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Barriers and Strategies to the Development of Co-Management Regimes in New Zealand: The Case of Te Waihora

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Lake Te Waihora, near Christchurch on the South Island of New Zealand, has been at the forefront of a public policy debate concerning the co-management of Conservation Lands. Several developments have strengthened the assertion by Ngai Tahu, a Maori tribe, that they should be much more involved in the management of the water body. Yet despite these catalysts for co-management, several conservation-oriented interest groups with their close ties to the Department of Conservation and their ability to engender public concern successfully prevented a quick agreement. In response Ngai Tahu has sought to employ a variety of strategies (i.e., utilize the courts, display the viability of co-management, build partnerships, and develop their human and financial resources) in combination to help them secure co-management of Te Waihora. In the end these strategies were successful. An analysis of this case compared to Pinkerton's theoretical propositions on the development of co-management regimes. This comparison is then given evidence to support six of the propositions and evidence to refute the remaining two. In addition, a new proposition, and a new dimension on a proposition, were developed. The study concluded that further testing of propositions is required to determine which ones hold up under the rigor of co-management case contexts. A further area of suggested research is to analyze the capacity of those bodies seeking shared management to determine their ability to recognize facilitating opportunities and implement strategies successfully to overcome barriers.

Key words: co-management, Ngai Tahu, Maori, conservation estate; New Zealand

Common property resources, or resources held in collective ownership, have been subjected to serious degradation through overuse all over the world (McCay and Acheson 1987). Hardin (1968) believed that this tragedy of the commons resulted from a conflict between collective and individual interests. In his example of graziers using a common pasture, he argued that each farmer would continue to add to their herds as long as the marginal return from each additional animal was positive, even though the marginal rate of return was falling and the resource was being depleted. Sustainable use of the resource would require limiting the number of animals to within the carrying capacity of the pasture. However, individuals will

not limit their herd sizes unless they know that all others are as well.

Laver (1984) and Ostrom (1987, 1990) offered three solutions to this prisoner's dilemma:

- 1) privatization of the commons (individual management);
- 2) regulation by an external body (state-level management); and
- 3) collective agreements among local resource users (local-level management).

While regulation by governments and privatization have been most advocated by politicians and academics, much less attention has been directed to local-level management. However, over the last two decades, local resource users have been increasingly vocal in urging central governments to give them management responsibilities. Indigenous peoples have been particularly strident in their demands, because of their close relationship with the environment, their dissatisfaction with Western approaches to resources management, and most significantly their successes in obtaining legal rights to environmental resources through litigation. Sometimes, the result of these actions has been the blending of state-level and local-level management systems, or co-management.

Many benefits can result from this compromise between government concerns for the efficient utilization and protection of resources, and local concerns for self-determination, equality, and conservation (Jentoft 1989:145-147). Advocates argue that

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co-management produces: 1) better decisions; 2) more equitable decisions; and 3) decisions that are more likely to be followed. First, improved decisions arise because both Western scientific and local knowledge are used. Western scientific knowledge is able to provide general information over a broad area, but often lacks the intimate detail of a particular area (Johnson 1992:8; Murdoch and Clark 1994:115). Local knowledge can supply that rich detail of a specific geographic area over a long period. Thus, the two sets of knowledge systems can complement one another and provide managers with better information that will result in improved decision-making. Second, including groups previously marginalized in the management process can enhance equity. Third, implementation of decisions is more likely because they involve participation of resource users and not just resource managers (Jentoft 1989:146). In contrast, government management is primarily top-down and often has difficulties in producing decisions that are legitimized by local resource users.

Despite these potential benefits, the pursuit of shared management by local groups frequently runs into sufficient opposition to successfully prevent co-management regimes from being developed. The purpose of this study is to identify the barriers to co-management, and the strategies used to overcome them, in an examination of the policy deliberations regarding the potential joint-management of the Conservation Estate in New Zealand. For illustrative and analytical purposes, the specific example of Te Waihora (Lake Ellesmere) is used. A comparison of these findings will then be made to the co-management research conducted by Pinkerton (1989:27; 1992:339-340).

Development of Co-Management Regimes

The academic literature on co-management is still evolving. The bulk of the written material either discusses the merits of co-management or examines examples of co-management and their successes or failures. Research on the process of how co-management institutions develop is limited. In this category of research, only Pinkerton (1989, 1992) (Table 1) has developed theoretical propositions relating to the barriers that those attempting to secure co-management encounter and the strategies they select to overcome them. While the literature in this topic area on the civil society is further developed both generally, and specifically on environmental matters, it does not focus directly on the shared management of natural resources. Consequently, Pinkerton's work will be used in an analysis of the findings of the Te Waihora case.

Methodology

This study utilized a case study approach. The selection of this research strategy was in keeping with that used by Pinkerton, thereby facilitating easy cross-referencing. Case studies have frequently been used in process studies, such as this one, because they allow the researcher to understand the intricacies and inter-relationships of processes that combine to make-up the overall situation (Yin 1989). Te Waihora was chosen for this research because it represented the highest profile example of the co-management debate in a country that was just on the verge of defining how it would manage its environmental resources in partnership with its indigenous people.

Table 1. Pinkerton's Theoretical Propositions on the Development of Co-management Regimes

Pinkerton (1989:27)

- Co-management is most likely to develop when...(those desiring co-management)...show a willingness to contribute financially to the rehabilitation of the resource, and/or contribute to other management functions.
- Co-management is most likely to develop when there is an opportunity for a negotiation process and/or experimental co-management of one simple function, which may later be expanded to other functions.

