to the enactment of a code. Each will be discussed separately.

**PROBLEM OF CONSISTENT APPROACH:
FREE MARKET VS. GOVERNMENT REGULATION**

Any discussion of the design of a water code must start with a description of objectives. What are the problems that we seek to resolve by the enactment of a water code? It is generally agreed that the following are goals for a water code:⁴

1. Preservation and conservation of water for desired uses (avoiding depletion of water in the future)
2. Management of water (granting water to those whom society favors)
3. "Tenure security" for water uses (protecting those who have valid water uses from costly challenges to their use by others).

There are basically two approaches for obtaining these objectives. First, there is a possible water code based on the model of a free market system. Second, there is the model based on government regulation through a limited duration permit system. These two approaches represent fundamental choices in many activities and it is not surprising that they constitute distinct, mutually exclusive alternatives. Let us examine how they fare in achieving the management, security, and conservation objectives.

Free Market Model

The free market model of a water code is based on the view that commodities are allocated to their highest and most efficient use by a market system. In such a system, water would be treated as a commodity and would be bought and sold according to need. Thus, if a developer required water for a West O'ahu subdivision, the developer would purchase such water from, let us say, a sugar company. If the sale of that water meant that some sugar lands would go out of production, the sugar company would only sell

the water if it could profit more from selling water than from growing sugar on the abandoned acreage. The developer would be willing to pay such a price if the development supported by the acquisition of the water would create enough of a profit, considering the cost of water, that development would be worthwhile. Thus, under the market system, water would go to a use that generated the most profit.

The market model would also act to discourage the waste of water, economists argue, because of the willingness of diverse buyers to purchase water. Those with excess water capacity would rather sell their water than allow it to be used in marginally productive ways.

As to the tenure security of rights, the market system does not create such security but, rather, must start from an existing system of secure rights. In order for parties to engage in the purchase or sale of a commodity, the parties must be sure about ownership, that is, who has the right to make the sale. Thus, for a market system to exist, rights must be well defined.⁵ In jurisdictions which allow water markets to exist, it is often the judicial system that provides definition by allowing parties to sue to clarify ownership claims on the basis of common law doctrines.

ADVANTAGES OF A FREE MARKET SYSTEM. Proponents of a free market system argue that it is the most efficient means of allocating commodities. Moreover, it is a means of insuring that a scarce commodity like water will not be wasted. It is further argued that the system of allocation by market cannot be replicated by a government agency because it depends on "voluntary interaction and pricing."⁶ Finally, large landowners in Hawai'i argue that they should be allowed to sell water because they are the owners of such water.⁷ This claim of ownership is not based on legal claims in the case of groundwater, but largely on the fact that such landowners developed the irrigation systems and wells. As the party who brought the water to the surface and invested in the wells and transmission services, these users claim the right to sell the water.

INAPPROPRIATENESS OF FREE MARKET SYSTEM TO HAWAI'I. A free market system in water rights is inappropriate because the property rights to water in Hawai'i are not well defined. Ownership of the groundwater and surface water rights are not clear in Hawai'i.

Under the correlative water rights doctrine, groundwater is not owned by the overlying landowners. All landowners above an aquifer have recipro-

cal rights to use.⁸ Thus, they may use a reasonable amount of water, as long as their use does not harm the use of any other. Such reciprocal rights are not suited for a free market system. One's rights under the correlative system depend on the reasonable uses of others and such uses can change over time.

It would be possible, under a code, to simply declare that present users of waters are the owners of such waters and grandfather their uses. There is little reason, however, to favor present users of water with such "ownership" status. Such an act would deny the possible validity of the claims of other groups to such water, such as Native Hawaiians.⁹ It would also constitute a windfall to such users whereby they would be able to profit from the sale of waters to the exclusion of other overlying land-owners who never drilled wells or were prevented from drilling by county policy. Such policies are in contravention of the doctrine of correlative rights.¹⁰

Claims to ownership of surface waters are also on shaky grounds. For many years, surface-water owners have believed that they could claim ownership to well-defined amounts of surface water. These claims were upset when, in McBryde v. Robinson and Reppun v. Board of Water Supply, the state supreme court held that "konohiki" water rights did not exist.¹¹ Instead the court held that the system of riparian rights controls the majority of surface water. The riparian system, like the correlative groundwater system, is not capable of definition and thus cannot be the basis for a free market approach.

Again, the code could be used to grant surface-water users well-defined rights as the "owners" of such water but this would raise problems for other groups which have disputed private ownership of surface water. Moreover, it would also be a windfall given the state supreme court's ruling that private ownership of surface water does not exist.

Moreover, a free market approach to the allocation of water would be undesirable in that unlike the market in wheat, fish or IBM stock, a water market on O'ahu would be "thin". In other words, there would not be enough buyers and sellers of water to form the necessary minimum of interactions by which a fair price would be maintained. In such a "thin" market, those who hold water will essentially be in a "seller's market" and thus able to dictate prices.¹²

Furthermore, a free market approach would likely eliminate sectors that rely on water but could not compete for water priced for domestic urban use. Since urban developers would be willing to pay almost any price for water, small and diversified agriculture would be priced out of business. If such a situation developed, Hawai'i would become less self-reliant in terms of food production.¹³ Water allocation under a system relying on market forces may not distribute water according to the needs of Hawai'i.

Government Regulation Model

The management of water by government regulation would rely on the use of limited duration permits. Such permits would achieve the management objective by allowing the water agency to reallocate water upon the expiration of the permit. Such permits would be issued on the basis of the water plan. The water plan would function in the same manner as a development plan. It would contain an inventory of available water sources (the sustainable yield) and a determination of what demands will be made on these water resources into the future. The water agency would then allocate water according to the plan.¹⁴ Limited permits of 5 to 15 years would be given in all cases other than urban uses. Such uses could receive perpetual permits because once an area is committed to urban use, its use will never change.

Thus, for example, an aquaculture farm would receive a 15-year permit for the use of a certain amount of groundwater. The permit holder is on notice that after 15 years, he has no guarantee over continued use of the water. If priorities in the water plan change over the intervening 15 years, the government can rely on the reacquisition of that amount of water.

Many have criticized the resulting termination as a harsh result from the perspective of the permit holder. Several provisions can be adopted to ameliorate what appears to be a rather stringent result. First, there would always be a very strong presumption for renewal. The permit was issued only as consistent with the water plan. The water plan, enacted after public input, has the force and effect of law. Thus, the initial issuance of the permit is a very strong commitment to future renewal, so

long as the basic assumptions of the plan remain in place.

Second, the code can provide that midway through the life of the permit, the permittee may seek renewal for the length of the permit. Thus, our aquaculture permit holder may, after 7½ years, seek agency approval to extend for another 15 years. After another 7½ years the permittee may continue to seek further extensions.

In this manner the limited duration permit system allows the government to achieve the three objectives of conservation, management and security. The limited duration feature allows attainment of the management objective because it is a means by which to reallocate water as needs change. The water plan with built-in limits on sustainable yield, allows the goal of conservation to be achieved. Finally, from the permittee's point of view, the permit system provides tenure security. The issuance of the permit constitutes a government assurance that no one else can disturb the tenure holder's use of water. Thus, once a permit is issued, costly litigation should be avoided.

ADVANTAGES OF LIMITED-DURATION PERMIT SYSTEM. As set forth above, the primary advantage of the system is that it gives the water agency a management tool—the limited-duration permit by which to actively "manage" the water supply. In contrast, the perpetual duration permit or fixed right of the free market system "gives away the store." In times of severe water shortage, the state would have to use eminent domain to buy back water. The limited-duration permit system is a means by which the state could be prepared for such possible shortfalls. Moreover, the limited duration permit provides a means to adjust in the event that land uses change. For Hawai'i the inappropriateness of long-term permits—20 years or longer—can be understood if one reviews the degree to which land use in Hawai'i has changed in the last 20 years.

The second major advantage of the limited duration permit system is that it would terminate endless delays and costly litigation over judicial challenges to ownership. The permit system would largely bypass the problem of ownership as permits would be awarded on the basis of the propriety of the use according to the water plan and not claims to ownership.

The permit approach views water as a government subsidy, to be awarded to those that the state desires to encourage. Thus, the award of permits might be analogized as achieving desired outcomes through tax policy based

on credits and deductions. To encourage energy self-sufficiency, for example, Congress passed tax credits for installing solar energy systems. When it was appropriate, the tax credit was eliminated. Water permits, like favorable tax treatment, are a tool for designing growth according to government objective. When a once favored use, such as an aquaculture farm, is no longer profitable, the permits can, like the solar energy tax credit, be terminated and the water reallocated elsewhere.¹⁵

Problem of Consistent Approach

The free market and government regulation alternatives represent opposing approaches. They are mutually exclusive. Attempts to compromise by developing a system that relies on features of both will be self-defeating as it would undermine the effectiveness of both approaches. Unfortunately, the water code proposed by the Advisory Study Commission represents a compromise that results in an untenable system.

The Advisory Study Commission code combines the free market system with the government regulation approach by relying on the creation of perpetual permits¹⁶ and restricting transferability by forbidding the sale of water.¹⁷ Moreover, any change in use is deemed a new use and requires reapplication. Thus, permit holders would have a perpetual right to use water but would not have rights to transfer water to a different party (who would be intending a different use) or to put the water to a different use. Under such a compromise solution, water would not—as hoped for under the free market system—rise to its most efficient use.

For example, a user might receive a perpetual permit for 10 mgd (0.44 m³/s) under the proposed code for a light industrial use. If after 10 years the profitability of his use declines, he may need only 6 mgd (0.26 m³/s). However, he has no real incentive to conserve the 4 mgd (0.18 m³/s) and may continue a wasteful use just to maintain rights to that 4 mgd into the future. After all, he would not want to lose the right to the 4 mgd only to have to apply later for the 4 mgd and take the chance of having his application denied. Furthermore, the permittee may not sell the 4 mgd. Hence, the permittee is implicitly encouraged to continue to waste the water as there are no incentives to transfer the water to another use.

As long as such waste is hidden, the permitting agency cannot require

the water for another use. The agency will have to devise a means to detect such waste. This would be very difficult under the code since permits are to be reviewed every 30 years.

Furthermore, in the above example, inefficiency may occur not because the water is wasted but because it is marginally utilized. The code encourages the permittee to stay in marginally useful industries rather than to transfer water to another more useful activity, or to return such water to the agency. Thus, the proposed code combines the two approaches, but the effect is an inoperable system. The market system, on the other hand, encourages transfers by making transfers attractive in an economic sense. Moreover, the limited-duration permit system effectuates such changes through central planning and short permits. The proposed code, with its prohibition on sale and perpetual permits, represents an internally inconsistent approach. While the spirit of compromise, reflected by the combined market and regulatory approach is laudable, it also reflects an inability of the commission to make the hard decisions. The market and regulatory approaches are largely mutually exclusive. The drafting of the compromise approach is essentially a decision not to decide. In this sense, the compromise approach represents a victory for those forces who have opposed any code. No rational legislature could enact a code that is so inconsistent.

OWNERSHIP/TAKING QUESTION

One objective to the enactment of the code which has been raised repeatedly is that there can be no code unless ownership of water is resolved. In connection with this argument, opponents of a code claim that ownership must be first resolved in order to assess whether regulation by a code would diminish the economic value of ownership and thus constitute a taking that requires compensation. The short answer to both objections is that a resolution of ownership is not a necessary condition for the development of a code. Permits would not be awarded on the basis of ownership but on the importance of proposed use.¹⁸ Prior use will have some bearing on the grant of the permit, but inefficient, wasteful uses should not be automatically "grandfathered" with the award of a permit. In any event,

under present law, only appurtenant water rights—a very limited amount—can be said to have a legal claim to ownership.¹⁹ Both riparian (surface) and correlative (groundwater) rights are not rights to ownership of a corpus of water but are relative use rights. Such rights vary, as to the amount of water they represent, with conditions in the body of water and the relative uses of other parties.

The question of ownership of water has also arisen because various parties have misunderstood the government to be relying on its ownership of water as the basis for regulation. Such a theory arose out of the first state supreme court decision in McBryde v. Robinson which stated that the state was the "owner" of all surface waters.²⁰ It was assumed that since the state owned all the waters, it obviously had the power to regulate the use of such waters. Others, however, argued that rational state regulation over the waters could stem from other sources, such as the state's inherent rights under its police powers or the public trust doctrine. Ownership of the water is not a necessary precondition to state control. Thus, even assuming the state is not the owner of the waters and someone else is the owner of the water, the state would still have the power to regulate water use.²¹

Land-use regulation is an oft-cited analogy. The counties do not have to be the owners of the land to have the power to regulate such land under its zoning power. Similarly, the state does not have to prove ownership over the air to be able to regulate noise or pollution of the environment.

The next issue is the "takings" question. Assuming that some other party owns the water and claims a certain amount of water use under such ownership, does a permit that diminishes the amount of water which may be used constitute a taking? As long as the permitting process is a rational and uniform scheme and not arbitrary and capricious, such cutbacks will not be deemed a taking.²² The courts have upheld the constitutionality of water regulation systems on the grounds that the exercise of such powers are, like the exercise of zoning powers, necessary to uphold the public good.²³

Thus, the ownership/taking objection is not a valid obstacle to the successful enactment of a regulatory/permit type of code. The resolution of ownership is not necessary for the issuance of permits. Government regulation would not be based on state ownership but rather on the police

powers. Even if such waters were declared to be owned by private parties, which is not the case in Hawai'i,²⁴ government regulation by use of a permit system would not amount to a taking.

OBJECTION OF COUNTIES TO STATEWIDE WATER CODE

If the second obstacle, the ownership/taking concern can be characterized as a dispute between the state and the large landowners and water users, this next concern can be described as a conflict between state and county interests. While large landowners have objected continually to the enactment of a permit-oriented water code, the counties' objection to a code has surfaced only in the last three years. The Hawaii Association of State and Counties focused their 1984 program on the proposed water code drafted by the Advisory Committee. The counties largely opposed the permit-oriented code on the grounds that neighbor islands did not have a water crisis and that the water shortage was mainly an O'ahu problem. The counties argued that principles of home rule supported a notion that the counties should have control over their own water allocation systems.

The counties have historically borne the major responsibility for the development of water. It was not until 1979 that the Board of Land and Natural Resources designated the Pearl Harbor aquifer as a groundwater area for regulation and protection of water. The counties have viewed the state as a latecomer to water management. Despite long county experience in water management, the water code would give the state ultimate power over water development. As a purveyor of water for all these years, the county water systems have developed significant technical expertise in hydrology, water development, and water management. Their self-perception was that their expertise was greater than that of the state. Thus, it was particularly galling that under the water code the county water systems would be a subordinate regulatory body.

In light of these objections the manager and chief engineer of the Board of Water Supply for the City and County of Honolulu did not endorse the Commission's code and submitted a minority report. The director of the Department of Water Supply of the County of Maui also dissented from the Commission's report.²⁵ Moreover, various representatives of the county

governments, with some exception, have opposed adoption of a water code in recent legislative sessions.

First, let us consider the county's general objection to a statewide code on the grounds that there are no shortages except on O'ahu and thus no rationale for a water code on the neighbor islands.

In response, it might be noted that although the neighbor islands have adequate water resources, there is a shortage of developable water. Thus, there are shortages on Hawai'i Island in the Kamuela, Kona, and Ka'u districts. There is also a water moratorium in upcountry Maui.

Moreover, the water code could benefit the neighbor islands by ending litigation and providing tenure security. The majority of litigation over water rights comes from the neighbor islands, such as the McBryde case from Kaua'i. The Wailuku River on Maui is the fountainhead of surface water law in Hawai'i.

Even if the outer islands do not face immediate shortages of developable water, the adoption of a statewide water code is appropriate to avoid a "crisis-oriented" approach to water management. As stated above, the limited permit approach to water management requires intensive water planning. Thus, under the water plan, long-term crisis and shortages will not be permitted to develop as the limited duration permit will allow the water agency to cut back on allocation as water becomes even more scarce.²⁶

The crisis-oriented approach characterized by Chapter 177, the present basis for water permitting conducted by the Board of Land and Natural Resources on O'ahu, stipulates that emergency power shall be exercised when the supply and condition of the water is endangered. The experience on O'ahu indicates that crisis management is an inappropriate way to respond to problems in water allocation. The failure to respond quickly enough may result in permanent damage to the resource.

Finally, the counties object to a limited duration permit system on the basis that it may deprive the counties of their present powers over land-use planning. This objection manifests itself as a claim of "home rule" power over water regulation, assertions that any statewide water resource agency would become a water czar and an unjustified interference with the counties' land-use planning process.

These concerns stem from a misunderstanding of the nature of a permit process. Limited duration permits are largely designed as tools to imple-

ment already determined land-use decisions. The development of a water plan would incorporate land-use decisions. It was never intended that the water plan would dictate planning decisions; rather, land-use decisions made in other political forums should determine how water should be allocated. The essence of the limited duration permit system is to provide a tool by which planners could reallocate water should land-use changes over time require such shifts.

Take for example a series of planning decisions that call for a growing population center on the 'Ewa plain. The plans may call for 10,000 people in that area by 1990, 20,000 by 1995, and 40,000 by the year 2000. Corresponding estimates may show that the water usage for the area will require 25 mgd (1.1 m³/s) in 1990, 50 mgd (2.2 m³/s) in 1995 and 100 mgd (4.4 m³/s) in the year 2000. Planning without the use of limited permits would mean that the county planning agencies approving the land-use designations which allow such growth would be doing so on the simple faith that enough water would be available in the future. Since the Pearl Harbor aquifer is, given present indications, already taxed to its limit, water would not be available unless other uses would terminate between now and the time future needs arise. Simply hoping this will occur represents a rather haphazard approach to development. Moreover, communities and interest groups that are likely to lose water in the future to growth in this new development will not have participated in the process by which water use is decided.

These problems can be fully aired in the development of the water plan, the process that would be followed by using a permit system. Communities, such as Wai'anae and windward O'ahu, which stand to lose water to the developing new urban area, would be apprised of this fact during the discussions of the proposed water plan. Moreover, the plan would make clear the limited alternatives that would allow adequate water for the new urban area. Let us suppose that those alternatives include two choices: (1) taking more and more water from Wai'anae and the windward coast, or (2) taking water from the sugar industry. Both alternatives have drawbacks, but the advantages of the water plan is that the two competing alternatives would be identified now. The planning process, however, clearly presents the alternatives. The decision to allow development of a new urban center forces an eventual cutback in agricultural water or domes-

tic water from the windward side. It is not the permit system that can be blamed for this difficult choice: the permit system forces awareness of difficult choices that are implicitly made when new growth is allowed. Any process by which these choices are not identified at the time the land-use decision is made hides the real costs of the decision and delays awareness far into the future.

Thus, the public would be forced, in 1987, to face the difficult choice between agricultural and domestic use. Once that choice is made, let us say, to phase out agricultural use—permits can be issued to reflect that choice. Thus sugar growers would be given 8-year permits for certain uses in a manner designed to free up another 25 mgd (1.1 m³/s) by 1995. If the expected urban growth does not materialize, that permit can be renewed. If, on the other hand, domestic water from the windward side is available for use elsewhere, the sugar plantation water permits can be renewed and excess water from the windward side can be reallocated to 'Ewa.

Thus, the water plan and permit system does not deny the counties from controlling land use. Rather it forces county planners to consider the long-term effects on water use that accompany each set of planning decisions. The development of a water plan forces public debate and considerations of consequences that may often be ignored under a mentality of "worrying about it later." True, a code will sharpen debates about the use of land and the use of water, but it is not a fair accusation that the code would displace the power of the counties over land-use planning.

CONFLICT BETWEEN WATER QUANTITY (DEPARTMENT OF LAND AND NATURAL RESOURCES) AND QUALITY (DEPARTMENT OF HEALTH) CONSIDERATIONS

A fourth problem hindering implementation of a code has been the tension between the potential water quantity permitting agency, the Department of Land and Natural Resources (DLNR), and the water quality permitting agency, the Department of Health (DOH). If a water user must receive a permit from both agencies, the problem arises as to which agency has ultimate authority. The problem would be solved if there were a single water agency which would issue both permits. In such an agency there would be little pressure to sacrifice quality concerns to meet quantity objectives.

Ideally, such an agency would be independent and have two separate divisions for water quantity and for water quality.

The proposed code of the Advisory Water Commission, however, has designated DLNR as the quantity agency. There is a concern in the community that if DLNR had final say over water use DLNR will not adequately address water quality concerns. The Department of Health has quietly resisted any attempts to divest DOH of its water quality permitting functions. The proposed code thus preserves DOH's ultimate power in this area. DOH argued that its hard won status as an agency certified by the Environmental Protection Agency (EPA) to administer the Safe Water Drinking Act would be jeopardized if DOH were made subordinate to any other agency.

The split of authority between DOH and DLNR under the code is a compromise with which the public is forced to live. However, it leaves much to be desired from the perspective of prospective permit applicants. Such applicants face the possibility of being granted a permit by one agency while being denied a permit by another.

Another problem is that quantity decisions are also quality decisions. Overdrafting from various wells in the Pearl Harbor aquifer may cause seawater intrusion and increasing levels of salinity. Salinity is a water quality concern. DOH has the power to deny a use on the grounds that such use would increase salinity. Thus, what might be an appropriate quantity decision by DLNR may, unbeknownst to DLNR, be inappropriate under DOH guidelines. Inconsistent permitting would certainly frustrate developers and reinforce the impression that Hawai'i is an overbureaucratized state.

Centralization of power in one agency would appear to be the logical managerial alternative to this problem. There has been little institutional support, however, for the creation of a new, independent agency. Large landowners have opposed the idea of a water code altogether. They are even more fearful of a new independent department on the grounds that it would be too powerful.

During the past ten years DLNR has urged that it be given the power of permitting. DLNR argued that it has experience with permits in the land-use process, that it is developing expertise in water permitting, and that adding water to DLNR's existing land responsibility would fulfill the potential promised in the department's title—a department of natural resources. On the other hand, DOH quietly opposed any attempt to divest it

of its final authority over water quality decisions and cited its accreditations by EPA as a major factor. Opposition to a new department has also been based on objections to the creation of any new cabinet level departments. Such objections, however, have been undermined by proposals of the new Governor Waihee administration for the establishment of a new department to administer the prison system.

In conclusion, it is not an absolute necessity that the dispute between DOH and DLNR over ultimate priority be resolved to enact a water code. But failure to do so increases the perception that a water code will do little to change the status quo. One of the goals of the water code was effective management and this is best achieved by having a single agency address quality and quantity concerns. The failure to establish effective management thwarts the goal of the constitutional amendment.