Pinkerton (1992:339-340)

- Barriers to negotiating and implementing co-management agreements are greater in proportion to the power of other parties affected and the extent to which they have captured a government agency.
- Previous co-management agreements may facilitate reaching a negotiating posture, but may not facilitate negotiation of new agreements or implementation of new agreements.
- The composition of courts and the political climate in any particular decade may influence the degree to which court action is preferred over political action.
- Barriers to implementing co-management are more easily overcome through alliances of stakeholders, non-government organizations, and agencies with complementary resources, especially when these parties form issue networks [cf. Hecllo 1978] which generate new technical information and alternative models.
- In situations of substantial power differential between parties, implementation of co-management agreements may be furthered by an appeal to the general public interest through the use of corporatist-associative style policy-making (i.e., where an organization attempts to represent the public interest to increase its political leverage) forums. This strategy may be most successful in more developed regions with diversified economies and stakeholder groups.
- Barriers are more easily overcome through the use of multiple sources of power, such as courts, legislature, public boards and citizen initiatives at strategic times, creating a spillover effect from one to the another.

Data sources for this article included both written material (i.e., government documents, academic literature, and a tracking of newspaper articles), and interviews with key-informants. Twenty-five interviews were conducted in June and July 1995 with Maori people (7), government bureaucrats (9), interest groups (5), and academics (4), involved in the co-management public policy debate in New Zealand. The specific questions asked of each respondent varied with respect to their affiliation with a particular interviewee group and their knowledge of events, but all focused on the roles played by the various actors in the policy debate concerning the co-management of Te Waihora. Several university and government agency libraries were searched for pertinent literature. The *New Zealand Herald* and *Christchurch Press* were also reviewed for information between June 1995 and October 1996.

Information from the written sources and interviews was combined to complement each other. Written documents were relied upon more in identifying the impetuses to co-management of the Conservation Estate and Te Waihora and the interviews were used primarily to provide information on the barriers and strategies to the joint-management of Te Waihora. The conversations with the seven Maori respondents were particularly useful in identifying the strategies utilized by them in an attempt to secure co-management for Te Waihora.

Catalysts for Co-Management in New Zealand

Before getting to the case study of Te Waihora, it is necessary to have some understanding of national events in New Zealand concerning the evolution of Maori rights. In particular, the establishment of a forum for Maori people to lodge grievances regarding land and natural resources and the incorporation of treaty principles into resource management law have been important precursors to today's contemplation of co-management of Conservation Lands. While these incidents have definite links to the international indigenous movement, it is not within the scope of this article to review these connections.

REMEMBERING THE PAST AND THE FORMATION OF THE WAITANGI TRIBUNAL

The Treaty of Waitangi was signed between the Maori and British peoples in 1840. Initially, the agreement was beneficial to both parties. However, with increasing *pakeha* settlement in the decades following the agreement, there was confiscation of tribal lands and increasing marginalization of Maori by the British administration (Orange 1987:185-225). Of particular significance to Maori was their exclusion from the use and management of natural resources that they relied upon for their physical and social well being (Cant 1993:9). In the late 1960s and early 1970s, Maori activism began to increase initiated by a knowledge of the postwar decolonialization of Africa, Asia, and the Pacific; developments sympathetic to the interests of indigenous peoples in the United States and Canada; and young Maori developing a proficiency in *pakeha* institutions through education (Orange 1987:238-254).

With enlarged public awareness and public sentiment towards Maori issues, the Treaty of Waitangi Act was passed in 1975. Under this legislation, an advisory tribunal was empowered to hear grievances regarding actions or omissions with respect to the Treaty, but only on matters that took place after the passage of the Act. In 1985, after continuing Maori pressure for reform, the mandate of the Tribunal was enlarged to hear grievances back to the original signing of the Treaty in 1840 (Cant 1993:12). Thus, the Maori now had a forum in which they could lodge claims regarding historic injustices.

The focus of the grievances brought before the Tribunal are mainly "management rights, rights of tribal input into decisions affecting the environment and resources" (Boast 1989:8). Early reports of the Waitangi Tribunal supported Maori interests in environmental matters. An analysis of the Tribunal's work revealed that it had a significant political impact on "issues such as planning and environmental law and raised significant ways in which *hapu* (family and district groups) and *iwi* (Maori tribal groups) could participate in local and regional government" (Cant 1993:21). A further strengthening of Maori interests in environmental matters occurred as a result of a court decision in 1987.

THE COURT OF APPEAL AND THE PRINCIPLES OF THE TREATY OF WAITANGI

In 1986, the New Zealand government introduced a Bill that potentially compromised the ability of the government to deal fairly with treaty claims. The Treaty of Waitangi Act (1975) specifies that only Crown Land can be used in treaty settlements.

Table 2. The Court of Appeal and the Principle of the Treaty of Waitangi

The Essential Bargain	Refers to the British acquiring sovereignty over New Zealand/Aoteroa in exchange for tribal rangatiratanga (authority of Maori tribes to make decisions and control resources).
Partnership	Refers to the responsibility of each treaty partner to act towards each other reasonably and in good faith.
Active Protection	Refers to the duty placed upon the Crown to actively protect Maori people and their land.
Tribal Rangatiratanga	Refers to Maori retaining chieftanship over their lands and resources while receiving all rights and privileges of New Zealand citizenship.

Adapted from the Parliamentary Commissioner for the Environment (1988, p., 112-116)

The proposed State Owned Enterprises Act allowed the transfer of Crown Land to a new Land Corporation for potential sale to third parties. Maori groups and the Waitangi Tribunal voiced their opposition to the statute, fearing that lands that might be used in a claims settlement would no longer be owned by the Crown, and, therefore, unavailable for compensation. In response, the government amended the proposed Bill in two respects (Boast 1987:241). First, the statute was changed to allow the government to recover lands for those claims filed before the Act received the Governor-General's assent. Second, a section was added that read:

Nothing in this Act shall permit the Crown to act in a manner that is inconsistent with the principles of the Treaty of Waitangi (State Owned Enterprises Act 1987:9).