NATIVE HAWAIIAN CLAIMS

Native Hawaiian claims have been largely ignored in discussions over the water code. While Native Hawaiians did testify before the commission, the commission made no attempt to deal with the problem of Native Hawaiian claims.

From the perspective of Native Hawaiians, the enactment of a code is a propitious event since enactment will be used to argue that all Native Hawaiian claims are nullified or derogated. Since tenure security is a major goal of the code, it will be in the interest of both the permitting agency and the permit holder to argue that permits cannot be judicially attacked under theories of common law rights. Thus, any specific or political claims Hawaiians have may be nullified by a code.

While Native Hawaiians are fearful of enactment of a code, the possible enactment of a code gives them leverage as they have an opportunity to waive any native common law claims in exchange for other specific and desirable rights under the code. The Admissions Act (1959) 5(f) trust claims have the greatest potential to hold up the code as such claims may jeopardize the permitting process as a whole.

However, Native Hawaiians do not really need water; instead, they need money. Thus, Native Hawaiians can exchange their common law claims for

water for monies to be raised through a surcharge on permits.

In short, the enactment of the code represents a moment of leverage, opportunity and possible danger to the Hawaiian community. The failure to openly discuss these issues does a great disservice to Hawaiians. Those who fail to alert them to their possible rights may share responsibility for another shameful chapter in the historic mistreatment of Hawaiians. Thus, the failure of the commission to actively seek to resolve the question of Native Hawaiian rights constitutes a missing link in the final development of a code.

CONCLUSIONS

The purpose of this report has been to highlight the major obstacles to the adoption of a code. Many proposed codes, including that suggested by the Advisory Commission, indicate a reluctance to make the difficult but necessary choices. Compromises as in the "perpetual permit/no sale" choice of the code presents an internally inconsistent scenario. Other failures to decide, as in the case in choosing between either DLNR or DOH as the ultimate permitting agency, present unattractive although not fatally flawed decisions. The decision to proceed with a code without coming to grips with Native Hawaiian claims to water, however, poses the real possibility of a major disaster: it would lay the groundwork for another injustice done to the Hawaiians.

The possibility that a code may be passed without resolution of Native Hawaiian claims is a forceful argument against the piecemeal approach to a water code—that some provisions can be enacted now while others can be postponed for the future. Such claims, if not explicitly considered, could undermine the code. While limited immediate action may quell critics of legislative inactivity, there is a great danger in acting simply to show action instead of acting following careful education and thoughtful choices among competing alternatives.

FOOTNOTES

1. See Article XI, Section 7 of the Hawaii State Constitution:

Section 7. The State has an obligation to protect, control and regulate the use of Hawaii's water resources for the benefit of its people.

The legislature shall provide for a water resources agency which, as provided by law, shall set overall water conservation, quality and use policies, define beneficial and reasonable uses; protect ground and surface water resources; watersheds and natural stream environments; establish criteria for water use priorities and establish procedures for regulating all uses of Hawaii's water resources.
2. One commission was the State Water Commission appointed by the Governor of Hawaii. Their report was issued in January 1979. See State Water Commission, *Hawaii's Water Resources: Directions for the Future*. The second is the Advisory Study Commission on Water Resources created by the state legislature. Their report was issued 14 January 1985. See Report of the Advisory Study Commission on Water Resources to the Thirteenth Legislature State of Hawaii.
3. See Hawaii Revised Statutes, Chapter 177: Ground-Water Use Act.
4. See generally, F. Maloney, R. Ausness and J. Morris, *A Model Water Code 173-77* (1972).
5. Anderson, "Water Marketing: An Idea Whose Time Has Come," in *Water Values and Markets: Emerging Management Tools at 15*, Special Report published by the Freshwater Foundation.
6. Id.
7. See the description of the litigation in McBryde v. Robinson in Chang, "Missing the Boat: The Ninth Circuit, Hawaii Water Rights and the Constitutionality of Retroactive Overruling," 16 *Golden Gate* 123 (1986).
8. See Chang, "The Impact of a Permit System on Native Hawaiian, Riparian, Appurtenant, Konohiki and Correlative Water Rights" (paper prepared for the Advisory Commission on Water Resources) 18-19.
9. Id. at 11-12. See also *Reparations and Restitution*. Documents submitted to the Native Hawaiian Study Commission by The Office of Hawaiian Affairs, May 1982.
10. Under the doctrine of correlative rights, overlying landowners have the right to drill for water. City Mill Co. v. Honolulu Sewer and Water Commission, 30 *Hawaii* 912.
11. In Reppun v. Board of Water Supply, 65 *Hawaii* 531 (1982), the Hawaii Supreme Court held that only two rights continued to exist as to sur-

face waters: appurtenant rights and riparian rights. Thus, "konohiki" water rights, or rights to the normal surplus waters of a stream, which belong to the owner of the ahupua'a on which the stream arises, were not deemed to exist. Thus, Reppun reaffirms the holding in McBryde Sugar Co. v. Robinson, 54 Hawaii 174, 504 P.2d 1330 (1973), cert. denied, 417 U.S. 976, cert. denied and appeal dismissed sub. nom. McBryde Sugar Co. v. Hawaii, 417 U.S. 962 (1974), which held that, other than for riparian and appurtenant water rights, the state was the owner of the surface waters of the state. See generally, Chang and Moncur, "Reppun v. Board of Water Supply: Property Rights, Economic Efficiency and Ensuring Minimum Streamflow Standards," Technical Report No. 165, Water Resources Research Center, University of Hawaii (September 1984).

12. Chang, "Water: Consumer Commodity or Government Subsidy?," in Water Values and Markets: Emerging Management Tools at 18. (A Special Report by the Freshwater Foundation.)
13. Id. at 19.
14. See section 8 of the proposed code drafted by the Advisory Study Commission on Water Resources titled "State Water Use and Protection Plan."
15. Chang, "Water: Consumer Commodity or Government Subsidy?" in Water Values and Markets: Emerging Management Tools at 19.
16. Section 38 of the code proposed by the Advisory Study Commission establishes perpetual permits.
17. Section 43 of the proposed code prohibits sale: "Water covered in permits may not be sold under this chapter." This, however, does not preclude the assessment of charges to recover the costs of development and distribution of water. A valid transfer of water pursuant to this section shall not be deemed a sale of water if the transfer is incidental to the sale or exchange of a property interest in land.
18. Permits would be granted to the use which best conforms to the water plan. See section 37 of the proposed water code: "If two or more applications which otherwise comply with the provisions of section 32 are pending for both or all, or which for all other reason are in conflict, the board shall approve that application which best serves the public interest as set forth in the state water plan.
19. Kloos, Aipa and Chang, "Water Rights, Water Regulation, and the 'Taking Issue' in Hawaii," Technical Report No. 150, Water Resources Research Center at 48 (University of Hawaii, May 1983). Appurtenant water rights are rights to a specific quantity of water. This is not the case with correlative or riparian rights. See McBryde Sugar Co. v. Robinson, 54 Hawaii 174, 504 P.2d 1330 (1973), cert. denied, 417 U.S. 976.
20. McBryde Sugar Co. v. Robinson, 54 Hawaii 174, 504 P.2d 1330 (1973).

21. See generally, Kloos, Aipa and Chang, "Water Rights, Water Regulation, and the 'Taking Issue' in Hawaii," Technical Report No. 150, Water Resources Research Center (University of Hawaii, May 1983).
22. See generally, Chang, "The Impact of a Permit System on Native Hawaiian, Riparian, Appurtenant, Konohiki and Correlative Water Rights," (Prepared for the Advisory Study Commission on Water Resources).
23. The Village of Tequesta v. Jupiter Inlet Corp., 371 So.2d 663 (Fla. 1979) (upholding the validity of Florida's limited duration permit system) and Cherry v. Steiner, 716 F.2d 687 (9th Cir.), cert. denied, 466 U.S. 931 (1984) (upholding the Arizona Groundwater Management Act of 1980).
24. Except in the case of appurtenant water rights, common law rights to water in Hawaii do not establish ownership of water. See Chang, "The Impact of a Permit System on Native Hawaiian, Riparian, Appurtenant, Konohiki and Correlative Water Rights" (paper prepared for the Advisory Study Commission on Water Resources; included as Appendix A).
25. See letters of Kazuyoshi Hayashida, Manager and Chief Engineer, Board of Water Supply, City and County of Honolulu, and Vince Bagoyo, Director, Department of Water Supply, County of Maui, contained in the Report of the Advisory Study Commission on Water Resources.
26. Section 46 of the code proposed by the Advisory Study Commission provides for greater powers in the event of a water shortage. The other pertinent provisions of the code are designed to avoid a crisis-oriented approach.

APPENDIX A

THE IMPACT OF A PERMIT SYSTEM
ON NATIVE HAWAIIAN, RIPARIAN, APPURTENANT
KONOHIKI AND CORRELATIVE WATER RIGHTSWilliamson B.C. Chang
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I. Introduction

The purpose of this memorandum is to set forth the legal issues which would be raised, in terms of existing common law water rights, if a limited duration permit system were adopted. Since much of the law in Hawaii is changing and many of these issues have not been addressed, there is a high degree of uncertainty as to how these issues will be ultimately resolved. The conclusions and analysis presented here must be viewed as preliminary. Further research will be conducted to refine the issues set forth below.

The fundamental question which pervades the entire analysis is the degree to which a limited duration permit system may constitutionally regulate vested common law property rights. As may be expected, this issue has been raised whenever a permit system has been enacted over a system of riparian rights. In short, it seems that a system for regulating water resources would be constitutional if such a system involved the rational regulation of existing rights.

The drafters of the Model Water Code, the model for the provisions contained in Alternative No. 1, state the following concerning the imposition of a permit system over an existing regime of riparian rights:

"It is the opinion of the drafters of the Model Water Code that while the right to gain available water subject to equitable rules for distribution is a legally protectable interest, there is no property interest in the rules of distribution prevailing at any particular time. (citing Baumann v. Smrha, 145 F. Supp. 617 (D. Kan.), aff'd 352 U.S. 863 (1956)). To the extent that a change in the riparian system destroys equitable distribution, such a change may be unconstitutional as in invasion of property rights. However, if the rules are rationally changed, reflecting changing needs or a more realistic awareness of hydrologic phenomena, such legislation should be upheld as constitutional. The property interest each riparian has is not an interest in the rules or the introduction of any new ones. The property interest is rather a right to make use of the water under a system of reciprocal rights.

(citing O'Connell, Iowa's New Water Statute--The Constitutionality of Regulating Existing Uses of Water, 47 Iowa L. Rev. 549 (1962))."

Of course, the system of water rights in Hawaii is much more complicated than one involving only riparian rights. One must also take account of possible Native Hawaiian, konohiki, appurtenant and correlative rights. The nature of these rights may be different from riparian rights and hence more difficult, or impossible, to regulate. Furthermore, the existence or nature of konohiki rights, riparian rights, prescriptive rights and Native Hawaiian rights turns, to a great extent, upon the outcome of the McBryde litigation.

Lastly, it is important to emphasize in this introduction that this memorandum does not attempt to argue the policy reasons for or against the adoption of the permit system. Again, the intent of the following analysis is to illustrate some of the legal issues involved in the adoption of a permit system in particular, and any water code in general.

II. Native Hawaiian Rights to Water

Issue: What are existing Native Hawaiian (including claims of the Hawaiian Homes Commission) entitlements to water and how might they be accommodated within the context of a state water code?