Unable to file all claims before the passage of the Act into law the New Zealand Maori Council began litigation to seek a stay in its operation (Temm 1990:88). The Maori Council argued before the Court of Appeal that the broad selling of Crown Lands of available lands for Treaty Settlements was inconsistent with the principles of the Treaty of Waitangi. To rule on the case the Court had to determine what those principles were (Boast 1987:243). The five judges identified four primary principles of the Treaty of Waitangi (Table 2). The judgement, issued in June 1987, decided that the government's failure to set up a system acceptable to Maori for the transfer of assets to State Owned enterprises was a breach of its partnership responsibilities (New Zealand Maori Council V. Attorney General 1987).

While the principles of the Treaty of Waitangi could not be incorporated into general law, they could be incorporated into legislation which directly referred to them (Boast 1987:245). In particular several land and resource related statutes made reference to treaty principles (Ministry for the Environment 1988:5; Mason 1993:1). Of specific importance to this article was the wording in the Conservation Act of 1987 s(4) which states that:

This Act shall be so interpreted and administered as to give effect to the principles of the Treaty of Waitangi.

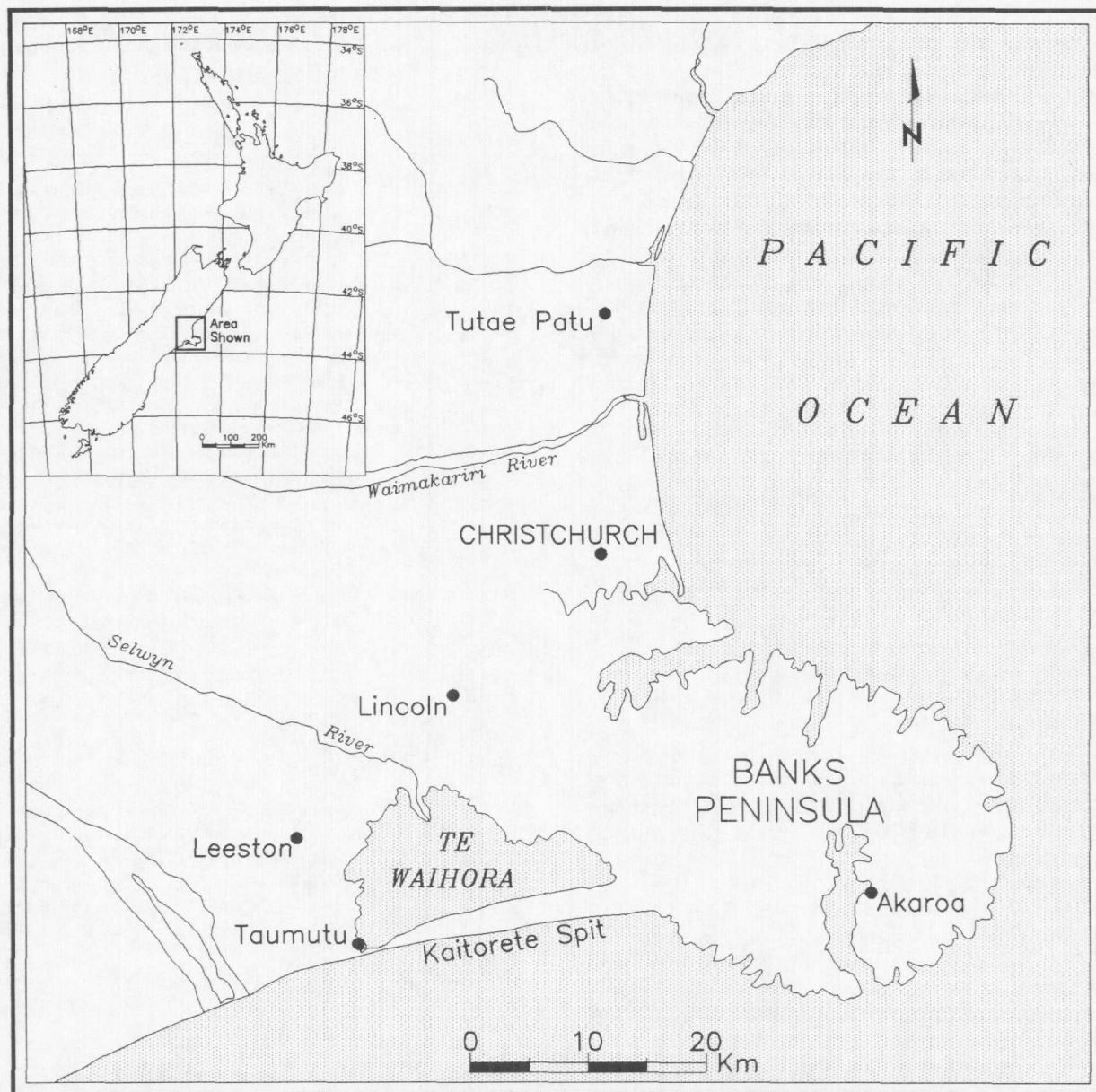


Figure 1. Location of Te Waihora

Many have understood the words “to give effect” to obligate the Department of Conservation, who administers the Act, to negotiate with *tangata whenua* shared decision-making arrangements. For example, the Parliamentary Commissioner for the Environment (1988:28) advised that:

...the implementation of the Treaty principles of partnership and tribal *rangatiratanga* (iwi authority to make decisions and control resources) requires a change in the existing power equation between the Treaty partners, giving *tangata whenua* an increased share in actual decision-making power at both central and regional levels.