A. Introduction

There appears to exist a genuine legal basis for the recognition of some Native Hawaiian claims to water within any Hawaii state water code. The source of these claims include:

1. Section 221 of the Hawaiian Homes Commission Act,
2. Common law water rights associated with lands of the Hawaiian Homes Commission,
3. State constitutional provisions providing that Native Hawaiians are entitled to income from ceded lands, and
4. Theories for reparations based on obligations resulting from the loss of crown and government lands.

In short, claims pursuant to section 221 are the strongest of the claims which can be asserted. Moreover, they are beyond regulation or dimunition under a permit system.

This is not to say, however, that the Hawaiian Homes Commission and the State could not work out mutually acceptable contractual agreements regarding claims under this section.

In general, the consideration of section 221 claims and other claims is necessary to ensure that the implementation of a water code is not subsequently frustrated by the assertion of these claims at a later time. Moreover, it is appropriate that the State consider, at the time that it is contemplating the enactment of a water code, what would constitute the appropriate recognition of the legal rights of Hawaii's native peoples.

B. The Hawaiian Homes Commission Act

1. Generally

By the Act of July 9, 1921, the Federal government set aside approximately 200,000 acres of government land in Hawaii as a trust for the "rehabilitation" of Native Hawaiians. Lots within the designated land were to be made available for 99-year leases to Native Hawaiians for settlement and cultivation. The administration of the program was placed in the hands of the Hawaiian Homes Commission.

At the time of Hawaii's admission into the union, the Hawaiian Home lands were granted to the state government subject to the condition that the Federal Act be incorporated into Hawaii state law and substantively amended only with the approval of the United States. Hence, any attempt by the State to substantively diminish water rights or use must require federal approval.

2. Section 221

Among the provisions of the Act is section 221 which assures the Hawaiian Homes Commission of priority access to "government-owned" water for certain specified purposes. Hence, section 221 may be a very significant consideration in developing a water code since "government-owned" water may be the equivalent of the "state-owned" water, which was held to apply to all surface waters by the Hawaii Supreme Court in McBryde. On the other hand, the proper reading of the term may be as it was used in 1921, prior to McBryde. Given this latter interpretation "government-owned" water probably refers to water appurtenant to government lands by way of konohiki, riparian, appurtenant or possibly correlative rights.

The importance of the proper interpretation is apparent when one considers paragraph (b) of section 221. That paragraph imposes an implied condition on any "water license" issued after the enactment of the Act. This condition entitles the Department of Hawaiian Home Lands (DHHL) with the right to use any water covered by such licenses to satisfy the livestock, aquaculture operations or domestic needs of individuals upon any Hawaiian homelands tract. Thus, if a permit system (limited or perpetual) was adopted, and such permits were considered "water licenses" of "government-owned" water (in the broader, McBryde formulation of state ownership of water) all waters granted pursuant to such permits may be subject to an implied condition that DHHL could use such water if it was necessary to fulfill the specific purposes of section 221(b).

In short, given such an analysis, DHHL would have priority to any water subject to a state permit to fulfill livestock, aquaculture or domestic needs on Hawaiian Home lands. It should be noted that under this logic, the waters subject to such a priority would not have to be adjacent to or appurtenant to Hawaiian Home lands. In other words, such a priority would enable the Department to "reach" across lands of other individuals to place a priority on waters subject to a state permit.

It is also significant to note that the rights under paragraph (b) do not extend to the use of waters for irrigation or industrial purposes. Such uses could be added pursuant to a state amendment of the Act. Such an amendment would be permissible because it augments rather than diminishes rights under the Act. For example, the term "aquaculture operations" was added by amendment to the original paragraph (b), which at that time only provided for livestock and domestic uses. However, it is an open question whether the State could, without Federal approval, remove rights added by state action. In other words, while the State may add such a use as aquaculture, it is not clear that the State, by legislative action, could remove such an added benefit.

Hence, a combined reading of McBryde and section 221, paragraphs (a)(1) and (b) may produce substantial problems in the adoption of a permit system. The conclusion that section 221 creates a possible priority on all water used pursuant to a permit is not one that is easily reached and requires further discussion.

The crux of the analysis involved interpretation of paragraph 221 (a)(1). That paragraph reads as follows:

(1) The term "water license" means any license issued by the Board of Land and Natural Resources granting to any person the right to the use of "government-owned" water.

Thus, as stated above, the key issues focus on the proper definition of "government-owned" water and whether or not a water license is the equivalent of a present day water permit.

As the the first issue, there are basically two competing definitions of "government-owned" water. The first definition would rely on the understanding of the term at the time of the passage of the Act in 1921. If one looks solely at the case law and practice in effect in 1921 (and not at subsequent interpretations as in McBryde v. Robinson and Reppun v. Board of Water Supply), one would probably conclude that "government-owned" meant ownership of water in a corporeal (as opposed to public-trust) sense. In other words, "government-owned" water would be very similar to government-owned land. "Government-owned" water would accrue to the government by means of land ownership and thus accompany possession of appurtenant water rights, konohiki water rights and possibly riparian water rights. It would be an open question whether "government-owned" water at this time would include groundwater rights. The only Hawaii Supreme Court decision establishing groundwater rights occurred in 1929. Thus, the assertion that the groundwater beneath government lands in 1921 was owned by the government could only be based on inference or traditional practice.

A second interpretation of "government-owned" water would be based on the Hawaii Supreme Court's decision in McBryde v. Robinson. In that decision, the Court held that the ownership of water in natural watercourses, streams and rivers remained in the people of Hawaii and thus the State. In Reppun v. Board of Water Supply, the Court elaborated on these statements and held that State ownership of water was the equivalent of the public trust.

The critical problem in equating the "government-owned" water of paragraph (a) with the "state ownership" of water in McBryde is that it necessarily means that McBryde will have retroactive effect on what was in 1921, a Federal statute. The argument, however, is not without some support. Clearly, one of the purposes of the decision in McBryde was to correct what that Court believed to be an improper characterization of Hawaiian law. In other words, the critical cases which gave rise to a notion of corporeal,

private ownership of water, such as Hawaiian Commercial Sugar Co. v. Wailuku Sugar Co. were held to be incorrect readings of Hawaiian law. It is this same notion, granting private ownership of water to individuals, which creates an interpretation that "government-owned" water in section 221 is limited to waters incidental to government lands under konohiki and appurtenant rights. Thus, if McBryde is a successful means of correcting and overruling cases such as Hawaiian Commercial, which created a private ownership of water, McBryde should also be successful in revising the notion of government ownership in section 221. While this retroactive effect might be more easily seen as to state statutes, there are complications when the statute is a federal one.

On this point, there might be two answers. First, one view might be that a subsequent state decision cannot change the meaning of a federal statute. A better view, however, might be that, since the term "government-owned" refers to state law, subsequent state judicial interpretations can affect the meaning of that term. Such an effect would not be as problematic if it enlarges or enhances the purpose of the Federal provision. Since the broader, McBryde, definition of "government-owned" water enhances the purposes of section 221, namely of ensuring the availability of water for Native Hawaiians, the use of this interpretation would be consistent with the overall purpose of the Act.

Another critical problem with this interpretation of paragraph (a) is the constitutionality of the McBryde decision. It is exactly this question of the retroactive application of the concept of "state ownership" which is being currently litigated. However, even if the Federal courts continue to nullify the effect of the McBryde decision, the Reppun decision's affirmation of the Court's intent to overrule the earlier private ownership principles may provide some opening for an argument for the broader interpretation of "government-owned".

It might be noted that this broader, McBryde based interpretation of "government-owned" water might have consequences in terms of water permitting undertaken by the Department of Land and Natural Resources under Chapter 177. If groundwater is viewed as either "state owned" in the McBryde sense, or subject to the public trust, then the above interpretation may provide an already existing priority for Hawaiian Home lands for water permitted under Chapter 177. However, such a claim is weakened by the fact that neither the first McBryde opinion in 1974 nor the 1982 McBryde answers held that

groundwater was state owned or subject to a public trust. Such an argument can only be made by inference or dicta. Any amendment to expand Chapter 177 to include surface waters may, however, raise these issues.

Two other issues must be dealt with in order to reach the conclusion that section 221 provides a broad right to water under any permit. First, it must be determined that permits are the equivalents of "water licenses" and second it must be determined whether or not permits issued by an agency other than the Department of Land and Natural Resources (DLNR) would be subject to the section 221 priority. As to both issues, it seems that the answer would be based on an interpretation that best effectuates the purposes of the Act.

The concepts of a water license and a water permit are close enough such that a court may conclude that the purpose of the Act would be to include present day permits within its scope. Both licenses and permits concede a right to use and do not speak to ownership.

Furthermore, whether or not DLNR is the actual agency issuing permits should be immaterial. The purpose of the Act was clearly to place this priority favoring DHHL on any government agency with the power to issue licenses. In other words, the purpose of the section could not have been thwarted by shifting the function of granting permits, via state statute, from DLNR to another state agency.

In conclusion, section 221 (b) and (a)(1) create a clear entitlement to water in favor of DHHL. Under the most conservative interpretation, DHHL presently has a right to domestic, aquaculture and livestock use of water which is appurtenant to government lands by way of appurtenant, kono-hiki, or riparian water rights and are presently the subject of a water license. Since only Congress can diminish rights under the Act, such rights to water could not be lessened under a permit system.

Under the broader interpretation of "government-owned" water, the priority under section 221 may give rise to a priority to waters subject to permits under a newly enacted code.

Finally, the most significant ramification of the above analysis may be in the 1978 amendment to the state constitution. Article XII, section 1 (Hawaiian Homes Commission Act) provides, inter alia, "Thirty percent of the State receipts from...water licenses shall be transferred to the

native Hawaiian rehabilitation fund,...." If, as discussed above, new water permits constitute "water licenses" of "government-owned" water, then, DHHL has a right to thirty percent of the revenues derived from such permits. Whether or not administrative fees or profits from the sale and transfer of permits constitute "revenue" remains to be seen.

C. Common Law Water Rights Incidental to Hawaiian Home Lands

Since the Hawaiian Homes Commission has numerous lands, it may, of course, have water rights incidental to such lands. Such water rights would be in the nature of riparian, konohiki, appurtenant or correlative water rights associated with these lands. However, as was stated in the report of the Federal-State Task Force on the Hawaiian Homes Commission, the DHHL has not conducted, nor does it have the resources to conduct, an inventory of its water rights.

Thus, while there appears to be no current inventory or analysis of water rights incidental to DHHL lands, it will be necessary to assess the impact of any code provision relating to the retention, extinguishment or diminution of existing rights. While this may involve no more than an application of code provisions in the same way that they relate to private interests, the additional complication of the federal role in the creation and enforcement of DHHL rights must be evaluated.

In particular, since the Hawaiian Homes Commission Act is a creation of the Federal government from then federal lands, common law water rights associated with such lands may be viewed to have vested under Federal law at the time of the creation of the program (see Hughes v. Washington, 389 U.S. 290 (1967) and Borax, Ltd. v. Los Angeles, 296 U.S. 10 (1953)). Thus, the appurtenant, riparian, and konohiki rights which were incidental to Hawaiian Home lands in 1921 may be beyond the reach of any state water code. It still may be possible, however, that the State and the DHHL may reach a contractual understanding that, for certain compensation, DHHL will not exercise such common law water rights.