Owen (1992:14) added that “In line with the principles of the Treaty, the Department of Conservation is seeking to achieve joint decision-making on any allocation of the resource, with the partners assuming shared and singular responsibilities in the process.”

Te Waihora, Ngai Tahu, and the Waitangi Report

SIGNIFICANCE OF TE WAIHORA AS A PLACE FOR CO-MANAGEMENT

Following the Court of Appeal case in 1987, Maori groups hoped that they would be able to realize co-management of their most important *taonga* (treasure, valued resources). Te Waihora was one such place. This lake is located on the east coast of the South Island, 20 km south of Christchurch (Figure 1). The body of water has always been a significant source of food for the Maori tribe Ngai Tahu (Tau *et al.* 1990:5.49) and was traditionally renowned for the quality and quantity of its fish, eels, waterfowl, and medicinal plants (Waitangi Tribunal 1991:863-870; James 1991:22-23; Office of Treaty Settlements 1993:22-23). The International Union for the Conservation of Nature also recognized the significance of Te Waihora in

identifying the wetlands surrounding the lake as being of international importance (Gough and Ward 1994:17).

Te Waihora's management is complex and fragmented, with multiple uses, perspectives, and agencies. Table 3 displays the responsibilities and interests of those who have a role in the lake. Although the lake is presently the fifth largest in New Zealand, covering 16,000 to 20,000 ha (Gough and Ward 1994:17), it was historically four to five times its present areal extent. The lake has been artificially drained by digging a channel through the Kaitorete Spit to the ocean since the early 1900s (Figure 1) to facilitate the expansion of the agricultural industry that now occupies most of the former lake bed. Local Maori have long expressed opposition to contemporary management structures that has conflicted with their values:

...there are substantial conflicts between many of the contemporary uses of Te Waihora and the traditional Maori view of the resource. Traditional Maori management of the lake as a fish farm is antithetical to water sports and current commercial fishing practices. Traditional hunting beliefs and practices are opposed to modern methods of game bird hunting and fishing. Iwi interests in sustaining *mahinga kai* (traditional places for food gathering) have been threatened by wildlife protection measures. Traditional Maori views of integrated management conflict with systems of environmental management which divide the lake's ecology into separate administrative components (James 1991:13).

The discontent among tangata whenua has led to calls for co-management of the lake with Ngai Tahu. This desire was formally expressed in the Ngai Tahu Claim brought before the Waitangi Tribunal.

THE NGAI TAHU REPORT: A FURTHER PUSH FOR CO-MANAGEMENT

Ngai Tahu brought forth grievances covering the majority of the South Island (Figure 2) to the Waitangi Tribunal in 1986. At issue were eight land purchases and the loss of *mahinga kai*. The basis of the claim for Te Waihora was that the lake was part of the area sold under the Kemp purchase that precluded the sale of *mahinga kai*. Despite acknowledgement by the Maori Land Court in 1868 that the tribe had always regarded this place as a valuable fishery and as the tribe's most highly prized and valuable of all their possessions, despite strong protests by Ngai Tahu over the years, no reserves of any kind were ever created over the lake to protect its use for Ngai Tahu (Waitangi Tribunal 1991:154).

Tipene O'Regan (1989:253), the chief negotiator for Ngai Tahu, stated that *mahinga kai* "is one of the most emotionally charged elements of the Ngai Tahu claim." After hearing evidence from August 1987 to October 1989, the Waitangi Tribunal released its main report in February 1991 regarding these claims. Included among its recommendations was a call for the joint-management of Te Waihora. After the Waitangi Tribunal made these recommendations it seemed to many of the interviewees that co-management of Te Waihora was imminent, because of the political pressure it placed on the national government to act. Certainly, the government began to take strides to arrive at a co-management arrangement for the lake. For example, James (1991:25) completed a report for the

Table 3. Responsibilities and Interests of Stakeholders in Te Waihora's Management

Stakeholder	Interest
Department of Conservation	Owns the lake bed and approximately two-thirds of the wetland area. Responsible for conservation of the fisheries and wildlife values.
Ngai Tahu	The lake maintains cultural and economic significance as a traditional food gathering place. Five local groups have traditional authority over the lake (Rapaki, Port Levy, Ngai Tuahuri, Wairewa, and Taumutu). Together they coordinate their interests through the Waihora Management Board.
Canterbury Regional Council	Has significant responsibilities with respect to the provisions of the Resource Management Act including developing water management plans, scientific research, resource consents, lake control activities, and consultation with tangata whenua.
Selwyn and Banks Peninsula District Councils	Limited responsibilities over management of surface of the lake under the Resource Management Act. Also prepares District Schemes that may have an impact on the lake, e.g., sewage management.
Minister of Agriculture and Fisheries	Responsible for commercial fishing licenses, research, and monitoring.
Farmers	Involved in lake edge farming with interests in drainage schemes, land reclamation, and stop banking. Are concerned that Ngai Tahu co-management may result in flooding of some farmland in an attempt to improve Te Waihora's water quality and conservation values.
Commercial Fishers	Fish for eel, flounder and mullet. Are concerned that Ngai Tahu co-management will reduce the size of their catch.
Recreational Interests	Includes game bird shooting, bird watching, fishing, watercraft activities, photography, horse riding, walking, picnicking, and off-roading.