The fact that the konohiki water rights of the Hawaiian Home lands may have vested under Federal law must be compared with the possible effect of McBryde on other individuals. Thus, it is possible that if the McBryde decision in 1974 is not struck down, then, the McBryde decision would apply to all lands except Hawaiian Home lands. In essence, Hawaiian Home lands would be the only lands which would have the pos-

sibility of retaining konohiki rights. This conclusion, and the earlier conclusion regarding the broader interpretation of section 221, can only be reached by the acceptance of the principle that state legislative or judicial action subsequent to 1921 can only increase and not diminish the rights available under the Hawaiian Homes Commission Act.

In addition to the fact that these common law water rights may not be extinguished or diminished under a water code, it can also be reasonably concluded that the state may be without authority to compel the DHHL to submit these common law rights to the jurisdiction of such a state water code. As in the case of modifying section 221, it is the Federal creation of the Act which prohibits regulation by state law. Similar reasoning was used by the State Attorney General and the County of Hawaii in 1972 to conclude that the counties lack the authority to zone Hawaiian Home lands insofar as they were needed to satisfy the purposes of the Act. Moreover, section 206 of the Act expressly forbids the Governor and the Board of Land and Natural Resources from exercising their powers in respect to Hawaiian Home lands. Absent a change in Federal law, it therefore may be reasonably concluded that common law water rights associated with Hawaiian Home lands are, absent consent, beyond regulation by a state water code.

D. Federally Reserved Water Rights

It should be noted that the DHHL may be able to assert water rights under the doctrine established in Winters v. United States. Under the Winters doctrine, federal reservations of land are deemed to implicitly reserve sufficient water resources to fully effectuate the purposes of the reservation. These federally reserved water rights are the primary weapons for the assertion of water rights for Native American reservations. The doctrine is well established and even provides recourse for enjoining adjacent water uses by private individuals which interfere with water uses on the reservation.

As a practical matter, however, DHHL may never need to assert its Winters rights. First, the rights under section 221 should prove satisfactory for meeting the livestock and domestic needs of the Hawaiian Home lands. Second, while there is no legislative history on this point, section 221 may be viewed as the statutory equivalent of Winters rights. Hence, the clear legislative expression in section 221 may be deemed to exclude any possible judicial implication of reserved water rights. If this barrier is overcome, however, Winters rights

may prove useful as a means of providing water for agricultural needs, a purpose not within the explicit provisions of section 221 (b).

E. The "Ceded Lands" Trust

1. Generally

By virtue of the Hawaii Constitution and statutes, the Office of Hawaiian Affairs is entitled to a pro rata share of the income derived from public lands "ceded" to the United States at the time of Hawaii's annexation and subsequently transferred to the State of Hawaii. This obligation includes any income generated from the disposition of water found on or under state lands and may extend to all waters whether or not connected to state property.

2. The Scope of the Trust

The scope of the trust extends to property ceded by the Republic of Hawaii to the United States, including all public buildings and lands in addition to "all other public property of every kind and description belonging to the government of the Hawaiian Islands, together with every right and appurtenance thereto appertaining" (section 91 of the Organic Act, Act of April 30, 1900, 31 Stat. 141). At the time of annexation, surface water rights, to the degree thereto identified, were generally treated as appurtenant to the ownership of land. As such, these waters and water rights associated with public lands should necessarily be considered among the "public property" ceded to the United States.

If revenue were generated from the leasing of these waters, some amount would be due Native Hawaiians. In 1978, the State Constitution was amended to identify the Office of Hawaiian Affairs (OHA) as the proper beneficiary of the pro rata share of the trust. Subsequently, the legislature identified twenty percent as the appropriate share of the trust. Hence, OHA has a right to twenty percent of the income from the disposition of income from waters incidental to ceded lands.

Even without the adoption of a water code, this analysis leads to the conclusion that OHA may presently have a right to twenty percent of the income derived from leasing state water which is associated with state ceded lands.

The scope of waters which constitute such "ceded waters" may be vastly enhanced if the 1974 McBryde decision is held to be constitutional. In that opinion, the Hawaii Supreme

Court held that the sovereign is, and has always been, the owner of virtually all of Hawaii's surface water. The 1982 McBryde decision (Answers to Six Questions) reinforces this view, since under the Public Trust doctrine, the sovereign would also be the owner, albeit subject to a trust, of the waters. Thus, if all surface waters were "owned" by the sovereign in 1898, as were public lands and building, then, all such waters were ceded to the United States. As such, all surface waters would constitute "ceded waters".

If all surface waters are "ceded waters", then, OHA should be the recipient of twenty percent of the income associated with the disposition of these waters. As a practical matter, there may not be much income generated from the administration of a limited duration permit system. Permit fees collected to administer the system do not necessarily constitute "revenue". On the other hand, if a market system in water rights were to be adopted, OHA may have a claim on revenues and profits generated from the state's sale of water rights.

It should be noted that if this interpretation does prevail, namely that McBryde creates a "ceded waters" concept as to surface waters, such waters would be in a public trust by way of the explicit language of section 5 of the Admission Act. As a result, certain trust obligations may fall upon the state either as a matter of the general interpretation of the law surrounding the terms "public trust" or by way of the specific duties imposed by interpretations of section 5 of the Admissions Act itself. In other words, since the surface waters are subject to the trust created by the Admission Act, the state may be prohibited from acts such as disposing of the waters without compensation. Such a disposition may take place, for example, if the state were to grant freely--alienable, perpetual permits to private individuals for all surface waters with no compensation to the state. However, a full discussion of the ramifications of the public trust doctrine, as expressed either in section 5 or the McBryde opinion, is beyond the scope of this memorandum.

F. Theories of Reparation: Loss of Crown Properties

The minority report of the Federal Native Hawaiian Study Commission concludes that the role of the United States in the ultimate dispossession of Hawaiian land and sovereignty justifies some form of reparations to the Hawaiian people. While such claims are essentially directed at the United States and thus would have little legal impact upon the development of a state water code, these reparation claims do assert that the

state is the ultimate beneficiary of the wrongdoing of the United States. As a result, the state, as present holder of property belonging to the Native Hawaiians, has a moral, if not legal, duty, to provide an appropriate measure of relief.

Of particular relevance is the status of the lands, and hence the accompanying water resources, which once constituted the so-called crown lands. Crown lands were lands reserved by the crown at the time of the Mahele. The minority report of the Native Hawaiian Study Commission asserts that the dispossession of the Native Hawaiian interest in these lands can be the basis for reparations to the Hawaiian people. In particular, the minority report asserts a right to title in these land (and hence waters). The minority report states:

The Crown Lands were a domain which benefitted "the dignity" of the native monarchs and were a unique symbol of the Hawaiian government and native people. The interest Native Hawaiians held in these lands could be considered analogous to an aboriginal title interest. (Native Hawaiian Study Commission Report, Volume II at 93)

It seems that the thrust of this argument is that title to crown lands still remain in Native Hawaiians under the doctrine of aboriginal title. The majority report of the study commission concluded that the doctrine did not apply since aboriginal title had been extinguished. In any event the applicability of this doctrine to the development of a water code needs further study. It seems, however, that a reparations theory would involve money damages, either from the United States or the State of Hawaii, and thus not directly affect water allocation and permitting.

G. Customary Rights

In 1978, the following provision, affirming the state's commitment to the retention of Traditional and Customary Hawaiian Rights, was added to the Constitution:

Section 7. The State reaffirms and shall protect all rights, customarily and traditionally exercised for subsistence, cultural and religious purposes and possessed by ahupua'a tenants who are descendants of native Hawaiians who inhabited the Hawaiian Islands prior to 1778, subject to the right of the State to regulate such rights. (Hawaii Constitution Article XIII section 7)

Since, at present, no customary water rights have been clearly identified, this section will not have a direct impact upon the water code. However, since wet land taro cultivation was a subsistence right traditionally exercised by Native Hawaiians, this section can be interpreted as requiring the state to "reaffirm" and "protect" such farming. How such "reaffirmation" and "protection" will actually take form in a water code remains unclear. This section does provide support for claims that such farming constitutes a reasonable and beneficial use. The Hawaii Supreme Court decision in Reppun v. Board of Water Supply also clearly holds that taro farming is a reasonable use.

Finally, while no customary water rights have yet been judicially recognized (apart from the long history of recognition for appurtenant water rights), the recent Hawaii Supreme Court decision in Kalipi v. Hawaiian Trust Co., Ltd. in 1982 may serve as the source for future assertions of customary Hawaiian practices and usages of water.

H. Conclusion

1. The Hawaiian Homes Commission has a clear right to water derived from government owned lands if such water is subject to a water license. A fair and conservative interpretation of section 221 leads one to conclude that water from government lands (under a konohiki, riparian or appurtenant water right) which was granted to a private party, pursuant to a permit, would be subject to the priorities created under section 221. Such priorities would exist in favor of the Hawaiian Home lands for domestic, livestock and aquaculture uses. The rights under section 221 can only be diminished by Congress. The rights granted in section 221 would extend beyond the lands adjacent to Hawaiian Home lands.

2. A more expansive interpretation of section 221 would grant such priorities as to all surface waters subject to state permits, whether or not such waters originate from government owned lands. Such an interpretation would be based on the determination in McBryde that all surface waters were owned by the State. Hence, the term "government owned" waters as used in section 221 includes all surface waters. This interpretation depends upon the outcome of the McBryde litigation. Thirty percent of the revenue from such permits should belong to DHHL.

3. Similar to state government lands, the lands of the DHHL have common law water rights. It is probable that such rights will be considered to have vested at the time of

the enactment of the Hawaiian Homes Commission Act. If so, they are not subject to being repealed or overruled by judicial decision.

4. The State does not have the power to subject such common law water rights to regulation under a water code. Hence, the rights of DHHL in this context is similar to those of the United States military. Regulation by consent is possible. Furthermore, it is believed that the DHHL could contractually agree to refuse to assert common law property rights in return for compensation.

5. There is a possibility that the DHHL could assert federally reserved water rights. Nevertheless, section 221 may constitute an express extinguishment of such rights.

6. There is a constitutional and legal obligation to pay OHA a portion of the revenues derived from ceded lands. Common law water rights should be considered part of the corpus of the trust established with ceded lands. Hence, OHA has a claim to revenues derived from the licensing of government waters which originate on ceded lands.

7. The waters associated with the ceded lands trust may constitute all the surface waters of the state if state ownership of waters, as adopted in the McBryde opinion, gives to such waters the same status as ceded lands. Furthermore, if all surface waters are part of the trust created by section 5(f) a water code may not be free to alienate such waters from public control. Moreover, OHA may have a right to a pro rata portion of revenues generated from the sale or transfer of such waters by the State.

8. The constitutionally mandated policy of protecting traditional, subsistence, Native Hawaiian water uses bolsters arguments that activities such as wet land taro farming constitute reasonable and beneficial uses under a water code.

9. The ultimate disposition of the litigation in Robinson v. Ariyoshi, (McBryde) will have a substantial effect on Native Hawaiian water rights.

As can be seen, the analysis and extrapolation of each of these rights and theories obviously requires more development. There can be no doubt, however, that some, or all, of these issues will inevitably arise when a water code is considered.