Adapted from James (1991, p. 6)

Department of Conservation on the matter shortly after the Ngai Tahu Report was released and stated that:

Te Waihora presents an ideal opportunity to the Department of Conservation to develop a partnership with Ngai Tahu...The Waitangi Tribunal's recommendations provide direction on how the relationship between Ngai Tahu and the Crown may proceed. The *iwi* is keen to take management responsibility and the Department acknowledges both its obligations to recognize the *rangatiratanga* of the tangata whenua, and the conservation concerns it has in common with them.

In addition, a discussion paper was prepared by the Office of Treaty Settlements (1993) identifying options for the co-management of Te Waihora. Included in the recommendations

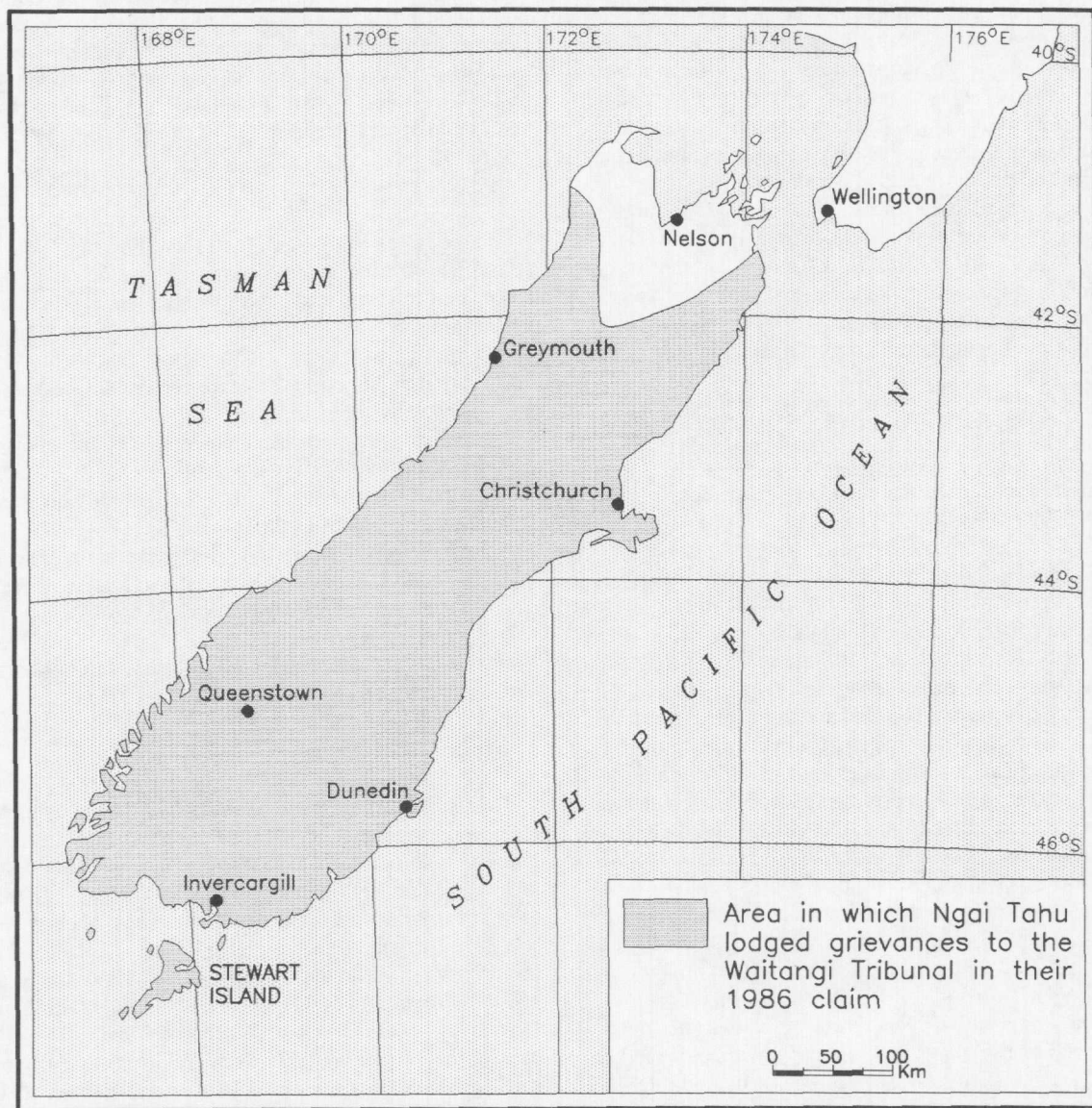


Figure 2. Ngai Tahu Claims Area

was the establishment of two *kaitiaki* bodies: one for the lake's wetland belt between Ngai Tahu and the Department of Conservation; and another for water and land use between Ngai Tahu and the Canterbury Regional Council.

However, it was not until early October 1996 that the Crown and Ngai Tahu reached a treaty claims settlement that included co-management provisions for Te Waihora. This arrangement was similar to that proposed by the earlier discussion paper (Office of Treaty Settlements 1993:28-44) where: 1) Ngai Tahu would be recognized as the statutory advisor on lands administered by the Minister of Conservation; and 2) Ngai Tahu would develop a joint-management plan with the Canterbury Regional Council, and other relevant local governments, within a five-year time period (Office of Treaty Settlements 1996a, b). Before reaching this resolution, however, Ngai Tahu encountered barriers that substantially reduced the likelihood of an agreement being reached. In response, Ngai Tahu

implemented a number of strategies to overcome these barriers. The following section will describe how these barriers and strategies were manifest in the current case study.

Co-Management of Te Waihora: Barriers and Strategies

BARRIERS TO CO-MANAGEMENT

Interviewees identified several sources of opposition to the development of a co-management scheme for Te Waihora. Local users of the lake, such as farmers, fishers, hunters, and recreationists, were concerned that Maori involvement in lake management will not be compatible with their interests. In addition, some local government agencies did not want to relinquish some of their power (e.g., Canterbury Regional

Council, Selwyn and Banks District Council, North Canterbury Fish and Game Council) to *tangata whenua*. However, the principal impediment to co-management identified by respondents was the sensitive nature of the national public policy debate with respect to the use of the Conservation Estate in Treaty Claim Settlements. The stalemate in this debate was largely a result of the advocacy of several significant national interest groups, including the Royal Forest and Bird Protection Society, Public Access New Zealand, and Federated Mountain Clubs. These groups are opposed to co-management of the Conservation Estate with *iwi* and *hapu* for fear that there will be degradation in conservation values and a limiting of access to these areas. For example, Mason (1993:14), writing in a Public Access New Zealand monograph, stated that:

The Department of Conservation, as the central custodian of the public estate, is limited by statute to preserving natural resources for their own intrinsic worth and allowing public uses consistent with that objective. Fundamental changes to this founding 'preservation-with-use' philosophy and to public rights of access and enjoyment are at issue.

These interest organizations have been effective lobbies against more Maori control because they maintain close ties to the Department of Conservation, and have a significant membership. Twelve informants from inside, and outside, of this government department suggested that these interest groups have captured the conservation agency. Little or no progress can be made with respect to co-management of Te Waihora, they declared, as long as the Department of Conservation makes the final decisions. In order to make headway, they believed that there had to be political support from the national government. However, the general population's concern over concessions to Maori prompted a tenuous majority government to release its Crown Proposal for the Settlement of Treaty of Waitangi Claims in December 1994 (Office of Treaty Settlements 1994). This draft policy statement sought to limit government liabilities with respect to Treaty Claims and stated that the Conservation Estate "is not readily available for the settlement of Treaty Claims and should be considered only in certain circumstances" (1994:16). The document goes further to mirror the above-mentioned interest groups' interventions, stressing that Conservation Lands will not be used for Treaty Claims if there is any potential degradation of natural and historic values, or a reduction in public access.

In 1995, the Waitangi Tribunal completed its Ngai Tahu Ancillary Claims Report dealing with smaller issues that it did not have time to cover in its first report. The Tribunal made two comments concerning the lack of progress at reaching co-management agreements. The first was that the Tribunal did not believe that Crown ownership was a prerequisite for conservation integrity. The second statement the Waitangi Tribunal made was that there was a lack of understanding of the legal options for co-management (Waitangi Tribunal 1995). Indeed, it is true that in New Zealand, there are few examples of co-management to learn from and certainly not any that are of similar scope and scale to what would be involved with Te Waihora. Ten informants noted that both the Crown and Ngai Tahu seemed to have difficulty in formulating a position after the release of the Ngai Tahu Report in 1991 that first recommended co-management of the lake. Certainly, this

problem hindered progress in reaching an early agreement when there was initial momentum. Since then, the Department of Conservation did preliminary work evaluating various legal instruments within current legislative provisions that could ensure that Maori ownership of lands maintained conservation values and access (Department of Conservation 1995).

STRATEGIES FOR ACHIEVING CO-MANAGEMENT

Interviewees from Ngai Tahu identified the following five strategies utilized in an attempt to overcome government reluctance to enter into a co-management agreement for Te Waihora:

- 1) to utilize the courts to more clearly define Maori rights to the environment;
- 2) to display that co-management is a viable option for the management of natural resources;
- 3) to build partnerships with other actors who support the co-management of the lake;
- 4) to develop the human and financial resources so that they are better equipped to negotiate with the Crown; and
- 5) to utilize a variety of strategies to create a synergy.

These strategies were selected because the context of the situation provided incentives to take these measures.

1) Utilization of the Courts

Treaty claim negotiations with Ngai Tahu began in 1992. However, progress slowed with the lobbying of interest groups opposed to the co-management of the Conservation Estate, the 1993 national election, and dissatisfaction by Ngai Tahu with the Crown Proposals for Treaty Settlements. The government suspended negotiations when Ngai Tahu rejected an interim offer by the government in 1994. After 21 months of a stand-off, the Crown and Ngai Tahu resumed negotiations in June 1996 (New Zealand Press Association 1996). Before getting back to the bargaining table, Ngai Tahu strategically engaged in litigation in an attempt to force the Crown to resume discussions by better defining their legal rights to natural resources (New Zealand Press Association 1996).

Two initiatives with respect to litigation by Ngai Tahu may be noted. One was an attempt to maintain sole rights for tourist licenses distributed by the Department of Conservation for viewing whales at Kaikoura. The Court of Appeal, in September 1995, reached a decision in favor of Ngai Tahu, stating that the department had a responsibility to do more than only their consultation program (New Zealand Press Association 1995a). A second court proceeding sought an injunction to prevent the sale of any State Owned Enterprise land within Ngai Tahu's traditional territory. In early October 1995, Ngai Tahu won an injunction that largely prevented the Crown from selling State Owned Enterprise land within their traditional territory (New Zealand Press Association 1995b).

Ngai Tahu's strategy of court action was at least partially responsible for getting the government back to the negotiating table to discuss co-management. However, other events unrelated to Ngai Tahu were also a factor in changing the government's stance concerning treaty negotiations. These influences included the formation of a new political party from

existing Parliamentary members that provided the governing party with a more secure majority, general satisfaction among the public with the settlement of another Maori group (i.e., the Tainui) in 1995 which did not include the co-management of any significant sites, and a desire to reach an agreement before the national election in October 1996.