III. The Constitutionality of Regulating Riparian, Appurtenant, Konohiki and Correlative Rights Under a Limited Duration Permit System

A. Introduction

A second set of critical issues pertaining to the adoption of a permit system focuses on the constitutionality of regulating existing common law water rights under such a system. It is important to assess the constitutionality of any proposed water code prior to its adoption. Of the alternatives presently before the Commission, alternatives involving limited duration permits raise the greatest potential for posing constitutional difficulties. In other words, if konohiki rights are held to still exist (McBryde is overturned), then, requiring a konohiki right holder to cut back such use under a limited duration permit poses much greater legal questions than the question of replacing such a right with a perpetual permit. However, while a perpetual permit system does not raise these particular constitutional questions, the development of a perpetual permit system may raise other issues regarding its appropriateness under the public trust doctrine. (See discussion of "ceded waters" concept, supra)

It is clear that the legal questions raised by all the various alternatives cannot be discussed in this memorandum. Hence, the scenario which poses the greatest constitutional difficulties will be analyzed. Such a scenario involves the following:

1. The 1974 McBryde decision is overturned. Thus, konohiki water rights to surplus and prescriptive water rights are reaffirmed. The language in the opinion regarding state ownership of surface waters is nullified.

2. Reppun v. Board of Water Supply, however, remains intact. Thus, that decision's holdings regarding riparian and appurtenant water rights remains valid.

3. The legislature adopts a limited duration permit system similar to Alternative No. 1. The key features of such a system are the following:

(a) Reasonable-beneficial use (in keeping with the constitutional amendment) is the standard for evaluating the award of permits for ground and surface waters.

(b) All existing uses based on common law water rights are issued permits to continue that portion of total use which meets the reasonable-beneficial standard. Since McBryde has been overturned, such common law water rights would include

konohiki rights. Any existing use, however, will be diminished if it fails to meet the standard. There will be no compensation in the case of such cut back.

(c) New uses, whether or not based on a claimed common law water right, will be issued only if the applicant meets the reasonable-beneficial use standard.

(d) All permits issued to existing and new users are limited to fifteen years or less. Permits to county water systems for domestic use shall be thirty years. Permits are renewable at the discretion of the administrative agency, in keeping with the application of the reasonable-beneficial use standard.

(e) Permits are not transferable, and modifications in use require administrative approval.

The purpose of choosing a scenario which raises the greatest constitutional questions is that it enables one to extrapolate results as to less extreme scenarios. Thus, if this system, given these conditions, will be held constitutional, then all systems which are less stringent in terms of regulating existing rights, will also be held constitutional. Given the importance of brevity in this memorandum, only conclusions will be presented. A detailed discussion of case law regarding the takings issue will be eliminated. Post--1983 developments in the law regarding "takings" have not been considered. Moreover, it is recommended that further research in this area be undertaken.

B. Critical Legal Issues

Five critical issues are posed by the constitutional "takings" issue. First, it must be determined to what degree common law water rights in the pre-McBryde era constitute property. Second, if such uses or rights are property, it is necessary to determine whether a permit system may constitutionally require that the quantity of such use be cut back. Third, it is necessary to determine whether inchoate rights, or unexercised uses based on valid common law claims to water, may be denied the right to fully exercise their claim under the reasonable-beneficial use standard. Fourth, it must be determined whether the limited duration of such permits is constitutional. Finally, other issues are raised under the state constitutional amendment requiring the assurance of appurtenant rights and existing correlative and riparian uses.

C. Property Interest in Common Law Water Rights

1. Generally

An analysis of whether a taking occurs when common law property rights are subjected to a permit system first requires a determination as to whether or not there is a constitutional property interest in such rights. The constitution only protects those rights and expectations that rise to the level of property.

2. Riparian Rights

If one examines the law of other jurisdictions, one would generally conclude that there is little discussion as to whether or not riparian rights constitute property interests. The following arguments would tend to show that if there are property rights in riparian rights, they are generally weak. In other words, permit systems imposed over riparian systems are generally held to be constitutional.

First, property rights are usually associated with an ascertainable corpus. Riparian rights are not rights to a particular body of water, but are rights to flow. On the other hand, case law in Hawaii would indicate that konohiki rights might have been viewed as rights to specific bodies of water. On the contrary, riparian rights are subject to the physical uncertainties regarding the amount of water flowing in a stream.

Second, riparian rights are subject to other variables. In the case of the reasonable use doctrine (applicable in this scenario because the Reppun decision is assumed to be valid) riparian rights are subject to the rights of others and thus may be cut back if a riparian's use harms the reasonable use of another. A major theme of the Hawaii Supreme Court's decision in Reppun v. Board of Water Supply is that all water rights in Hawaii should be viewed as involving inseparable notions of right and duty. Hence, riparian rights come with incidental obligations to the community of water users.

Third, riparian rights are held subject to various governmental servitudes. The most important of these is the Federal government's navigational servitude. Generally, a riparian owner is not entitled to compensation when his rights are impaired by an exercise of the Federal navigation servitude. (But see Kaiser Aetna v. United States 444 U.S. 164 (1979) where the assertion of the servitude was not reasonably related to the original purposes of the servitude, the enhancement of commerce on interstate waterways.) State courts have, at times, created particular equitable servitudes to protect

environmental interests (see Mono Lake decision by the California Supreme Court).

Thus, one might conclude that a riparian system does not speak of property rights in the usual sense. A riparian owner does not have a property interest in the quantities of water that are being used at any particular time. Rather, the property interest, if any, is as to a right to use water under a system of reciprocal and mutually beneficial rights.

The Hawaii Supreme Court in Reppun v. Board of Water Supply held that the source of riparian rights in Hawaii is statutory. However, this should not make a difference in terms of the above analysis. The Court interpreted the statute creating riparian rights as codifying the ancient Hawaiian system of surface water use, a system which was essentially similar to the reciprocal system of rights under riparian law.

In conclusion, holders of riparian rights have "property" interest, if that terminology can be used, in a system of equitable distribution. If that system, and these rights, were replaced by a similar rational system of distribution, there should be no constitutional, "takings", issue.

3. Property Interest in Correlative Water Rights

The system of correlative rights can be viewed as the groundwater corollary to the riparian reasonable use doctrine regarding surface waters. The correlative system involves reciprocal rights for those landowners overlying the groundwater aquifer. Each must respect the rights of others. As the Hawaii Supreme Court stated in City Mill Co. v. Honolulu Sewer and Water Commission, 30 Hawaii 912, 925:

Their rights are correlative. Each should so exercise his right as not to deprive others of their rights in whole or in part. In times of plenty greater freedom of use probably can be permitted and ordinarily would be permitted without question. In times of greater scarcity or deterioration in quality of waters, all would be required under this view to so conduct themselves in their use of the water as not to take more than their reasonable share.

Hence, the same analysis as applied to riparian rights should hold for correlative rights. The property right of correlative right holders, again, lies in the system of reciprocal rights and not in the groundwater itself. If this

system were to be replaced by a permit system which was not rational or equitable, a constitutional "takings" issue might arise. However, as in the case of riparian rights, if the system is replaced by a rational system of equitable distribution, no constitutional question should arise.

4. Property Interests in Appurtenant Water Rights

A greater property interest should be recognized in appurtenant rights as opposed to riparian or correlative rights. In particular, appurtenant water rights have a right to a specific quantity of water and have priority over all non-appurtenant rights with respect to this quantity. Furthermore, in both Reppun v. Board of Water Supply and Peck v. Bailey, 8 Hawaii 658 (1967) the Hawaii Supreme Court considered appurtenant rights to be akin to easements in favor of a dominant estate. As such, appurtenant water rights are somewhat different from the "rules of distribution" that characterize riparian and correlative rights.

In Reppun v. Board of Water Supply, the Court held that appurtenant water rights cannot be severed or transferred but can be extinguished by deed. This particular holding raises serious problems for certain individuals, (such as the small farmers involved in the McBryde litigation) who contracted away their appurtenant water rights. If such grants were in the form of an extinguishment by deed, then the purported grantee did not receive appurtenant rights to water and the grantor effectively lost his appurtenant rights. In such a case, both parties would have lost the benefits that they were contracting for. The grantor has no right to the compensation he has received, for, the grantee can receive no rights to water. Thus, the grantee has paid for nothing. Moreover, the grantee cannot receive the appurtenant water rights either by deed or contract. He may, however, simply appropriate the water in the stream that the grantor has now lost. In the case of an attempted contract to transfer appurtenant water rights, the contract would be null and void under the holding in Reppun. The grantor, however, in the contractual case, would have still retained his appurtenant water rights. The constitutional "takings" issue raised by the Reppun decision cannot be addressed here. The Reppun decision is presently before the United States Supreme Court. However, that Court has not decided whether or not it will hear the appeal. Any Supreme Court ruling on Reppun would undoubtedly affect the quality of the property rights in appurtenant rights.

In conclusion, appurtenant water rights have a stronger claim to property status than either riparian or

correlative rights. Whether or not such rights are immune from regulation because of the Federal or State constitutions will be discussed in following sections.

5. Property Interest in Konohiki Water Rights

The konohiki water right is the strongest of the pre-McBryde water rights. As to the so-called "normal" surplus waters, only appurtenant water rights have a higher claim of right. As to the storm and freshet flows, riparian rights have a higher claim. As to the normal surplus flow in surface waters, konohiki rights are unique in that they do not have reciprocal obligations. (Even appurtenant right holders arguably have reciprocal obligations among each other in a situation of diminished flow.)

As such, konohiki water rights need not make accommodations to others in the normal surplus waters. Furthermore, some pre-McBryde cases have held that the holder of a konohiki water right is the "owner of the waters." While such statements may raise conceptual issues as to whether or not any water rights can be considered non-usufructuary (how can any individual "own" the corpus of water, as opposed to having a right to a flow?) these statements are at least indicative of a desire to accord konohiki rights higher status on the scale of rights. In conclusion, since konohiki right holders have an unlimited use of the normal surplus waters, such rights should clearly be considered property.

D. Termination or Restriction of Inchoate (Unexercised) Water Rights

1. Generally

An important legal question arises when any new water code purports to restrict or terminate unexercised water rights. The following hypothetical may serve as an example of a typical case. Suppose an individual owns land above a groundwater aquifer. Under the City Mill decision, such a person has correlative rights. Assume that while others over the same aquifer have drilled wells and exercised their correlative rights; this particular individual has never done so. Subsequent to the passage of a water code, this individual is merely given the right to apply for a permit to pump groundwater. The code requires him to meet a reasonable-beneficial standard and does not give him a priority over others. Can this individual assert that his property has been taken without "just compensation"?

Some of the issues that arise in the above taking analysis include the following: are inchoate water rights "property" for the purposes of just compensation? If the individual had no real reason prior to the code to pump groundwater, and, after the adoption, has no new reason to pump, has anything been "taken"? In other words, if the individual can show no reasonable or beneficial reason to pump, can denial constitute a "taking"? Finally, does the fact that all groundwater users, including existing users as well as inchoate right holders, are subject to a comprehensive permit system applying a uniform standard, make a difference?

Four different approaches to this question have been identified in the judicial opinions from other jurisdictions. A brief summary of these approaches will be presented.

Under the first approach, the court applies the diminution of value approach as enunciated in Pennsylvania Coal Co. v. Mahon, 260 U.S. 395 (1922). Under this approach, a regulation is a taking where it causes a substantial decrease in the value of the property. The lower court decisions have tended to find no taking despite large reductions in value. E.G. Haas v. City and County of San Francisco, 605 F.2d 1117 (9th Cir. 1979) (decrease in value from \$2 million to \$100,000). But see, Pearce v. Village of Edina, 363 Minn. 533, 118 N.W.2d 659 (1962) (taking where decrease in value is from \$350,000 to \$100,000).