2) Viability of Co-Management as an Approach for the Management of Natural Resources

Maori informants from Ngai Tahu stated that they recognized that it would be difficult to reach an agreement with the Crown over the co-management of Te Waihora with its large size, multiple uses, and significant conservation values. For this reason, Ngai Tahu sought to negotiate co-management arrangements of a less significant conservation site or a single management function of Te Waihora first. In this manner, the tribe believed that they could display that they were competent environmental managers that maintained open access and, in so doing, allay the concerns held by the preservation-oriented interest groups. Ngai Tahu could then point to this experience to push for a comprehensive agreement for Te Waihora.

One longstanding example of co-management already exists between the Crown and Ngai Tahu. The tribe has beneficially owned and collectively administered the Titi Islands since 1886 (Waitangi Tribunal 1991:856, Crengle 1993:19) and heralded it to be a model of how co-management could work (Waitangi Tribunal 1991:856). The Waitangi Tribunal (1991:859) agreed, stating that it was "a perfect application" of treaty principles and that it was "unfortunate other *mahinga kai* were not regarded or protected in the same way." Yet despite these endorsements, there has been significant public opposition to the extension of the joint-management regime to the nearby Crown Titi Islands as recommended by the Waitangi Tribunal. In public submissions on the proposed settlement of the Ngai Tahu claim to the islands, a large majority of presenters were opposed to any of the four proposals for dealing with the claim primarily because they believed that *tangata whenua* were overharvesting the birds (Riddell and Lightfoot 1994). Thus, in this situation, having a working example of co-management has not developed public or interest group trust in Ngai Tahu's ability to conserve natural resources.

The experience with the Titi Islands, however, did not prevent Ngai Tahu from working to develop co-management arrangements in other areas. Tutae Patu Lagoon, approximately 60 km north of Christchurch, is a good example. This lagoon was the subject of a grievance before the Waitangi Tribunal that, in its ancillary claims document, found that Ngai Tahu does not have a valid claim to it (Waitangi Tribunal 1995:50). However, even before this Tribunal report was released, the Crown began negotiations with *tangata whenua* to establish a joint-management regime involving re-vesting ownership of the area in the local tribe (Office of Treaty Settlements 1993:10).

Instead of the usual opposition to such a Maori claim, the Royal Forest and Bird Protection Society (1993) supported co-management of the area. The divergence from this interest group's normal objection to the re-vesting of lands to Maori may be explained by the scanty resources directed toward restoration of the lagoon by the cash-strapped Department of Conservation despite the area being a wildlife management reserve (Waitangi Tribunal 1995:50). Thus, one informant from

the interest group stated that the organization's stance was that Maori conservation of the lagoon was better than no conservation activities at all. However, in a submission made by the Royal Forest and Bird Protection Society to the Department of Conservation on the lagoon issue, the Society made it clear that they did not regard this stance as a precedent when dealing with other categories of reserves (Royal Forest and Bird Protection Society 1993:1). When talks between the Crown and Ngai Tahu resumed in 1996, the government made a number of concessions including re-vesting of ownership of the lagoon to Ngai Tahu as freehold land. To meet the concerns of the Royal Forest and Bird Protection Society, and like-minded interest groups, money was also granted for the building of a public walkway and for restoration of the polluted lagoon (Iosofa and New Zealand Press Association 1996).

At the same time that Ngai Tahu was pushing for a shared management regime for Tutae Patu, they were also seeking new responsibilities over the management of Te Waihora. This drive for increased authority was to be accomplished by getting the commercial eel fishery of Te Waihora into the Quota Management System. Under this structure, all fisheries with regulated catches require that 20 percent of the quota be allotted to Maori. This was part of the Sea Lords Agreement (Waitangi Tribunal 1992) negotiated after the probable recognition by the courts that Maori had unextinguished title to fishery resources. Included in this system would be some sort of shared management structure to make decisions on such items as the yearly allowable harvest. Attempts to work out an operating regime were successful with the Crown and Ngai Tahu reaching an agreement early in 1996.

3) Building Partnerships with Others Who Support the Co-Management of Te Waihora

The *tangata whenua* conviction of how Te Waihora should be managed runs counter to how most interests want the lake to be managed (James 1991:13). For instance, farmers disagree with the Maori desire to flood some farmland to improve the assimilative capacities of the waterbody; commercial fishers are concerned that their catch limits will be reduced; and, recreationists are worried that their access to the lake will be reduced. Consequently, Ngai Tahu has few potential partners who share their interests. However, the tribe was successful in establishing links with some in the academic community. It was Ngai Tahu's hope, stated two key interviewees from this group, that by supporting projects related to the degraded state of the eel fishery or potential co-management arrangement options for the lake, that their position would be enhanced in the eyes of the Crown. They, therefore, have invited researchers to study the water body and have sought to coordinate the studies of various individuals and research groups.

4) Development of Human and Financial Resources

Informants from Ngai Tahu point to the superior human and financial resources of the Crown when it comes to negotiations with them. The only way that the tribe can gain an equal footing, Ngai Tahu informants indicated, would be to develop their resources as a nation. In this they have been relatively successful compared to some other Maori groups with \$16 million in the Ngai Tahu Trust and 30 people employed in their Christchurch

office in 1996. This has been a long-term strategy by Ngai Tahu that has paid dividends with the tribe being known as a competent adversary to the Crown.

5) Utilization of a Variety of Strategies to Create Synergy

None of the Maori respondents believed that any one of the strategies described above would be successful in arriving at a co-management agreement with the Crown. Rather they recognized that it would take a combination of strategies employed at strategic times to arrive at their goal.

TIMING AND SELECTION OF STRATEGIES

Ngai Tahu believed that their sharing of management functions for Te Waihora would only be achieved when the politicians thought it was of enough importance for them to act on the issue. However, with the substantial public concern about such an accord, it was politically risky for any government to implement such measures. Consequently, Ngai Tahu pursued strategies that bypassed the Department of Conservation and went directly to putting pressure on the politicians to act (i.e., litigation, partnerships with the academic community, building of human and financial resources) and to lessen the public opposition (i.e., display the viability of co-management arrangements).

The choice of strategy came in reaction to the unfolding of the events surrounding the case. The development of Ngai Tahu's financial and human resources was an ongoing strategy to provide for a more equal footing in its relationship with the Crown. The first strategy specifically utilized in an attempt to secure co-management of Te Waihora came after the conservation-based groups reacted negatively to the recommendation in the Ngai Tahu Report (Waitangi Tribunal 1991) that Te Waihora be jointly-managed. To counter the public opposition that these groups were able to generate over concerns of declining environmental values and restrictions on public access, Ngai Tahu implemented its strategy of trying to build examples of where co-management worked so that they could point to these to refute the widely-held apprehensions among the public.

Because of the prominence of the Te Waihora debate in New Zealand, some academic and other researchers began to take a new look at the ecological status of the lake, and started to investigate how a new Crown-Ngai Tahu partnership could be reflected in the institutional arrangements for its management. Ngai Tahu recognized that these studies could aid their cause, and, therefore initiated the strategy of aiding and coordinating what research they could into these matters.

The use of the courts was the last, and most effective, strategy to be employed. However, Ngai Tahu was pushed into this course of action only after the Crown suspended treaty negotiations. Up to this point, Ngai Tahu was content to exercise the previous three strategies. Thus, it is clear that the context of the situation established the pushes and pulls that affected which strategies Ngai Tahu would use and when.

Discussion of Theoretical Propositions

The above discussion on barriers and strategies and their impact on an agreement to establish a co-management

arrangement can be used to ascertain whether the eight theoretical propositions reported by Pinkerton (1989:27; 1992:339-340) were valid. This comparison found evidence to reject two of the propositions and support for the remaining six. In addition, a new proposition, and a new dimension on a proposition, may be developed from this example.

The two propositions in which there was disagreement with Pinkerton were that co-management may be furthered through: 1) an appeal to the public interest; and 2) expressing a willingness to contribute financially or managerially to the rehabilitation of a degraded resource. While an appeal to the public interest was not evident in the Te Waihora case, it was clear that this potential strategy would not have had the supportive role that Pinkerton projected. The general New Zealand public, as well as those local to the lake, were too solidly against Maori sharing in the management of significant Conservation Estate sites.

Similarly, Ngai Tahu contributing to the rehabilitation of Te Waihora would not have had a positive influence on their cause. This was because the potential allies from the conservation groups were opposed to the Maori interest in the Conservation Estate and the other significant lobby, the farmers, were ardently opposed to the proposed Maori treatment of the lake (i.e., increasing water volume) because it would flood dozens of farms that surround the present boundaries of the lake. However, having made this point, Ngai Tahu did garner shared decision-making powers over Tutae Patu largely because of their willingness to put resources into the rehabilitation of the lagoon. This must be looked at as a special circumstance, though as the only reason this strategy worked in this situation was that the cash-strapped Department of Conservation was intending on removing their presence.

Of the six propositions for which there existed supportive evidence, the ability of other actors to capture a government agency and the role of litigation were particularly prominent. The other four propositions were not as conspicuous.

The new proposition is that co-management is more likely to be developed when the organizational capabilities of the party trying to achieve co-management are sufficient to recognize favorable conditions for the employment of strategies. Ngai Tahu clearly had these capabilities since they concentrated on strategies that did have an effect while staying away from others that would have been less likely to have an impact. Another dimension may be added as well to an existing proposition. Not only did the pursuit of experimental co-management of one function aid Ngai Tahu in achieving co-management of Te Waihora. Pinkerton (1989:27) suggested Ngai Tahu's attempts to secure management responsibilities of the less significant site of Tutae Patu also contributed.

Conclusion

The Te Waihora example in this article represents a redefining of Maori involvement in the management of the Conservation Estate in New Zealand. I have identified the primary barrier to the development of the co-management regime for the lake and the five strategies utilized by Ngai Tahu to overcome it. An analysis of these barriers and strategies, compared to the theoretical propositions proposed by Pinkerton (1989:27; 1992:339-340), found support for six of them. A new

proposition and a new dimension on another proposition were identified from the Te Waihora case. Since context is a critical variable, further testing of these propositions is required to determine which ones hold up to the rigor of the variety of co-management experience. Another area of suggested study can be identified from the strategy of Ngai Tahu is to increase their human and financial resources. This research would need to investigate the capacity of those bodies seeking shared management to determine their ability to recognize facilitating opportunities and implement strategies successfully to overcome barriers.

GLOSSARY OF MAORI TERMS

*hapu*¹ — family or district groups
*iwi*¹ — Maori tribal groups
*kaitiaki*² — guardian, steward
*mahinga kai*¹ — traditional places for food-gathering and other resources
*pakeha*³ — people of non-Maori descent
*rangatiratanga*¹ — iwi authority to make decisions and control resources
*tangata whenua*² — people of the land, includes a connection to the land through ancestral ties
*taonga*¹ — treasures, valued resources

1. New Zealand Conservation Authority (1994, p 13).
2. Parliamentary Commissioner for the Environment (1988, p. 35-36).

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