This "diminution in value" standard was the standard applied as to the Oregon comprehensive water code which provided for the termination of inchoate riparian and correlative rights. California-Oregon Power Co. v. Beaver Portland Cement Co., 73 F.2d 555 (9th Cir. 1934), aff'd, 295 U.S. 142 (1935) (not reaching the constitutional issue). The court noted several factors in refusing to find a taking. First, common law riparian rights were not absolute. Second, "natural" and "domestic" uses still remained for inchoate riparian right holders. Third, the court noted that a prior riparian holder could obtain water by other means under the code. Finally, the court found some support in its decision on the grounds that riparian rights are use rights rather than rights of physical ownership.

A second line of analysis focuses on the character of the public regulation rather than its impact on individuals. This view is based on a very strong emphasis on the public interest in regulation and the need to make choices among conflicting rights and interests in water. Thus, in the Arizona case of Southwest Engineering Co. v. Ernst, 79 Ariz.

403, 291 P.2d 764 (1955), the court upheld a statute which prohibited new wells from being drilled in a designated area, but allowed maximum pumpage from existing wells. The court relied on Miller v. Schoene, 276 U.S. 272 (1928) which held that where there is an inevitable choice between two conflicting classes of property, the public interest in the protection of one, even to the destruction of another is a valid exercise of the police power. There is some question as to whether the Arizona Court correctly applied Miller. Nevertheless, this line of cases does find strong underlying support in the notion that where there is a perceived crisis, the public interest in regulation will be given a fair amount of deference.

A third group of cases uphold state permits systems by analogy to land use regulations. In Village of Tequesta v. Jupiter Inlet Corporation, 371 So.2d 663 (Fla. 1979) the Florida Court held constitutional a limited duration permit system which resulted in the restriction of a former landowner's groundwater rights. The court analogized the power to regulate under a permit system with the power to zone land as expressed in Euclid v. Ambler Realty Co., 272 U.S. 365 (1926).

California, comprising the final category, offers a different result in that the termination of inchoate rights in that state was held unconstitutional. The 1913 California Water Code attempted to terminate inchoate rights. Subsequent cases held such terminations to be unconstitutional. It should be noted, however, that nineteenth century California case law established the natural flow riparian doctrine, and held that such rights could not be infringed upon by later legislation allowing prior appropriation. Moreover, the California decisions are dated and recent "takings" decision in the land use area have significantly changed the law since then.

2. Restriction or Termination of Inchoate Riparian and Correlative Rights.

Riparian and correlative rights will be treated together since their essential attributes are similar. In essence, they are reciprocal rights to a reasonable use among other adjoining landowners. The property interest in riparian and correlative rights lies in the "rules of distribution" as opposed to ownership of bodies of water. (See discussion regarding the property nature of correlative and riparian rights.)

In general, the termination of inchoate riparian and correlative rights under this scenario should not amount to

a taking. Such rights would be replaced by a "right" to apply for water if a proposed use qualified as reasonable and beneficial under the code.

First, inchoate rights should be viewed as property if the right, as exercised would have constituted property. In other words, inchoate riparian and correlative rights should have the same status as riparian and correlative rights which have been put to use. There is no general consensus regarding the property nature of such rights. It is best, perhaps, to consider such rights to constitute "property" for constitutional purposes. However, it can be concluded that these two rights are "weaker", in a property sense than konohiki and appurtenant rights.

Second, the attributes of riparian and correlative rights which render them weaker than konohiki and appurtenant, lessen the likelihood that termination of such rights will raise a takings question. In particular, riparian and correlative rights are not rights to specific bodies or quantities of water. Rather, they are rights to flow. The amount of this flow can vary because of physical changes in water availability. Moreover, the right to flow can vary because other reasonable uses are made of the water by adjoining riparian or correlative owners. Thus, riparian and correlative rights are reciprocal and subject to a concept of community of interest.

Third, both riparian and correlative rights may be viewed as rational systems of equitable distribution administered for the benefit of the group of riparian and correlative owners. If such a system were replaced by a statutory system of similar purpose, namely, equitable distribution among the same group by permit, such a system is likely to be upheld without the requirement of compensation.

Fourth, a taking may occur when all reasonable uses for property are wiped out by the termination of an inchoate right. This is not likely to occur under the present scenario as minimal domestic use will be allowed all property. Furthermore, a complete denial of water to any particular parcel should only occur where that parcel can claim no reasonable-beneficial use of water. In essence, such lands would be denied water, in a nonemergency situation, if their proposed use would be non-reasonable and non-beneficial (in other words, wasteful). In an emergency situation, if lands were denied any use of water, the takings issue would be judged under a different standard. In such a case, the need to pro-

tect public health and safety would likely be a sound reason for denying less critical demands for water.

Finally, restriction of these common law rights under a permit system would be similar to the land use regulations upheld in Penn Central Transportation Co. v. City of New York, 438 U.S. 104 (1978). In fact, restriction of inchoate riparian and correlative rights should be more acceptable than restrictions on land development rights since the water rights are "weaker" forms of property. The uncertainties involved in riparian and correlative rights establishes lower expectations than as to land rights.

3. Termination of Inchoate Konohiki and Appurtenant Water Rights

It is difficult to determine whether or not the restriction or termination of unexercised konohiki and appurtenant rights would amount to a taking. It can be said, however, that both of these rights present stronger cases for a taking. In particular, konohiki rights have an unqualified right to normal surplus water and thus are not subject to the reciprocal rights of others. Moreover, both appurtenant and konohiki rights are more of the form of property and much less "rules of distribution" than riparian and correlative rights.

It seems that any evaluation of a taking will have to be judged on a case-by-case basis. As to appurtenant rights, whether or not a taking has occurred is likely to be determined by looking at the impact of the restriction on the value of the land that possesses the unexercised appurtenant water right. If the restriction or termination of that right were to substantially diminish the value of the land to a point where it is almost valueless, then, a taking will have occurred.

It is not likely that a termination of an appurtenant water right would render the land completely useless. First, any land today which has unexercised appurtenant water rights undoubtedly has value that is independent of the water. In all probability such land is not being farmed. Moreover, if such land is not in cultivation, its domestic water needs are probably being met by the county water system. Hence, foreclosure of the water right should not dramatically affect the value of the land.

Secondly, subsequent to the Reppun decision, appurtenant water rights cannot be transferred. The effect of this decision is to undermine the economic value of the right.

If it cannot be transferred for value, and if it is not presently being used, then, it is a fair assumption that much of the present value of the land is not based on these unexercised rights. Hence, restriction of inchoate appurtenant rights will not sufficiently lower value to meet the diminution in value test.

However, inchoate appurtenant water rights may be protected from termination by the 1978 amendment to the State constitution. That amendment requires the "assuring of appurtenant rights". That language may be interpreted as guaranteeing all appurtenant water rights whether exercised or unexercised. On the other hand, one might read that language together with other language of the amendment which suggests that all waters be put to the reasonable-beneficial use test.

Using this reading, the only occasion when appurtenant water rights would be completely terminated would be when the holder of such rights was denied an application under the reasonable-beneficial standard. If a proposed user fails to meet such a standard should his appurtenant rights still be recognized? Thus, a question is raised as to whether the reasonable-beneficial standard, or the assurance of appurtenant rights takes precedence.

It should be noted that the amendment distinguishes between "rights" and "uses". It assures appurtenant "rights" while assuring only riparian and correlative "uses". It would seem that the clear intent of such a distinction would be to protect inchoate appurtenant rights. If the drafters had meant only to protect exercised appurtenant rights, the term "uses" could have been chosen for appurtenant rights as well.

Finally, it must also be determined what the term "assure" means. One question that is certain to be raised is whether or not such rights can be "assured" if they are replaced by a permit of sufficient duration. Moreover, it is necessary to judge the degree to which the amendment protects appurtenant rights from judicial modification. It is important to note that Reppun, a post-1978 amendment Hawaii Supreme Court decision, substantially diminished the economic value of appurtenant rights by rendering them non-severable.

In conclusion, the takings issue as to appurtenant rights is not as much of a problem as the proper interpretation of the 1978 amendment. Further work must be done on clarifying the intent of this amendment.

Konohiki rights present the best case for establishing a taking given a restriction or termination of unexercised rights. Assuming a total repudiation of the 1974 McBryde opinion, such rights present the strongest form of property among the four.

The major question as to these rights is whether or not the water right stands alone as a form of property or whether or not it must be evaluated as incidental to the land which generates the right. If the right stands alone, a complete termination of the right (with no replacement right issued under a permit) would constitute a complete destruction of value. As such, it would meet the "diminution in value" test as to a taking.

On the other hand, if the right is viewed as incidental to the land which creates the right, then, a case-by-case analysis must be made to judge the effect of the termination on the value of the land. From the rightholder's point of view, the first option is the best. Under the second option, he or she would have to show that the value of the land substantially dropped subsequent to the termination of the unexercised konohiki rights. This may be problematic since it may be hard to explain why konohiki rights have value as to any particular parcel if they have not yet been sold or put to use. On the other hand, the real value of such land might truly lie in its unexercised water rights.

Thus, the key issue is whether the rights should be legally viewed as standing alone or as incidental to the land. Normally, water rights are viewed as incidental to the land and the diminution analysis applies to the land. However, konohiki rights might be found to be rather unique in American jurisprudence. Konohiki rights can be distinguished from other rights on the basis of the inherent concept of ownership imbedded in such rights, the severability of such rights and the unqualified right to appropriate surface waters. Hence, a court might treat the right as standing alone and hence compensable.

Where the right is only partly restricted and not fully terminated, a different result may follow. In such a case, a comparison of the economic value of the inchoate right with the permit would have to be undertaken.

In the case of konohiki rights, the impact of a permit system depends greatly on the outcome of the McBryde litigation. Moreover, the analysis would also vary as to how the property interest in konohiki rights is defined.

E. The Constitutionality of Restricting Existing Uses Based on Riparian, Correlative, Appurtenant or Kono-hiki Rights

1. Generally

As presented, the scenario for this portion of the memorandum states that no compensation will be paid if existing uses based on common law rights must be cut to meet the reasonable-beneficial use standard. It should be noted that Alternative No. 1, as well as the Model Water Code, provides for "reasonable compensation" for such reductions. The purpose of posing the no-compensation alternative in this memorandum is to explore the constitutional dimensions of this problem, namely, whether, compensation is compelled by the fifth amendment. Of course, whether or not the law compels compensation, there are a host of political and economic reasons for paying such compensation. The point here is not to discuss the wisdom of such a decision, merely whether the law demands such a result.

2. Restriction of Existing Uses Based on Riparian and Correlative Uses

In short, the analysis regarding restriction of existing riparian and correlative uses mirrors the previous discussion regarding inchoate rights. It may reasonably be concluded that compensation would not be required where there is a restriction of riparian and correlative uses pursuant to a comprehensive water code which applies a uniform and rational standard. This conclusion is bolstered if the clear legislative purpose of the water code is to protect a critical resource and promote the general welfare.

First, much of this conclusion rests upon the prior discussions regarding the property interests in riparian and correlative rights. The uncertainty of riparian and correlative rights, due to the reciprocal rights of others and changing physical conditions, supports the notion that there is no taking when these rights are replaced by permits of finite amounts for fixed periods. In essence, the uncertainty of one system is replaced by the certainty of another. Hence, the detriment of lost quantity must be measured against the benefits derived from the fixed nature of the quantity under a permit system as well as the implicit promise of the permitting agency to protect the permittee from other claims. This benefit/burden type of analysis has been encouraged by the U.S. Supreme Court decision in Penn Central Transportation Co. v. City of New York, 438 U.S. 104 (1978) (recognizing that land-

mark designation benefitted city as a whole and therefore benefitted owners of the landmark site) and would probably be appropriate in this setting.

Hence, the property interest in riparian and correlative rights is in a set of equitable rules of distribution. If such a judicial system is replaced by an equitable administrative system which necessitates some reductions, no taking should be found. As a result, part of the takings analysis will focus on the criteria used to determine quantities under the permitting process. If the criteria is rationally related to the goals of the code and particular individuals are not singled out for disparate treatment, the process should pass constitutional muster.

Second, as stated earlier, the courts have generally upheld water codes which have altered the existing uses of riparians. In State ex. rel. Emery v. Knapp, 167 Kan. 546, 207 P.2d 440 (1949) the Kansas Supreme Court upheld the validity of the state's new appropriation law against complaint by riparian property holders. The constitutionality of the Oregon code was upheld, as previously mentioned, in California-Oregon Power Co. v. Beaver Portland Cement Co., 73 F.2d 555 (9th Cir. 1934), aff'd on other grounds, 295 U.S. 142 (1935). Courts in Nebraska and California have gone the other way (see Clark v. Cambridge and Arapahoe Irrigation and Improvement Co., 45 Neb. 798, 64 N.W. 239 (1895) and Herminghaus v. Southern Cal. Edison Co., 200 Cal. 81, 252 P. 607 (1926)). But the current validity of those decisions must be questioned in light of recent trends in the fifth amendment.

There are fewer cases dealing with permit systems and groundwater rights. One such case was The Village of Tequesta v. Jupiter Inlet Corp., 371 So.2d 663 (Fla. 1979). In that case, the court upheld a permit system which had the effect of diminishing the rights of a landowner who claimed under the "reasonable use" doctrine.

One means of mitigating the harshness of any reductions compelled by a water code would be to give the user a period of time by which to phase down his use. Such amortization periods would certainly aid in avoiding the possibility that a taking has occurred.

Any complete termination of an existing riparian or correlative use would be judged on a case-by-case basis. The reasons for such a termination would be important. In a nonemergency situation a complete reduction would be compelled only if the existing was wasteful or extremely non-beneficial

in light of other users. In such a case, a taking is not likely to have occurred since even under the previously prevailing riparian or correlative systems, there is no real right to continue a wasteful use to the detriment of others. Thus, one may fairly conclude that compensation would not be required if reasonable standards required that existing users be cut back.

Finally, it is necessary to address the issues raised by the 1978 constitutional amendment as to riparian and correlative uses. The second paragraph of that amendment states in full:

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

As to riparian and correlative rights, the issue is whether or not this amendment mandates grandfathering all existing and riparian uses. This is one possible interpretation.

On the other hand, if there had been an attempt to grandfather all existing uses at the date of the amendment, it seems that much of the other language of the paragraph would be unnecessary. For example, the amendment calls for regulating all water resources, defining beneficial and reasonable uses, establishing water use priorities and protecting ground and surface water resources. In other words, if correlative and riparian uses, as well as appurtenant rights were meant to vest, then, there would be little point to defining reasonable and beneficial uses or establishing priorities.

Moreover, there may be some ambiguity about the meaning of "assuring riparian and correlative uses." It is not altogether clear whether the language was meant to protect the quantity of use at some particular date or the system of riparian and correlative rules. There is some support for the latter interpretation since correlative and riparian uses can be based only on the extent of the legal right. Since the system of rights in both instances is based on reciprocal benefits and burdens, there is no right to a fixed quantity. This being the case, the "assurance" that the amendment speaks to logically

refers to assuring the continuation of the type of reasonable use system that characterizes both riparian and correlative rights. If that is the case, then, a permit system that simulates the essential features of the riparian and correlative systems would be an appropriate means of "assuring riparian and correlative uses."

Moreover, since quantities of use could have been cut back under judicial application of the riparian or correlative systems, administrative cutbacks pursuant to a reasonable-beneficial standard should not run afoul of the state constitutional amendment. There is no express indication that the purpose of the amendment was to give riparian and correlative right holders more than they held under the common law.

A further complication is the fact that the system of riparian rights in effect at the time of the adoption of the amendment was the "natural flow" theory. In 1982, the Hawaii Supreme Court essentially overruled this theory and applied the "reasonable use" theory. Additional difficulties occur when it is noted that the adoption of the "natural flow" theory, in the 1974 McBryde decision, has always existed under a cloud of uncertainty.

If the drafters of the constitutional amendment were thinking in terms of the "natural flow" theory (despite the uncertain status of the McBryde decision) the quality of the riparian right they were seeking to assure may be more absolute than the riparian right which exists under the "reasonable use" doctrine. The complexity in this area focuses on the constitutionality of a subsequent judicial decision altering the meaning a provision which meant something quite different to those who enacted the provision. The present McBryde litigation touches upon this question of retroactivity. Such issues are beyond the scope of this discussion.

3. Restriction and Termination of Existing Uses Based on Konohiki and Appurtenant Water Rights

The restriction or termination of existing uses based on appurtenant or konohiki water rights present the best case for requiring compensation. If an existing use is cut back and the new use is allowed under a permit, it seems that a comparison of the economic value given up with the economic value received will have to be undertaken. Hence, the taking analysis will have to be done on a case-by-case basis. Several factors need to be considered.

(a) Konohiki Rights

First, in the case of konohiki rights, it is hard to imagine a case of absolute termination. If the use prior to the permit was for some arguably reasonable purpose, some quantity of water is likely to be allowed under the reasonable-beneficial standard.

Second, given that the likely scenario involves diminution, not absolute termination, the court could apply the diminution in value test. If so, it will be important for the court to decide whether it is the value of the land, or the value of the konohiki right, separately, which must be measured. This has been discussed earlier.

Third, if the impact is measured in terms of land values, then, the reduction in use is likely to survive a takings challenge in that some reasonable use still remains in the land.

Fourth, if the court were to apply a Penn Central type of analysis, in addition to the diminution in value test, then the court would weigh the benefits of a permit system against the detriment of diminished use and limited duration. The major benefit that a permit system would introduce would be a sort of state guarantee of the waters allowed under a permit. In a sense, the permit system represents the state's adjudication of the water allowed under the permit. Hence, the state would be agreeing to abide by the award of water under the permit and to protect such an amount from future claimants. The quality of this legal security would have to be compared with the state of affairs that exists under a system of water rights administered under the judicial process. Judicial determinations of water rights have been subject to revision over time. In weighing the benefits and burdens, the court would note that the detrimental loss of a portion of quantity might be outweighed by the greater gain in legal security.

Hence, the overall benefits of a permit system, both to all users in general, and to the particular complainant, may mitigate against the finding of a taking.

In conclusion, konohiki water rights present the most difficult case to analyze. Specifically, it is difficult to judge how courts will analyze the property interests found in konohiki water rights. Moreover, it is difficult to weigh the added economic benefit of legal security under a uniformly applied administrative system.

(b) Appurtenant Water Rights

Much of the above analysis also holds true for appurtenant water rights. It is hard to conceive of the absolute termination of an existing appurtenant use under the reasonable-beneficial use standard unless it was wasteful. Hence, the more likely case will involve some diminution in use. As in the case of konohiki uses, appurtenant uses will probably have to be judged on a case-by-case basis. Reduction in appurtenant rights will be evaluated in terms of the impact on the land. As such, it will probably be difficult to show the drop in value that is required to trigger a taking. Moreover, the same benefit/burden approach will be used. Losses in quantity of water are likely to be offset by benefits in terms of restrictions on other users.

As in the situation involving termination of inchoate appurtenant rights, substantial questions are raised in terms of the 1978 constitutional amendment. Reference should be made to the discussion in that section.

F. The Constitutionality of Limited Term Permits

This section touches briefly on the legal aspects associated with short term permits. First, short term permits have been in effect in Florida and Iowa and have been held constitutional. Second, a possible taking issue does arise when a short term permit is issued in place of a perpetual right. Whether or not a taking has occurred depends on the tests that have been briefly discussed, namely the diminution in value and benefit/burden tests. Thus, if a permit is so short that it wipes out all reasonable investment-backed investments then, it will be held to be a taking.

Finally, a question arises as to when a permittee would have the right to sue. Assume that a perpetual permit is replaced by a fifteen-year permit. Such an individual receives less value in the form of the permit. Can he sue at the time of issuance if the statute provides for discretionary renewability at some time in the future? In general, the answer would appear to be negative. If the Supreme Court's decision in Duke Power Co. v. Carolina Environmental Study Group, 438 U.S. 59 (1978) serves as a guide, a court would find that the individual would have to wait until his application for renewal was denied before he could assert a taking. At the time of issuance, the possibility of renewal, fifteen years hence, still exists. Hence, some economic value is still present. In

conclusion, the limited term feature of a permit system, does not, by itself, present constitutional problems.

G. Conclusions to Part III

1. Riparian and Correlative Rights

Riparian and correlative rights should be considered property for the purposes of just compensation. However, they represent a "weaker" form of property as compared to appurtenant and konohiki rights. Riparian and correlative rights are subject to substantial legal and physical uncertainty. In essence, the property interest lies in a system of equitable distribution.

If this judicial system were replaced by an administrative system designed to ensure equitable distribution, there should be no taking in either the case of termination of inchoate rights or reductions in use. Under the diminution in value test, the court would look to the impact of the regulation on the land that generated the right. Furthermore, under the benefit/burden analysis, the benefits of a comprehensive system of regulation are likely to be an important factor against the finding of a taking.

The 1978 constitutional amendment presents difficult questions as to the protection of existing riparian and correlative uses. Inchoate riparian and correlative rights do not appear to be protected. Two interpretations emerge. Under one, riparian and correlative uses should be grandfathered. Under a second, the overall goals and purposes of the amendment would be thwarted if such large amounts of water could not be regulated. Moreover, riparian and correlative rights do not provide for fixed quantities. Such rights are essentially systems of preserving reciprocal and reasonable uses. Under this interpretation a reasonable-beneficial permit system replacing such common law systems could meet the terms of the amendment.

2. Appurtenant Rights

Appurtenant rights can be constitutionally terminated or adjusted under a permit system. Whether a taking has occurred would be evaluated on an individual basis. The key issue is whether or not the reduction or termination of use will substantially diminish the value of the land. Under the permit system, reasonable or beneficial appurtenant uses should be preserved in some quantity. Hence, only non-beneficial or wasteful uses will be reduced or terminated. In such cases,

reduction, given the limited value of the use, and the important public goals of the code, is likely to be held constitutional.

The more substantial question is whether or not inchoate and existing appurtenant uses should be grandfathered under the 1978 constitutional amendment. This question needs further investigation.

3. Konohiki Rights

Konohiki rights represent the best case for compelling compensation. Much of this analysis turns on the outcome of the McBryde decision and judicial determination of the nature of the property right. If the right is held to exist separately, then reduction in termination will be measured by the diminution of the economic value of the right alone. If viewed as a right incidental to land, then the diminution in land value will be the key factor. A significant aspect of the analysis will be that, under a code, only non-beneficial, non-reasonable konohiki uses should be cut back. The broad powers of the state to promote the general welfare, particularly as to a scarce resource, should allow the state to reduce non-beneficial konohiki uses.